



*Past*

# Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory, Los Alamos, New Mexico



*Present*

## Volume 3 *Comment Response Document* Book 2 Section 3 *(pages 3-562 through 3-1089)* and Section 4



*Future*



U.S. Department of Energy



National Nuclear Security Administration



Los Alamos Site Office

AVAILABILITY OF  
THE FINAL SITE-WIDE ENVIRONMENTAL IMPACT  
STATEMENT FOR CONTINUED OPERATION OF  
LOS ALAMOS NATIONAL LABORATORY,  
LOS ALAMOS, NEW MEXICO

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# Reader's Guide

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This Comment Response Document (CRD) for the *Final Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory, Los Alamos, New Mexico* (LANL SWEIS or SWEIS) consists of four sections:

- Chapter 1 – Overview of the Public Comment Process

This section describes the public comment process for the Draft LANL SWEIS; the format used in the public hearings on the Draft SWEIS; the organization of this CRD and how to use the document; and the changes made by the National Nuclear Security Administration (NNSA) to the Final LANL SWEIS in response to the public comments and developments that have occurred since publication of the Draft SWEIS.

- Chapter 2 – Major Issues

This section presents summaries of the major issues identified from the public comments received on the Draft LANL SWEIS and the NNSA response to each issue.

- Chapter 3 – Public Comments and NNSA Responses

This section presents a side-by-side display of the comments received by NNSA during the public comment period and the NNSA response to each comment. The comments were obtained at three public hearings on the Draft LANL SWEIS and by telephone, fax, electronic mail, and U.S. mail. Each comment document was assigned a sequential log number as it was received. When the same comment document was submitted by many individuals, it was designated as a campaign. The campaigns were grouped together for the purpose of responding to comments. This section also contains index tables of public officials, organizations, and individuals that commented on the Draft SWEIS.

- Chapter 4 – References

This section contains the references cited in this CRD.

## To Find a Specific Comment and NNSA Response

Refer to the “List of Commentors” immediately following the Table of Contents. This list is organized alphabetically by commentor name and shows the corresponding page number(s) where commentors can find their comment(s). Public officials, organizations, and interest groups appear first on the list, followed by individuals. City and state government bodies are listed under “City of” or “State of.” Members of Congress are listed alphabetically under “Members of Congress.” Separate tables listing public officials and organizations and the page(s) where their comments and associated NNSA responses appear are also provided in Section 3 of this CRD.

*The U.S. Department of Energy (DOE) has made a good faith effort to interpret the spelling of names that were either hand-written on comment forms and letters, transcribed from oral statements made during public hearings, or were recorded on the telephone comment line.*



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Commentor No. 269: Virginia J. Miller

From: Virginia J. Miller [mailto:vmjopus@cybermesa.com]  
 Sent: Thursday, September 21, 2006 1:10 AM  
 To: LANL\_SWEIS  
 Subject: LANL SWEIS Comments

## LANL SWEIS Comments

I vigorously oppose any continuance and expansion of nuclear weapons research, design and production at Los Alamos National Laboratory as called for in the 'Expanded Operations Alternative' in the LANL SWEIS. To Quadruple plutonium pit production, the same activities that caused such severe contamination at Rocky Flats near Denver that the site was shut down for environmental crimes; to double related radioactive wastes and the storage and use of 'special nuclear materials inventory, mostly plutonium' and to project explosive open air experiments of up to 6,900 pounds of Depleted Uranium every year, when the use of DU weapons is a war crime under the Geneva Conventions resulting in grievous health problems, shows a blatant disregard for the health and safety of the people and environment of northern New Mexico, our land, water and air. All this at a site located above the Rio Grande, a source of water for many communities in NM, Texas and Mexico. In addition, LANL plans to increase water use above the current water supply allotted to it from the regional aquifer. There are far better uses for our precious, limited water resources. How would you protect our water, air and land when they are already contaminated and will only become much worse if the proposed expanded operations are implemented? I want a specific answer.

269-1

269-2

269-1  
cont'd

The LANL SWEIS proposals are unnecessary, immoral and illegal. Current plutonium pits will last 60-90+ years and every one of these pits should be dismantled now. We don't need any more! Nuclear weapons are a threat to our planet and all life on it. The World Court has condemned the use and threat of use of nuclear weapons. In 1970 the United States signed the Non Proliferation Treaty. Under the U.S. Constitution international treaties are the "supreme law of the land". Article 6 of the NPT mandates that ALL nuclear powers work for worldwide nuclear disarmament. It's the law.

269-3

Congress must call for nuclear disarmament and transform the mission of LANL and other national laboratories with a focus on research and development of new clean up technologies, nuclear disarmament verification, renewable, clean energy and work to help prevent and curb the impacts of global climate change, a serious national security threat. If our leaders, the NNSA, the DOE and the nuclear industrial complex choose to violate the law, they will be held accountable. STOP this nuclear madness. BASTA!

269-4

Virginia J. Miller  
 125 Calle Don Jose  
 Santa Fe NM 87501  
 (XXX) XXX-XXX

- 269-1** NNSA notes the commentor's opposition to nuclear weapons-related activities and the Expanded Operations Alternative at LANL. Design, procedural and operational experiences at the Rocky Flats Plant formed the basis for many lessons learned that were recorded and used throughout the NNSA weapons complex to further protect public and worker health and safety. At LANL there have been numerous advancements in facility design, operations, equipment, procedures and training to minimize the risk to the public, workers and environment as a result of activities at LANL. Section 2.12, Comparison to Rocky Flats Plant, of this CRD provides more information regarding a comparison of LANL to Rocky Flats. LANL operations and related environmental monitoring are conducted in compliance with Federal and State laws and regulations. LANL staff monitor and measure, through an environmental surveillance program, the concentration of all radioisotopes including those that are present in depleted uranium in the soil, sediment, surface water, and groundwater around the perimeter of LANL and in areas beyond the perimeter. This monitoring and surveillance includes the Rio Grande and the aquifer that is used for drinking water. By measuring the content of these environmental samples, LANL staff determine if the health and safety of the public is affected by any emissions. Measured levels of radioisotopes, chemicals, and elements are provided in Appendix F. Health effects from LANL emissions are provided in Chapter 5. For more information related to depleted uranium experiments at LANL, refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD.
- 269-2** LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling as discussed in Chapter 5, Section 5.8. Refer to Section 2.8, Water Use, of this CRD for more information on water use, available water rights, and water supply planning at LANL.
- 269-3** NNSA has reviewed the pit lifetime studies and has concluded that degradation of plutonium in the majority of nuclear weapons would not affect warhead reliability for at least 85 years. The analyses in this SWEIS, however, remain valid with production of up to 80 pits per year. This potential production rate would provide NNSA with flexibility in meeting its stockpile stewardship mission, taking into account changing geopolitical conditions. In addition, operations at LANL are not in

Commentor No. 269 (cont'd): Virginia J. Miller

violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Continuing to ensure a safe and reliable nuclear stockpile violates none of the terms of the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**269-4** NNSA notes the commentor's statement that the Congress change LANL's mission. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Commentor No. 270 : Charles W. Trask III, PE, PTOE

From: Charles W. Trask III, PE, PTOE [mailto:cwtrask3@lanl.gov]  
Sent: Wednesday, September 20, 2006 9:59 PM  
To: LANL\_SWEIS  
Cc: allidap@lanl.gov; nromero@lanl.gov  
Subject: Draft Site-Wide Environmental Impact Statement (SWEIS)

Dear Sir / Madam

1. I would like to make comments on the draft SWEIS, based upon my expertise as follows:

- A. I am the lab's Traffic Engineer (a LANS employee)
- B. I am a resident of Los Alamos (born and raised here)
- C. I am a registered Professional Engineer (in New Mexico)
- D. I am a registered Professional Traffic Operations Engineer (PTOE), certified by the Institute of Transportation Engineers (ITE)
- E. A member of the Los Alamos County Transportation Board
- F. I am certified by the International Municipal Signal Association (IMSA) in Work Zone Safety, Traffic Signals Level 3, Sign/Markings Level 3, Roadway Lighting Level 1, Work Zone Inspector, and Traffic Signal Inspector
- G. I have 40 years experience in civil engineering consulting, design and operations of streets and roadways -- I have completed many projects for the NMDOT, NM Counties, and NM Cities
- H. I wrote the current Traffic Signal Design and Roadway Lighting Design Manuals for the NMDOT

2. I do not believe that enough consideration has been given to the existing and proposed local and regional transportation facilities. I am very motivated when it comes to traffic safety and congestion, and have become an expert over the years by experience and education --

Upon my arrival here four years ago, I expected to find a first class state of the art facility -- what I found was pretty shocking -- let me present a few items -- I will try to be brief

A. ENFORCEMENT -- When I got here, there was ZERO enforcement -- this was absolutely unbelievable to me -- I have never been anywhere where there is no enforcement -- and the worst part is that the "culture" supports it because they don't want to get caught -- how can management be so pro-active in safety and not be willing to FUND enforcement ?? I really pushed getting the Memorandum Of Understanding (MOU) with the County signed and we succeeded BUT we still have

270-1

270-1

NNSA notes the commentor's opinion regarding existing and proposed local and regional transportation facilities. The New Mexico Department of Transportation and Los Alamos County are working with private companies to expand the availability of local and regional transportation to LANL and the surrounding communities as discussed in Chapter 4, Section 4.10.1, of the SWEIS.

**Commentor No. 270 (cont'd): Charles W. Trask III, PE, PTOE**

no enforcement on the secondary roads -- PTLA is woefully under funded to even write parking tickets --would you send your children to a college that has no police (Party U -- every kid's dream) ??

RECOMMENDATION: Fund upgrading signing and striping improvements to conform to the current laws of the United States and the State of New Mexico, negotiate with the County of Los Alamos to add the secondary roads to the MOU, and pay for at least 2 additional full time police -- fund additional parking improvements (see Item # 5 below) and fund adequate PTLA personnel to patrol parking

B. DRIVER'S TRAINING -- Driver's training is not required by the Lab -- it is my opinion that one of the most dangerous weapons we have here is the automobile coupled with arrogant and aggressive drivers who know they will not get caught (see Item A above) -- so far, it appears to me that management is not willing to open this door -- we have recently been trained to do everything safely except drive

RECOMMENDATION: Fund and promote driver's training and background checks on driver's licenses -- the driver's training should be site specific and should include modules on proper bicycling and how to be a good pedestrian -- the driver's license checks should be done at least annually -- these requirements should be universally applied to Lab employees, PTLA, KSL, DOE, and all contractors -- we suggest that it be included in the General Employee Training (GET) and also with the annual on line security refresher

C. TRAFFIC ACCIDENTS -- in the past, most traffic accidents are not tracked at the lab -- if a government car was not involved, it was not tracked -- the last 3 fatalities at the Lab were traffic accidents and the lab has no record of them because they were private vehicles (and a bike) coming to work or going home -- no improvements were ever funded -- I stated my own system of tracking accidents -- in 2000 there were 41 accidents, in 2001 and 2002 there were 53 accidents, and in 2003 there were 57 accidents -- in 2004 there were 59 accidents, and in 2005 there were 100 accidents - - a lot of these accidents were predictable and preventable with standard engineering practices -- it is my belief that a majority of these accidents are a direct result of Item A and Item B above, and lack of funding -- most of the Lab's roadways, roadsides, and intersections are substandard

RECOMMENDATION: Fund the tracking of all traffic accidents and improvements to roadways to mitigate problems

D. COMPLIANCE -- nearly all of the Lab's roadways, roadsides, and intersections are substandard -- a majority of the Lab's signs and pavement markings do not comply with the Manual on Uniform Traffic Control Devices (the MUTCD), which is the law -- most of the sidewalks are substandard and do not comply with the American's with Disabilities Act (ADA), which is the law -- we have gotten some funding for sidewalks and guard rails, but major issues still remain unfunded

*Comment side of this page intentionally left blank.*

**Commentor No. 270 (cont'd): Charles W. Trask III, PE, PTOE**

The following codes, laws, and standards will apply to this Program

- 1). Federal, State, and Local codes and laws.
- 2). Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, U. S. Department of Transportation, latest edition.
- 3). A Policy On Geometric Design Of Highways And Streets, American Association of State Highway and Transportation Officials, latest edition.
- 4). Traffic Engineering Handbook, Institute of Transportation Engineers, latest edition.
- 5). New Mexico Department of Transportation policies, design standards, and specifications, latest edition.
- 6). Other Institute of Transportation Engineers (ITE) publications, latest edition.
- 7). Other American Association of State Highway and Transportation Officials (AASHTO) publications, latest edition
- 8). Other Federal Highway Administration (FHWA) U. S. Department of Transportation publication, latest edition
- 9). American's With Disabilities Act (ADA), latest edition
- 10). International Municipal Signal Association (IMSA) publications, latest edition
- 11). Night Skies Act (NM Statutes)

Compliance with these codes, laws and standards is mandatory.

RECOMMENDATION -- Step up funding to mitigate these issues before there is another traffic related fatality

E. PARKING -- Lack of adequate parking is driving bizarre and unsafe behaviors -- we keep talking about putting parking here and there, but it never happens -- people are often forced to park illegally which breeds disrespect for the law, however there is little or no enforcement (see Item A above) so people don't worry about getting caught-- people use weird pathways and goat trails to get to and from their vehicles and wind up falling down -- a majority of the parking lots are not designed for safe access -- most parking lots do not comply with ADA (see Item D above)

RECOMMENDATION -- Fund and build adequate parking -- remodel existing lots to provide safe and ADA compliant access

The bottom line is we need money and a commitment to improve traffic safety and reduce congestion and associated air pollution -- I am very worried that we will continue to have traffic related injuries and possibly more fatalities -- I know that the

*Comment side of this page intentionally left blank.*

**Commentor No. 270 (cont'd): Charles W. Trask III, PE, PTOE**

Lab's mission is provide great science, but we will not be able to do that if we injure or kill the people that work here while they are travelling to and from work

3. Chapter 2, Table 2 discusses all of the modifications and achievements at the lab -- there is no mention of any transportation improvements, because there were none -- under socioeconomic elements, the population of the lab projected increased approximately 2000 more than expected -- the existing transportation system was over capacity before 1999 -- you can't continue to squeeze blood out of a turnip because there is none left to give -- none of the new projects include any sort of traffic mitigation measures or parking to take care of the increasing lab population--there were no projects to improve access roads, parking problems, and/or regional/local transportation

270-2

4. Chapter 3 discusses the Security Project on Pajarito Road -- this project caused approximately 3000 vehicles a day to move over to the front hill road, NM 502, and the Truck Route -- this is causing a lot of congestion, over capacity, and safety problems --there were 33 accidents on the truck route in 2005 alone with a severity rate that is deplorable -- DOE must take into consideration regional transportation impacts -- it is not a true statement to say that there is no significant impact for these projects

270-3

The discussion about transportation on page 3-98 is unacceptable -- to say that "LANL alternatives are expected to result in no more than 3 traffic fatalities and no worker or public cancer deaths(LCFs), and therefore would not contribute substantially to cumulative impacts" is a completely bogus statement -- there have been and will be worker deaths due to traffic accidents, that DOE will not recognize because they were in private vehicles -- the fact is, they are dead and others will surely die on this DOE site because of substandard over-congested roads, lack of enforcement, and lack of mandatory driver's training -- to compare this site to other NM Counties is inappropriate -- if we had a fatality by radiation or electricity, I would hate to think of the repercussions, but to kill some one on the road is ok??

270-4

Increases of any amount of traffic, coupled with the years of past abuse, will cause a complete breakdown of the roads --

The discussion about construction workers on page 3-100 should include a statement that they may likely be injured or killed driving on-site to and from work

5. In Chapter 4 Paragraph 4.6.2 Worker Health, should include statements about risk to injury by traffic accident -- I have the statistics if you need them

270-5

On page 4-105, under Accident History, there is no mention of the 3 traffic fatalities that happened on site

Tables 4-49 and 4-50 show traffic volumes that are dated -- up to date counts should be collected

**270-2** As discussed in Chapter 4, Section 4.10.1, Los Alamos County is working with the State and private transportation companies to expand regional and local transportation opportunities. The County is also working to start a local transit service that will involve 13 buses on 16 routes. Buses will circulate the Townsite, White Rock, and some LANL locations (yet to be determined). New parking structures and lots have been added in the past few years to alleviate some of the parking and traffic problems at the site. Appendix J, Section J.1, discusses proposals for new facilities and projects at LANL that include improvements to parking and traffic flow related to the Expanded Operations Alternative.

**270-3** Appendix J, Section J.1 discusses the Security Driven Transportation Modifications under consideration at LANL. Additional data on traffic flows around the site is being collected and evaluated. The data may support the need for additional relief to alleviate traffic concerns. Possible solutions include the construction of bridges across canyons that would provide alternate routes for persons to travel to the town of Los Alamos as discussed in Section J.1. Regional transportation services are also being considered as evidenced by the increase in the availability of regional commuter bus services as discussed in Chapter 4, Section 4.10.1, of the SWEIS. The accident rates in Los Alamos County have been updated in Section 4.10.2.

**270-4** The text in Chapter 3 has been revised to avoid confusion. The number of projected traffic deaths is correct for offsite transportation activities. The SWEIS does not attempt to project traffic fatalities as a result of local traffic; however, Chapter 4, Table 4-57, which summarizes published traffic accident data for Los Alamos County and the State for the period 1999 through 2004, has been added to the SWEIS. During that period, there were 5 fatalities within the county as a result of traffic accidents. While any death is considered a tragedy, the fatality rate for the county during this 6-year period was 0.46 per 100 million vehicle miles (160 million vehicle kilometers) traveled versus a State rate of 2.0 fatalities per 100 million vehicle (160 million vehicle kilometers) miles traveled during the same time period. Included in the County's totals were 1 fatality during 2001 as a consequence of a motorcyclist colliding with a private vehicle at the intersection of Sigma and Diamond, and 1 fatality during 1999 as a result of two private vehicles colliding

**Commentor No. 270 (cont'd): Charles W. Trask III, PE, PTOE**

Table 4-51 should show the portion of accidents in Los Alamos County that occurred on the DOE site -- comparison to other counties is not appropriate -- accident data is normally shown for 3 years due to statistical variances -- for example, I could pick a year that did have fatalities -- I have a lot of accident data for the DOE site -- you are more than welcome to add this info to this section

In Paragraph 4.10.3.1 and 4.10.3.2, mention should be made that trucks can not safely negotiate the substandard entrance to TA 54 , thus causing them to drive a through TA 3 to go down the truck route, instead of taking the shortest route -- the worst road conditions in the entire network is on this DOE site

6. In Chapter 5 on page 5-155 Local Traffic should be expanded to include all of the other primary and secondary roads -- they are all over capacity and/or worn out and in need of replacement

7. in Chapter 6 please add

A. Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, U. S. Department of Transportation, latest edition required by 23 CFR part 655.603

B. American's With Disabilities Act (ADA), latest edition

C. There is a DOE order that requires all folks driving a gov vehicle to have driver's training -- is it on this list ??

Thanks for this opportunity to make comments

charlie

**270-5  
cont'd**

**270-6**

at the intersection of Eniwetok and Diamond. The information on these accidents has also been added to Chapter 4, Section 4.10.2, of the Final SWEIS.

**270-5** The discussion on the risks faced by construction workers in Chapter 3, Section 3.6.3, of the SWEIS was not changed because the risks associated with commuting to and from work are not unique to LANL. As discussed in the response to Comment no. 270-4, a new table (Table 4-57) has been added to Chapter 4, Section 4.10.2 showing the traffic accident statistics for Los Alamos County from 1999 through 2004 to allow for a more balanced analysis as suggested by the commentor. From 1999 through 2006, drivers in Los Alamos County had an accident rate of 192 accidents per 100 million vehicle miles (160 million vehicle kilometers) traveled versus the State average of 210 over the same time period. Table 4-56 shows how the accident rate in Los Alamos County compares with other nearby counties for the latest year for which data was available. NNSA notes in Chapter 5, Section 5.10.3 that with the number of construction projects and MDA remediation efforts that could occur along Pajarito Road, it may be necessary to consider an alternate truck entry point for trucks working on these projects along Pajarito Road at NM 4 to alleviate some of the truck traffic on the truck route, NM 501. Further traffic studies may be needed to determine whether any changes would be required.

**270-6** The SWEIS does not list all of the laws and regulations that govern operations at LANL such as those mentioned by the commentor. Chapter 6 focuses primarily on those laws, regulations, and orders that relate to environmental issues.

Commentor No. 271: Robin Gay Wakeland

From: ROBIN G WAKELAND [mailto:rgwakeland4036@msn.com]  
Sent: Wednesday, September 20, 2006 9:47 PM  
To: LANL\_SWEIS  
Subject: plutonium pits

My response to the SWEIS regarding Los Alamos National Laboratory proposal to produce plutonium pits is that any and all plutonium pit production at LANL should cease immediately and no more such production should be allowed. This is based on plutonium pit production and associated plutonium processing creating a radioactive waste stream which cannot be fully contained and which ultimately pollutes our water and other environmental niches, here in New Mexico. Manufacture of plutonium pits also violates our agreement with the Strategic Arms Limitation Treat (SALT), as it represents manufacture of weapons prohibited by the treaty.

Robin Gay Wakeland  
resident of city of Santa Fe, 3rd city council district  
PO Box 29174  
Santa Fe NM 87592  
XXX-XXX-XXXX

271-1

271-1 NNSA notes the commentor's opposition to pit production at LANL. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. Chapter 5 of the SWEIS analyzes the environmental impacts of plutonium pit production, including radioactive waste generation and disposal. Refer to Sections 2.6, Offsite Contamination, and Section 2.7, Waste Management, of this CRD for more information.

271-2

271-2 NNSA notes the commentor's concerns regarding possible violations of the Strategic Arms Limitation Treaty. The United States is not manufacturing new nuclear weapons, but is maintaining its nuclear stockpile through its Stockpile Stewardship Program. In addition, subsequent treaties, such as the Strategic Offensive Reductions Treaty, signed in 2002, require further reductions in the size of the nuclear weapons stockpile that exceed the reductions required by the Strategic Arms Limitation Treaty. The United States is meeting its obligations to all currently recognized nonproliferation treaties to which it is a signatory.



Commentor No. 272: Ann MacLeod

From: annmacq@rof.net [mailto:annmacq@rof.net]  
Sent: Wednesday, September 20, 2006 9:04 PM  
To: LANL\_SWEIS  
Subject: No increase in Plutonium Comment

I am currently reading the Pulitzer prize-winning book on J. Robert Oppenheimer, which shows how intelligent and good-intentioned humans can accept terrible things as political necessities. Please don't add to the world's nuclear capabilities by producing more plutonium.

Ann MacLeod  
Basalt, CO

|| 272-1

272-1 NNSA notes the commentor's opposition to the production of more plutonium. The continued operation of LANL would include production of pits from existing plutonium, but would not include the production of new plutonium. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Commentor No. 273: Bobbie Paul

From: Bobbie Paul [mailto:bobbiepaul@rp.cbeyond.com]  
Sent: Wednesday, September 20, 2006 7:11 PM  
To: LANL\_SWEIS  
Subject: Comments to 2006 SWEIS at LANL

I oppose the preferred Expanded Operations Alternative suggested for future operations at Los Alamos National Laboratory (LANL) as proposed in the draft 2006 Site-Wide Environmental Impact Statement (SWEIS).

273-1

I am especially concerned with the reintroduction of a modern pit facility (referred to quite frequently in the SWEIS) that would be capable of producing 450 plutonium pits per year, violating article VI of the Nuclear nonproliferation treaty calling for total disarmament of nuclear weapons.

273-2

Also, where are the plans for clean up technologies ? Where do you address public health and alternatives that lessen the impact and harm to the environment?

273-3

This SWEIS seems to reflect the unfortunate, yet familiar, state of mind known as nuclear madness.

Sincerely,

Bobbie Paul \  
227 Elizabeth St NE  
Atlanta, Georgia 30307

273-1 NNSA notes the commentor's opposition to the Expanded Operations Alternative. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

273-2 Reference to a modern pit facility in the Draft LANL SWEIS was in the context of ensuring that reasonably foreseeable future actions were addressed in accordance with the Council on Environmental Quality NEPA regulations regarding cumulative impacts. The LANL SWEIS alternatives addressing operational levels for the next 5 years limit the level of pit production to 80 pits per year (Expanded Operations Alternative). In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (71 FR 61731). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). The Final SWEIS does not include reference to a modern pit facility. In discharging its responsibilities for nuclear stockpile management, NNSA is not violating the Nuclear Nonproliferation Treaty. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, Section 2.2, National Environmental Policy Act (NEPA) Process, and Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more discussion.

273-3 Appendix I of the SWEIS summarizes several technologies for cleanup of soil, water and air, and references additional information about existing and emerging cleanup technologies. Appendix I also presents options and environmental analyses for conducting future remediation activities at LANL, primarily related to the Consent Order that was entered into in March 2005. Decisions about remediation measures at LANL will be made in accordance with established regulatory standards and processes, including those of the State of New Mexico for the Consent Order. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered including containment in place,

**Commentor No. 273 (cont'd): Bobbie Paul**

treatment, or removal. Any selected remedy must meet several criteria including protection of human health and the environment and attainment of applicable cleanup standards considering the designated future use of the site. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the New Mexico Environment Department using cleanup criteria documented in Section VIII of the Consent Order. Refer to Chapter 2, Section 2.2.6 of this SWEIS for a description of the progress made since the early 1990s in conducting the LANL environmental restoration program. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information on LANL cleanup.

Commentor No. 274: Thomas and Rebecca Shankland

From: Shankland [mailto:shankland@cybermesa.com]  
Sent: Wednesday, September 20, 2006 6:20 PM  
To: LANL\_SWEIS  
Subject: comment on SWEIS

September 20, 2006

Comments on the SWEIS

We prefer the no action alternative except for the impact on LANSCE.

274-1

Our principal objection to the preferred alternative is the increase in plutonium pit production. For the last 10 years or so, the administration and scientists at the laboratory, plus most of the townspeople, have rejected the idea of increased plutonium pit production. The increase in radioactive waste, the effect on international relations, the lack of sufficient water-these are only a few of the reasons to oppose this alternative.

274-2

The proposed warehouse near Tsankawi (a nearly pristine national park) is an outrage for the native Americans and tourists who presently enjoy this site and feel that it is a step back into an important historical period.

274-3

We oppose this substantial shift from scientific research to weapons manufacture. The environmental impact on land and water is unsustainable if even possible.

274-2  
cont'd

What does Los Alamos and the nation want? Not more weapons, but a solution to the energy problems that are making our world situation so precarious. We could be working on global warming, alternative energy, solar and wind energy production. Please change the direction of LANL to this important work.

274-4

Thank you.

Thomas and Rebecca Shankland  
6 Mariposa Court  
Los Alamos, NM 87544

274-1 NNSA notes the commentors' preference for the No Action Alternative, except for the impact on LANSCE. As stated in Chapter 1, Section 1.4, of the SWEIS, NNSA could choose to implement the alternatives either in whole or in part. Therefore, it is possible for a decision to be made regarding LANSCE that is different than the level of operations included in a particular alternative.

274-2 NNSA notes the commentor's objection to increased pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. Impacts of the Expanded Operations Alternative are presented in Chapter 5; Section 5.9 evaluates the impacts on waste management, and Section 5.8 evaluates impacts to infrastructure, including water usage. Also, refer to Sections 2.6, Offsite Contamination, and 2.8, Water Use, of this CRD for more information related to the concerns expressed in this comment. International relations are not within the scope of the SWEIS.

274-3 Potential impacts to the Tsankawi Unit of Bandelier National Monument are addressed in Appendix G, Section G.9.3.2, of the SWEIS. As noted in Appendix G, the proposed Remote Warehouse and Truck Inspection Station is located approximately 1 mile (1.6 kilometers) from the Tsankawi Unit and would not be visible from trails or the parking lot. Although the nighttime sky glow from lighting at the new facility could be visible from Tsankawi under normal conditions, the trails at Tsankawi are closed to the public after dusk. Further, installed lighting would comply with the New Mexico Night Sky Protection Act to the extent it does not compromise security. Additionally, sound levels generated during construction and operation are expected to dissipate to background levels before reaching the Tsankawi parking lot.

274-4 Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Commentor No. 275: Travis Gibson

From: Travis Gibson [mailto:dragonhawk2024@hotmail.com]  
Sent: Wednesday, September 20, 2006 4:32 PM  
To: LANL\_SWEIS  
Subject: LANL

I am a Santa Fe teenager who is appaled with the idea to use Los Alamos and billions of dollars to create a new generation of nuclear warheads. These bombs cause nothing but destruction and horror. I can't believe that in the 21st century people still havent learned to help each other and treat each other with respect. Instead hundreds of thousands die because the people in power, the people supposedly representing ME and supposedly trying to help the world are only furthering the demise of our planet and species. This is tragic. The fact that teens and kids and adults all know it is nearly sickening when you consider how little people know about the world they live in now days. DOWN WITH DESTRUCTION!!!

Travis Gibson  
1672 Cerro Gordo rd  
Santa Fe NM 87501  
(XXX) XXX-XXXX

275-1

275-1 NNSA notes the commentor's concerns regarding nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Commentor No. 276: Wendy Courtemanche

From: wendy courtemanche [mailto:wcourte94@yahoo.com]  
Sent: Monday, September 25, 2006 8:17 PM  
To: LANL\_SWEIS  
Subject: Re: LANL plutonium pit production

September 25, 2006

Ms. Elizabeth Withers, EIS Document Manager Los Alamos Site Office National Nuclear Security Administration U.S. Department of Energy

538 35th Street

Los Alamos, New Mexico, 87544-2201

Dear Ms. Withers,

I oppose the preferred Expanded Operations Alternative suggested for future operations at Los Alamos National Laboratory (LANL) as proposed in the draft 2006 Site-Wide Environmental Impact Statement (SWEIS). The proposed Expanded Operations will increase nuclear weapons design and research and therefore generate more waste and increase air emissions and discharges to surface and ground waters that flow to the Río Grande.

276-1

I object to the fact that increased cleanup was only included in the Expanded Operations and not part of the No Action and Reduced Operations Alternatives.

Compliance with the New Mexico Environment Department (NMED)/LANL Consent Order for cleanup at LANL by 2015 should not be made optional nor be tied the expansion of activities which threaten public health and the environment. Increased Consent Order cleanup should be included in all three alternatives.

276-2

When implementing cleanup, LANL must be required to do so to the fullest extent possible. One of the proposed cleanup plans consists of simply covering contaminated sites in such a way that it would be within health standards for people to work 40 hours a week in an industrial job on the site. This level of cleanup is not adequate for children at a day care facility on the formerly contaminated site, let alone a change in land use. In order to protect future drinking water supplies, all waste must be removed from the major material disposal areas (dumps), canyon cleanups and other NMED/LANL Consent Order actions as well as LANL's voluntary cleanup activities.

276-3

The Department of Energy (DOE) recommends that plutonium pit production increase from 20 to 80 pits per year. The draft SWEIS references a modern pit facility (MPF) 60 times. This facility would be capable of producing 450 plutonium pits per year, despite widespread opposition to the MPF by New Mexicans in 2004. This has dire local, national and international implications. The draft SWEIS lacks an adequate discussion of how a MPF or increase pit production would not

276-4

276-1 NNSA notes the commentor's opposition to the Expanded Operations Alternative and concerns about proliferation of nuclear weapons. The potential environmental, health, and safety impacts of the continued operation of LANL under the three proposed alternatives are analyzed in Chapter 5 of the SWEIS, including management of radioactive and chemical wastes, monitoring of air emissions, and treatment or monitoring of wastewater discharged through National Pollutant Discharge Elimination System-permitted outfalls. The commentor is correct that the Expanded Operations Alternative would result in greater amounts of radioactive and chemical waste as well as increased air emissions and wastewater discharges but as demonstrated in the SWEIS, these increases can be safely managed. It should be noted that treated effluents do not normally flow directly into the Río Grande; surface waters may reach the river a few times a year during large precipitation events. Refer to Section 2.6, Offsite Contamination, of this CRD for more information.

276-2 NNSA does not consider compliance with the Consent Order to be optional, and is not linking Consent Order compliance with decisions about pit production; proposed new projects or activities; increased operational levels; or waste generated from other LANL activities. Chapter 1, Section 1.3, of the SWEIS defines the three alternatives and explains why activities to comply with the Consent Order are included only in the Expanded Operations Alternative. Chapter 1, Section 1.4 states that NNSA could choose to implement the alternatives either in whole or in part, and that NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

276-3 Although Appendix I of the SWEIS evaluates the environmental impacts associated with potential remedial action alternatives, decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order, and of DOE. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered such as containment in place, treatment, or removal. Any remedy selected for a site requiring environmental restoration must meet several criteria including protection of human health

**Commentor No. 276 (cont'd): Wendy Courtemanche**

violate Article VI of the Nuclear Nonproliferation Treaty, which calls for complete disarmament of nuclear weapons. We are concerned that DOE is attempting to slip in a MPF at LANL without adequate analysis. Therefore, the final SWEIS should be void of all references to a MPF at LANL.

276-4  
cont'd

The Expanded Operations would annually generate a total of 860 cubic yards of transuranic waste, 12,000 cubic yards of low-level radioactive waste and 2,750,000 pounds of chemical waste. Increased pit production alone would generate an additional 1,800 or more 55-gallon drums of transuranic wastes each year for disposal at the Waste Isolation Pilot Plant (WIPP). LANL currently has approximately 40,000 drums sitting above-ground in fabric tents awaiting shipment to WIPP. Likewise, the clean up plan focuses on removing drums that are currently buried in Area G, rather than providing safe and secure storage for those already above ground. DOE should make permanent disposal of existing waste a priority, rather than continue to generate more.

276-5

LANL is not in compliance with DOE and Defense Nuclear Facilities Safety Board (DNFSB) safety regulations and recommendations. Some LANL facilities are up to six years behind on preparing and submitting their safety documentation to DOE. Such lack of compliance poses an unacceptable risk to workers, the public and the environment. LANL needs to be up-to-date and in full compliance with all DOE and DNFSB safety regulations and recommendations. Furthermore, many of the buildings at LANL are not in compliance with existing earthquake building codes, despite the fact that LANL is built upon at least three major fault lines.

276-6

Existing facilities and new construction must be up to code before any operations are done in them.

Many of the documents referred to in the draft SWEIS are based on studies that have not been finalized. For instance, the draft SWEIS was released before either the risk assessment for LANL's low-level waste dump at Area G or the latest seismic hazard study were completed, both of which are due to be released in 2006. Further, the draft SWEIS relies on an incomplete and inaccurate draft Agency for Toxic Substances and Disease Registry report for health impacts analysis. It is impossible to accurately determine the environmental and health impacts for future operations at LANL based on incomplete data.

276-7

276-8

It was premature for DOE to release the draft SWEIS without these essential reports being part of the analysis. The SWEIS must include a reanalysis based on the findings in the 2006 Area G risk assessment and seismic hazard study. The ATSDR report should not be used in any analysis regarding LANL activities.

276-7  
cont'd  
276-8  
cont'd

and the environment, and attainment of applicable cleanup standards including those for ground and surface waters and soil. If the site is to remain under DOE ownership, then cleanup standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted access by the public, then the site would need to meet cleanup standards for unrestricted release. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the New Mexico Environment Department using the cleanup and screening levels documented in Section VIII of the Consent Order. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

276-4 Reference to a modern pit facility in the Draft SWEIS was in the context of ensuring that reasonably foreseeable future actions were addressed in accordance with the Council on Environmental Quality NEPA regulations regarding cumulative impacts. The SWEIS alternatives addressing operational levels for the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative). In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (71 FR 61731). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). The Final SWEIS does not include a reference to a modern pit facility. In discharging its Stockpile Stewardship responsibilities, NNSA is not violating the Nuclear Nonproliferation Treaty. Please refer to Sections 2.1, Opposition to Nuclear Weapons and Pit Production, 2.2, National Environmental Policy Act (NEPA) Process, and 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

276-5 Although a pollution prevention and waste minimization program has been instituted at LANL (see Chapter 4, Section 4.9, of the SWEIS), operation

Commentor No. 276 (cont'd): Wendy Courtemanche

LANL activities jeopardize both water quality and quantity for surface and ground water. New Mexicans rely on surface and groundwater for drinking and farming. LANL discharges approximately 163,000,000 gallons per year of industrial and sanitary effluent into the canyon systems. DOE did not use the most current water quality standards when assessing impacts in this draft SWEIS, nor did DOE use the most current data about the number of streams that are impaired on the Pajarito Plateau from LANL activities.

Contaminants, such as perchlorate, hexavalent chromium and 1, 4-dioxane have already been found in the regional aquifer and test wells and yet DOE is not monitoring 1,405 sites that have the potential to release contaminants during storms and when the snow melts. The Expanded Operations will increase water usage by LANL above the amount allotted to it from the regional aquifer. DOE must analyze LANL's impacts against the latest water quality standards and the current impaired stream information in the SWEIS. In order to ensure that water quality is protected now and in the future, DOE must adopt the Removal Option for all clean up activities.

LANL would process 87,000 pounds of high explosives and up to 6,900 pounds of depleted uranium (DU) will be blown up in "dynamic experiments" annually. The 1979 LANL Final Environmental Impact Statement estimates that 220,000 pounds of depleted uranium were used in dynamic experiments during the history of LANL. From 1979 to present we do not know how much DU has been used in experiments and remains in the environment. DOE must monitor and implement comprehensive sampling programs at all open burning and open detonation sites and for all activities using high explosives and depleted uranium.

LANL must be required to reevaluate and broaden their air sampling programs. DOE should no longer hide under the "grandfather clause," which allows for facilities existing before December 31, 1988 to emit toxic air pollutants without regulation. DOE recommends increasing activities at the Los Alamos Neutron Science Center, which has the highest amount of radionuclide air emissions and a long history of technical problems resulting in increased air emissions. DOE must institute a program to stop all toxic air pollutant emissions from LANL facilities and activities.

In conclusion, the Expanded Operations Alternative will result in higher demands for electricity, water and natural gas, which will impact the environment.

These impacts must be considered in the cumulative impacts of the Expanded Operations Alternative.

In addition, Congress must change the mission of LANL to focus on research and development into renewable energy, such as solar, wind and biomass, and clean up

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of LANL in support of DOE's core missions will cause the generation of waste that NNSA intends to safely manage as it continues to address existing waste in storage. Nearly all of the stored waste at LANL consists of legacy transuranic waste that is stored above ground within domes in TA-54. Most of this waste was originally stored below grade, but was retrieved and placed in an above ground, inspectable configuration as required by the New Mexico Environment Department. NNSA is working to prepare all stored and newly generated transuranic waste for shipment to WIPP. Shipment rates for 2006 have increased significantly over past years. Refer to Section 2.7, Waste Management, of this CRD for more information.

276-6

The Defense Nuclear Facilities Safety Board does not regulate nor authorize operation of facilities at LANL. Its function, as mandated by the Congress, is to provide independent safety oversight of the NNSA nuclear weapons complex. As in the case of all NNSA nuclear weapons complex sites, the Defense Nuclear Facilities Safety Board reviews safety issues and prepares reports regarding the safety of nuclear weapons complex facilities, which are submitted to NNSA. NNSA and the LANL contractor have reviewed Defense Nuclear Facilities Safety Board reports and responded with commitments to update and improve safety basis documentation. The Los Alamos Site Office Safety Authorization Basis Team assures the development and approval of adequate controls in support of safe operations at LANL. All LANL facility operations are based on authorization and approval by NNSA following NNSA's evaluation of the acceptability of existing relevant safety documentation. Reports and recommendations made by the Defense Nuclear Facilities Safety Board that are relevant to NEPA are taken into account in analyses in the SWEIS. Refer to Section 2.13, Recommendations of the Defense Nuclear Facilities Safety Board, of this CRD for more information.

Seismic characteristics of the LANL environment are described in Chapter 4, Section 4.2.2.3, of the SWEIS. Chapter 5, Section 5.12 presents the estimated human health impacts from postulated facility accidents, including earthquakes. Over the years, based on new seismic information or changed requirements, NNSA has evaluated the survivability of LANL buildings and structures and implemented mitigation measures in terms of structural upgrades, reduction of hazardous materials inventories, or replacement of the structures to reduce



**Commentor No. 276 (cont'd): Wendy Courtemanche**

technologies that support the environmental and public health. The SWEIS must include a fourth alternative that focuses on these activities.

Sincerely,

Wendy Courtemanche  
611 B Girard NE  
Albuquerque, NM 87106

|| 276-13  
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the potential for harm to the workforce and the public. Construction requirements are imposed for new structures in accordance with the site locations relative to known fault lines, and in accordance with the planned future use of the structure. For proposed new buildings, safety studies in the form of hazards assessment documents that take into account the most current seismic information are prepared to fully address a comprehensive set of accident risks. The results of these safety studies are incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

**276-7** To the extent possible, the most recent technical documents, including an update to the seismic hazard analysis, completed in June 2007, are considered in the Final SWEIS analyses. Information under development that is not available for use in the Final SWEIS, such as the updated Area G performance assessment, will be considered as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

**276-8** The SWEIS makes use of current, accepted, and well-documented scientific models and data that have been, and continue to be widely used to analyze environmental impacts for the purpose of compliance with NEPA. The analysis methods used are essentially the same as were used in preparation of several DOE Environmental Impact Statements that have recently been published in final form or have been reviewed, in draft, by the public. In general, the data, models, assumptions, and other information used in the SWEIS are drawn from published sources and have been subjected to scientific peer review. Chapter 7 of the SWEIS and each of the Appendices lists the documented sources of information

Commentor No. 276 (cont'd): Wendy Courtemanche

and models used in the analyses. The SWEIS presents an independent assessment of public health impacts from contaminants in the LANL environment.

The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry Public Health Assessment in any specific way for its conclusions. The Agency for Toxic Substances and Disease Registry is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting Public Health Assessments at each site on the U.S. Environmental Protection Agency National Priorities List. It is thus appropriate for the SWEIS to acknowledge the conclusions of the LANL Public Health Assessment because the Public Health Assessment is a relevant Federal agency study. The Agency for Toxic Substances and Disease Registry Public Health Assessment for LANL was prepared with public oversight and review. The Public Health Assessment was finalized and released August 31, 2006 (ATSDR 2006). The U.S. Environmental Protection Agency provided comments on the draft Public Health Assessment were addressed by the Agency for Toxic Substances and Disease Registry in the final document. Appendix I to the final Public Health Assessment lists the comments on the draft that were received from members of the public and other Federal agencies and describes how those comments were addressed in the final document.

- 276-9** Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, of the SWEIS, over the past 6 years, LANL has a very good record of complying with permit conditions, which are set to protect health and safety. Under all alternatives, LANL operations would continue to meet permit conditions designed to protect water resources at LANL. In addition, LANL staff conducts a monitoring program (described in Section 4.3.1.5) to detect contamination that has resulted from past practices. In accordance with applicable regulations and agreements, LANL staff evaluate and take corrective action for occurrences of contamination in groundwater and surface waters at LANL. The water quality standards in Chapter 4, Tables 4-7 and 4-9 have been updated to reflect standards recently issued by the New Mexico Water Quality Control Commission. The new standards have not yet been approved by the U.S. Environmental Protection Agency;

Commentor No. 276 (cont'd): Wendy Courtemanche

nevertheless, they are used in the 2005 Environmental Surveillance Report (LANL 2006g) and the SWEIS in evaluating water quality data. As Table 4-7 demonstrates, LANL surface water data are compared to a variety of standards that legally apply, in order to identify contaminants and data trends that could indicate the need for corrective actions. In Section 4.3.2.2, it is stated that chromium concentrations between 375 and 404 parts per billion were detected in two wells in Mortandad Canyon. LANL staff will be conducting further drilling and sampling activities to characterize contamination at LANL as stated in the Interim Measures Work Plan for Chromium Contamination in Groundwater. Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding chromium contamination in the groundwater. NNSA notes that detection of dioxane was reported to the New Mexico Environment Department in July 2006, 1 year after the sample was collected from a well in Mortandad Canyon. The dioxane contamination level is between 20 parts per billion and 56 parts per billion, below the 61 parts per billion U.S. Environmental Protection Agency risk-based cleanup level established through the Consent Order. As described in Appendix F, statistical analysis shows that perchlorate at most LANL locations are below the U.S. Environmental Protection Agency No Observed Effect Level and New Mexico's screening level. Only Mortandad and Pueblo Canyons exceed the New Mexico limit and only Mortandad Canyon exceeds U.S. Environmental Protection Agency's No Observed Effect Level.

NNSA does not agree with the statement that there are over 1,400 unmonitored discharge sites. As described in Section 4.3.1.3, NNSA had managed stormwater runoff from its solid waste management units under a Multisector General Permit Program, and then transitioned towards management under an individual National Pollutant Discharge Elimination System industrial activity permit. DOE and Los Alamos County have combined water rights of 1,806 million gallons (6,836 million liters) per year, of which 542 million gallons (2,050 million liters) per year are allotted to DOE. In recent years, the largest amount of water used by DOE and the County was 1,515 million gallons (5,735 million liters) in 2000, when the Cerro Grande Fire occurred. As shown in Table 4-43 and discussed in Section 5.8.2.3, LANL water usage has been and is expected to remain below its 542 million gallons (2,050 million liters) per year allotment.

Commentor No. 276 (cont'd): Wendy Courtemanche

Decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the State of New Mexico for the Consent Order. The intent of the SWEIS is not to prejudge these decisions but to provide environmental impact information to be used for the decision-making process, and for the benefit of the reader regarding potential remediation action options. Several alternative remedies may be considered for a contaminated site, including containment in place, treatment, removal, or other remedies. Any remedy selected for a site requiring environmental restoration must meet several criteria including protection of human health and the environment, and attainment of applicable cleanup standards considering the designated future use of the site. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the State of New Mexico considering applicable groundwater and surface water quality standards. As indicated in Chapter 1, Section 1.4, of the SWEIS, NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**276-10** Environmental remediation of sites used for dynamic experiments at LANL (firing sites) is being addressed, primarily in accordance with DOE's authority under the Atomic Energy Act, and with the requirements of the March 2005 Consent Order. Since 1989, when over 2,100 potential release sites, including firing sites, were identified at LANL, because of progress in remediation and consolidation of geographically proximate sites, only 829 potential release sites remained at the end of 2005. Therefore, the levels of depleted uranium and high explosives that may remain in the vicinity of the firing sites is being reduced. Additional information is in Chapter 2, Section 2.2.6 and Appendix I of the SWEIS, and in Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD.

Please refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information about how LANL staff ensures the safety of high explosives testing and the use of depleted uranium as well as LANL's monitoring program.

Commentor No. 276 (cont'd): Wendy Courtemanche

- 276-11** All LANL operations, regardless of when they began, comply with the applicable State (New Mexico Air Quality Control Act) and Federal (Clean Air Act, Toxic Substances Control Act) laws and regulations and have valid permits as described in Chapter 6 of the SWEIS. The LANL contractor complies with its Clean Air Act, Title V operating permit which includes requirements for monitoring air pollutant emissions from sources at LANL and recordkeeping for these sources. Current air sampling programs at LANL include ambient non-radiological air monitoring, an ambient radiological air sampling network called AIRNET, and stack sampling for radionuclides, as described in Chapter 4, Sections 4.4.2.3 and 4.4.3.1. The LANL contractor evaluates the results from these programs and makes changes in the sampling locations and constituents as appropriate. LANSCE does have the highest amount of radionuclide air emissions at the site. As discussed in Chapter 5, Section 5.6, if necessary, operational controls at LANSCE would limit the dose to the maximally exposed offsite individual from air emissions to 7.5 millirem per year to ensure compliance with the 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants) limit of 10 millirem per year.
- 276-12** The cumulative impacts of the Expanded Operations Alternative for electricity, water, and natural gas demands were evaluated and are discussed in Chapter 5, Section 5.13. Although not anticipated, future expansion of the LANL infrastructure to supply additional electricity, water, or natural gas, would be preceded by appropriate environmental documentation. Changes made to the offsite infrastructure to meet LANL demands would be required to meet applicable State and Federal environmental regulations.
- 276-13** NNSA notes the commentor's statement that the Congress must change LANL's mission. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Commentor No. 277: Max Weber

From: Max Weber [mailto:mweber@starband.net]  
Sent: Friday, September 22, 2006 3:15 PM  
To: LANL\_SWEIS  
Subject: expanded plutonium pit production @ LANL

Dear DOE I absolutely oppose the expanded plutonium pit production at the Los Alamos Laboratory. With your past history and performance @ the Rocky Flats Plant. What possible reasons would I have to not appose pit production @ the LANL? It is my feeling that DOE can not be trusted to over see the production now at Los Alamos Laboratory. And Los Alamos needs to clean up the mess they now have and not continue w any new programs. Show me where your heart is by first cleaning up the polluted sites that you have already made. And 2nd I not sure that we need any more Atomic bombs. Or to build new triggers for bombs w have. Cold war is over folks and fat chance you will be able to use your Atom Bombs on anyone. You will just be making more of a mess for future generations to clean up. So get real and move on do something to help the Planet..Max Weber

Max Weber  
Los Trigos Ranch  
Rowe, NM 87562  
Office: XXX-XXX-XXXX  
Email: mweber@starband.net

277-1

277-2

277-1  
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277-1 NNSA notes the commentor's opposition to atomic bombs and concerns regarding pit production at LANL. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. Also, refer to Section 2.12, Comparison to Rocky Flats Plant, of this CRD for more information about Rocky Flats and why NNSA believes that operations at LANL would not result in a similar outcome.

277-2 Chapter 2, Section 2.2.6 of this SWEIS describes the progress that DOE has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Decisions about environmental remediation will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order. Appendix I of this SWEIS presents options and environmental analyses for conducting remediation activities at LANL primarily related to the Consent Order. These analyses address LANL waste disposal sites and other contaminated areas, and provide environmental impact information to facilitate environmental remediation decisions that will be made by DOE and the New Mexico Environment Department. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

Commentor No. 278: Robert J. Siebert

9/18/06

Dear DOE and LANL,

I am opposed to expanding the plutonium pit production at LANL. We should think long and hard before moving in this direction. LANL has not demonstrated the capability and the safety record to protect both its workers and the surrounding community. Do we really need more nuclear weapons? I thought the long term goal was to have less. The United States ought to be the leader in the world for reducing the number of nuclear weapons.

Thank you



ROBERT J. SIEBERT  
PO Box 9448  
SANTA FE NM  
87504

278-1

278-1 NNSA notes the commentor's opposition to pit production. Pit production performed at LANL supports stockpile stewardship and management. The United States is currently reducing the size of its nuclear stockpile in accordance with international treaties. The pits that would be produced at LANL would replace existing pits and would not add to the number of nuclear weapons in the stockpile. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

278-2

278-2 NNSA notes the commentor's opinion regarding the safety record at LANL. NNSA and its operating contractors have internal organizations dedicated to safe operation of its nuclear facilities. DOE has issued regulations, standards, and guidance for nuclear facility operations including requirements for performance of safety evaluations and risk assessments which become the basis for facility operating parameters. The DOE goal is to eliminate any accidents and these regulations and standards of operations reduce the likelihood of accidents, but do not eliminate them completely. Chapter 4, Section 4.6.3 contains a discussion of accidents and safety at LANL facilities. The LANL contractor applies lessons learned from past accidents to improve overall safety performance. LANL staff takes actions in the areas of procedures, training, inspection, and component upgrading and replacement in order to address the root causes of accidents and preclude their recurrence.

278-1  
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Commentor No. 279: Beatrice Lewis

September 25, 2006

Dear DOE and LANL;

I oppose the expanded plutonium pit production at the Los Alamos National Laboratory. It will turn the lab into a nuclear storage and radioactive waste dump, as well as a nuclear bomb factory.

I oppose the increased toxic and radioactive waste generated by expanded operations; LANL's continuing pollution of our water supply; the continuing burial of radioactive and chemical wastes in unlined dumps; the construction of new nuclear weapons anywhere in the US.

The Lab should prioritize the development of improved cleanup technologies, renewable energy programs, and should lead by example in the elimination of weapons of mass destruction.

*Beatrice C Lewis*  
*Senato Fe*  
*87505*

279-1

279-2

279-1 NNSA notes the commentor's opposition to pit production at LANL for the reasons enumerated. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President, and is therefore not being considered in the SWEIS. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

The environmental impacts of waste generation and disposal are addressed in Chapter 5 of the SWEIS. While increased waste generation would occur as a result of expanded pit production, not all waste would be disposed of at LANL. Chemical waste and low-level radioactive mixed waste from LANL operations are sent offsite for treatment and disposal; transuranic waste is stored until shipped to WIPP for disposal, and low-level radioactive waste is either disposed of onsite at Area G or shipped offsite for disposal. The future use of lined rather than unlined pits for low-level radioactive waste disposal is under evaluation through the Area G Performance Assessment and Composite Analysis required by DOE Order 435.1, which is periodically reviewed and updated. The Performance Assessment and Composite Analysis will guide decisions regarding operational procedures and waste disposal. This SWEIS considers impacts from the use of unlined pits as its No Action Alternative baseline; this impact analysis therefore bounds the long-term environmental consequences that could result from the use of lined disposal pits. Refer to Section 2.7, Waste Management, of this CRD for more information.

Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, of the SWEIS, over the past 6 years, LANL has had a very good record of complying with permit conditions, which are set to protect health and safety. It is expected that LANL would continue to meet permit conditions designed to protect water resources under all alternatives. As described in Chapter 4, Section 4.3.2, past waste disposal practices at LANL (conducted in a manner consistent with standards in effect at that time) have contaminated the shallow groundwater, which in turn has the potential to contaminate portions of the regional aquifer under the Pajarito Plateau. As standards have evolved, waste disposal practices



Commentor No. 279 (cont'd): Beatrice Lewis

have also evolved to be more protective of the environment. As described in Chapter 5, Section 5.3.2.1, groundwater modeling performed for the Area G performance assessment indicates that groundwater ingestion doses 330 feet (100 meters) down gradient from Area G at 4,000 years and in Pajarito Canyon at 700 years would be a very small fraction of the 4 millirem per year standard for groundwater protection. NNSA is required to follow the Consent Order that stipulates that groundwater will be protected and that groundwater cleanup levels will be protective of human health. In addition, NNSA operates a monitoring program (described in Section 4.3.1.5) to detect contamination that has resulted from past practices. LANL staff evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters in accordance with applicable regulations and agreements. NNSA intends to continue to safely manage waste and conduct environmental restoration activities at LANL as it carries out its missions. Refer to Section 2.5, Water Resources, of this CRD for more information.

**279-2** NNSA notes the commentor's preference that activities at LANL be focused on cleanup of the site and areas other than nuclear weapons technology. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor, including nuclear nonproliferation. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

For many years, DOE has been working to implement and improve technologies for environmental restoration. Chapter 2, Section 2.2.6 describes the progress that NNSA has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Appendix I presents options and environmental analyses for conducting remediation activities at LANL, primarily related to the Consent Order that was entered into in March 2005. Appendix I also summarizes several technologies for cleanup of soil, water, and air, and references additional information

*Commentor No. 279 (cont'd): Beatrice Lewis*

about existing and emerging cleanup technologies. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**Commentor No. 280: Anthony J. Mortillaro, Assistant County  
Administrator, Los Alamos County**



**LOS ALAMOS COUNTY**

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**COUNTY ATTORNEY**

Peter A. Dwyer

September 19, 2006

Ms. Elizabeth Withers  
LASO NEPA Compliance Officer  
and ESA Program Manager  
528 35<sup>th</sup> Street, MS-A316  
Los Alamos, NM 87544

Re: Los Alamos County Comments on Draft LANL SWEIS

Dear Ms. Withers:

Los Alamos County thanks you for the opportunity to review the LANL Draft SWEIS. Los Alamos County is submitting comments on issues that are of critical importance to the County government and its residents. Two of the comments were submitted in December on the working draft and submitted in October 2005 on the rough draft. In addition, the County has discussed the issues set forth below and several other issues with DOE during the public comments period. We request written response to these comments.

- \* Request analysis of alternative actions to mitigate impacts on local traffic and roadway infrastructure associated with some projects.
- \* Security issues at LANL and the potential impact on the County.
- \* Ensure that the SWEIS supports the transfer of all previously and newly identified tracts.
- \* Request analysis and documentation of potential impacts of LANL activities to water quality.
- \* Does reference to DOE well fields in Table S-3 actually refer to County well fields?
- \* Off-site disposal of low-level waste at TA-54.

In October and December 2005, Los Alamos County commented in writing that the SWEIS was lacking an analysis of impacts on the local traffic and roadway infrastructure and that mitigation alternatives needed to be considered. Language has been added to the draft SWEIS to acknowledge the impacts (pS-52) "Transportation of waste and fill material by truck for DD&D and MDA remediation could result in an acceleration of wear on local roads and could exacerbate traffic problems." However, analysis of actions to mitigate the impact has not been completed and is requested. To avoid unacceptable risk and impact on the community's primary roadways and to County residents, businesses and LANL employees, Los Alamos County requests that LANL develop alternative roadways for transporting the waste off of the TA21 site. Alternative routes might include a bridge to NM502 near Airport Road or a new roadway to leave the mesa without impacting the community's primary roadways.

280-1

**280-1** NNSA notes the commentor's concern regarding additional traffic on county roadways during DD&D and potential material disposition area remediation activities at TA-21. As stated in Appendix H, Section H.2.3.2, additional waste transportation traffic on the DP Road would vary from about 1,000 to 1,500 trips per year, or an average of 20 one-way truck shipments per day. Based on annual average daily traffic information from the New Mexico State Highway and Transportation Department Consolidated Highway Database, the daily number of heavy commercial trucks on New Mexico 502 (NM 502) near DP Road are projected to range from about 500 to 700. Therefore, additional truck shipments on the road due to activities at TA-21 would amount to between 5 to 10 percent of trucks currently on the road. Unless current use restrictions on NM 502 are lifted (that is, unless the State of New Mexico remedies current safety and traffic concerns east of East Gate Road) and NM 502 is designated as a truck route, even if a bridge were built, the trucks would have to go west on NM 502 to get to the truck route (NM 501, East Jemez Road) before leaving Los Alamos County. Therefore, NNSA has suggested: (1) potential mitigation measures (discussed in Chapter 5, Section 5.14.3) for alternate truck routes such as construction of a bridge between TA-21 and NM 502 or another road from DP Mesa that would bypass the Los Alamos townsite's primary roadways, and (2) the timing of truck trips to avoid peak use hours. The exact mitigation measures implemented by NNSA will be decided after the New Mexico Environment Department approves remediation method(s) for TA-21 and the cleanup details are known.

**Commentor No. 280 (cont'd): Anthony J. Mortillaro, Assistant County Administrator, Los Alamos County**

Ms. Elizabeth Withers  
September 19, 2006  
Page 2

In addition, the SWEIS identifies certain security measures and activities at LANL that require amended security but the SWEIS does not address the potential impact on County's infrastructure (roads, buildings, utilities and public and private facilities) or socio-economic impacts upon the community. For example, the SWEIS identifies impacts of implementing security actions within the federal boundaries but does not address the impacts outside the boundaries. Impacts can include public safety, potential destruction of infrastructure, and other similar actions. Further, identification and discussion of mitigation actions the Department may potentially implement should be undertaken.

280-2

The County requests that the SWEIS identify the potential conveyance of land to the County for economic development purposes (the transfer of whole and portions of tracts TA36, TA62, TA70 and TA71) that the County requested from DOE. Further, the SWEIS should identify that a road is currently expected to be constructed on TA-62 on or about the location of a previous road on the parcel.

280-3

The Land Conveyance and Transfer Section p. 3-6 states that all lands will be transferred by 2007. This section should be updated to reflect the recent change to the law regulating the land transfers (that permits the land to be transferred after 2007) and the current DOE schedule for such actions.

280-4

Potential impacts to water quality should be addressed, as in the previous SWEIS. Ground water use and quantity are addressed but not quality. In light of recent discoveries of impacts to ground water quality, analysis and documentation of actual and expected impacts to groundwater quality is necessary and is requested.

280-5

Table S-3, Groundwater, Water Use refers to DOE well fields that are currently owned by the County. The reference should be deleted.

280-6

The SWEIS should address potential shipment of low level waste from TA-54 to off-site disposal. Off-site shipment may not be the priority of DOE currently, however, off-site disposal was recently an option and it should be considered as an option as part of the SWEIS.

If you have any questions, please do not hesitate to call Regina Wheeler at (505) 662-8050 or myself at (505) 662-8080.

Sincerely,



Anthony J. Mortillaro  
Assistant County Administrator

AJM/gc

Cc: Max Baker, County Administrator  
Kyle Zimmerman, Public Works Director  
Regina Wheeler, Solid Waste Division Manager  
Nancy Talley, Traffic Division Manager  
Robert Monday, Utilities Manager  
County Council

280-2

Appendix J, Section J.1, discusses the security-driven transportation modifications under consideration at LANL. NNSA will work with Los Alamos County to address any public safety concerns. NNSA does not expect that these modifications would result in the destruction of county infrastructure. However, there could be an increase in normal wear and tear on public roads because more traffic may be routed on NM 501 and NM 502 as a result of these modifications. This project is not expected to have any socioeconomic impacts on county residents.

280-3

Conveyance of land from LANL to Los Alamos County under Public Law 105-119, Section 632, is addressed in Chapter 4, Section 4.1.1, of the SWEIS. Should additional tracts be conveyed to Los Alamos County, the action would be evaluated in future NEPA compliance reviews. The Security Perimeter Project is described in Chapter 3, Section 3.1.1.1, of the SWEIS. This section was revised to indicate that the existing unimproved road in TA-62 would be improved through paving and other enhancements as needed to meet New Mexico Department of Transportation requirements. The Draft SWEIS also was revised to reflect recent legislation that provides an additional 5 years to complete the conveyance and transfer of land to Los Alamos County and the Pueblo of San Ildefonso, respectively. Specifically, the new legislation will extend the completion date through November 2012.

280-4

The potential impacts to groundwater quality are described in Chapter 5, Section 5.3.2, and summarized in Table S-5 in the Summary. In addition, the commentor may refer to Section 2.5, Water Resources, of this CRD for more information.

280-5

The table was revised to indicate that the wells are now owned by Los Alamos County.

280-6

The SWEIS analyses evaluated the impacts of transporting all low-level radioactive and other wastes generated during normal operation, demolition and construction, and material disposition area remediation to offsite disposal facilities. The results of these impacts are presented in Chapter 5, Section 5.10, for each alternative. In addition, the project-specific analyses presented in Appendices G, H, I, and J of the SWEIS evaluate the impacts of transporting all generated wastes from individual projects to offsite disposal facilities, as well as transporting all low-level radioactive wastes to the LANL disposal facility in TA-54. Clarifications were added in the waste management and transportation sections, where necessary, to emphasize these activities.

Commentor No. 281: Suzanne Phillips

September 18, 2006

Elizabeth Withers  
SWEIS Document Manager  
Los Alamos Site Office  
National Nuclear Security Administration  
538 35<sup>th</sup> Street  
Los Alamos NM 87544-2201

This is to protest the proposed expansion of plutonium pit production and any other weapons at LANL. I write not only as a resident of Carson, NM endangered by local contamination resulting from the production and waste disposal process, but as a citizen of the world.

281-1

How is it possible for a group of people to devote themselves to producing objects whose deliberate purpose is to destroy or maim other beings?

How can we sidestep and ignore the precept "Do unto others as you would have them do unto you"?

What moral and physical legacy are we leaving our children by choosing to destroy rather than create?

I beg the administrative staff of LANL to look again at the decisions they are about to implement and reverse their decision to increase weapons production. This would be a momentous step towards ending war as a social policy.

281-2

Suzanne Phillips  
7 Freedom Road  
Carson NM 87517-0069



281-1 NNSA notes the commentor's opposition to expanding pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

281-2 NNSA has prepared this SWEIS to evaluate the environmental impacts of continued operation of LANL, including different levels of pit production, and of various specific projects discussed in the appendices. As discussed in Chapter 1, Section 1.4, NNSA will consider this environmental impacts analysis and other factors such as programmatic needs, cost, and schedule in making decisions regarding the level of operations at LANL and the implementation of the projects. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production and 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more discussion.

Commentor No. 282: Azuriel Mayo

From: Azuriel Mayo [mailto:orcamanj1@centurytel.net]  
Sent: Tuesday, September 19, 2006 9:46 AM  
To: LANL\_SWEIS  
Subject: Plutonium production

Dear Fellow Citizen,

I am writing you on behalf of the children of this country and the world. I am deeply concerned with the desire to increase plutonium production at the Los Alamos Labs. I don't know if you have children of your own, but I must ask you on behalf of my children, what kind of world do you want them to inherit? How many bombs and poisons will be enough. I am deeply concerned that the United States, once the bastion of freedom, is now one of the largest arms dealer in the world. How much will radioactive dollars buy? Will they buy Peace and Security? Will they buy health for our children? Will they buy a healthy planet with pure drinking water?

I believe the time has come for us to rethink the way we do things. Our cowboy philosophy of a larger gun will no longer work on this crowded world. I believe it is time to give Peace a chance. Waging Peace is Profitable.

Thank you for reading this and I hope that you will understand that I have the highest level of love for you and all policy-makers and know that you will make the correct choice. I believe that you will make a choice for life and love.

With heartfelt regard,

Azuriel Mayo

282-1

282-1 NNSA notes the commentor's concerns. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**Commentor No. 283: Tim Curry,**  
**Design Solutions**



September 19, 2006

Ms. Elizabeth Withers, SWEIS Document Manager  
 NNSA Los Alamos Site Office  
 528 35th St., Los Alamos, NM 87544  
 E-mail: LANL\_SWEIS@doeal.gov, Fax: 505.667.5948

Dear Ms. Withers:

I am writing to comment on the proposed expansion of operations at LANL.

My comments are made because of the concern I have about my children being exposed to negative environmental issues due to increased LANL activities in Northern New Mexico.

In 1973 I moved to Boulder, Colorado and became immediately aware of the severe environmental impact that the Rocky Flats plant was causing in the Denver metro area. I joined with thousands of people in demanding that the plant be closed, that safety issues be addressed, and that clean-up efforts be undertaken to prevent further exposure.

The operations at the plant were a disaster to the environment, and hundreds of individuals down-wind from the plant were exposed to nuclear contaminants from fires, accidents, and plant mismanagement. It was a great victory, when the government was persuaded to close the plant, clean up the site, and abandon the production of the nuclear materials needed to make more nuclear bombs.

Twenty years later, I find my family, including two young children (aged 4 and 6), facing a potential repeat of the scenario at Rocky Flats. We are again facing the real possibility of accidents involving nuclear materials, inadvertent releases of nuclear contaminants, and unknown long-term effects on our environment. In the simplest of terms, it is simply a very bad idea to develop and produce additional nuclear materials in Northern New Mexico. There is a very specific lack of concern about the consequences of an accident in this region. Just as Rocky Flats was eventually closed due to its proximity to an urban area, so too it is very likely that the government will eventually realize that it is simply not a good idea, not common sense, to locate pit production adjacent to densely populated areas.

Therefore, I do not approve of any decision to expand the pit production at the plant and on the contrary request that clean-up efforts at LANL be increased immediately to protect our water and air in Northern New Mexico.

I also request that you undertake a study to determine the economic consequences of an accident at LANL that reflects the accidents and incidents

283-1

283-2

283-3

**283-1** The SWEIS evaluates the continued operation of LANL, including varying levels of pit production; however, the maximum level of up to 80 pits per year is vastly lower than the levels performed at the Rocky Flats Plant. Chapter 4 of the SWEIS describes the affected environment around LANL; it shows that the impacts of LANL operations have generally been within those projected in the 1999 LANL SWEIS. Chapter 5 of the SWEIS projects a similar level of operational impacts. The Rocky Flats Plant was closed due to a combination of factors, including the end of the Cold War that led to the reduction and cancellation of various weapons programs, and environmental and safety concerns. Design, procedural, and operational experiences at the Rocky Flats Plant formed the basis for many lessons learned that have been used throughout the nuclear weapons complex to increase protection of public and worker health and safety. At LANL, there have been numerous advancements in facility design, operations, equipment, procedures, and training to minimize the risk to the public, workers and environment as a result of LANL activities. Refer to Section 2.12, Comparison to Rocky Flats Plant, of this CRD for more information.

**283-2** NNSA notes the commentor's opposition to expanding pit production and request to increase cleanup efforts. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for a discussion of the need for continued pit production.

Chapter 2, Section 2.2.6, of the SWEIS describes progress made by NNSA in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Continuation of cleanup activities at a pre-Consent Order level is included in the No Action Alternative, while actions necessary to comply with the Consent Order are evaluated under the Expanded Operations Alternative. As stated in Chapter 1, Section 1.4, of the SWEIS, however, NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. For more information about proposed activities in support of the Consent Order, refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD.

**Commentor No. 283 (cont'd): Tim Curry,**  
**Design Solutions**

that actually occurred at Rocky Flats. This would provide the community and Northern New Mexico residents with valuable data and enable us to make a better-informed decision about the consequences of allowing additional nuclear production at LANL. Also, because we know about releases from specific accidents that occurred at Rocky Flats, we can develop an actual model of the consequences of a similar accident. Because these accidents and releases of contaminants occurred in the past it is a very real possibility, perhaps even a foregone conclusion, that similar events will occur again-only this time in our community.

Please stop the expansion of pit production at LANL, and provide our community with the study that I have detailed above.

Sincerely,

Tim Curry

**283-3**  
**cont'd**

**283-3** NNSA notes the commentor's opinion regarding the possibility of the recurrence of accidents like those at Rocky Flats. See the response to Comment no. 283-1 regarding comparison to the Rocky Flats Plant. Chapter 5, Section 5.12 presents the results of accident analyses performed for the operations proposed to be conducted at LANL. The accident scenarios are developed based on information that is specific to LANL facilities, including facility design and the amount of material available in the event of an accident (material at risk). The SWEIS analysis evaluates the radiological risks to members of the public from postulated accidents, however, analyzing the impacts that such an accident might have on the economy, for example from negative "press," is beyond the scope of a NEPA compliance assessment.



**Commentor No. 284: Ilse Bleck, Chair,  
Pajarito Group of the Sierra Club**

Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office, National Nuclear Security Administration  
US Department of Energy, 538 25<sup>th</sup> Street  
Los Alamos, NM 87544-2201

Dear Ms. Withers,

Please consider the following comments of the Pajarito Group of the Sierra Club regarding the Site-Wide Environmental Impact Statement (SWEIS). Our 500 members live in Los Alamos and its surrounding areas.

As an environmental organization we are concerned about the impact of the Preferred Alternative (Expanded Operations) on the environment. While this alternative would have the positive impact of upgrading aging facilities, improving security and remediating obsolete buildings and contaminated lands, it would also increase "selected operations," including plutonium pit production. An increase in the number of plutonium pits alone from 20 to 80 per year will produce about 1,800 55-gallon drums of waste. This waste would be added to the approximately 40,000 drums already sitting above ground and waiting to be shipped to the Waste Isolation Pilot Plant. Permanent disposal of already existing waste, not more waste production, should be given priority. The SWEIS should require that no expansion of operations be permitted which would increase the existing backlog of waste stored on site, and that the existing backlog be removed in a reasonable time frame.

284-1

Expanded Operations will increase LANL water usage above the amount allotted from the regional aquifer. With competition for water resources in our dry climate, with depletion of aquifers, and continued growth, this constant strain on our water system cannot be maintained. The SWEIS should specify how the additional water required for the expanded operations will be obtained, and insure that the county is not forced into a bidding war with DOE for this scarce resource.

284-2

As to water contaminants: The SWEIS states that "Recharge to the regional aquifer from the shallow contaminated perched groundwater bodies occurs slowly because the perched water is separated from the regional aquifer by hundreds of feet of dry rock." This statement is not entirely accurate; the rate of recharge varies in different areas. In some locations, recharge to groundwater has been tracked to fewer than five years. You must consult the LANL hydrology reports before making such a global statement.

284-3

Regardless of the rate of recharge, it is irresponsible to have contaminants reach the aquifer in any case. Protecting our aquifers should be of highest priority. DOE must adopt the Removal Option for all clean up activities in order to ensure that our water quality will be protected in the future.

LANL must reevaluate and broaden its air sampling programs. DOE must institute programs to stop toxic air pollutant emissions from LANL facilities, such as the Los Alamos Neutron Science Center.

284-4

**284-1** Although a pollution prevention and waste minimization program has been instituted at LANL (see Chapter 4, Section 4.9, of the SWEIS), operation of LANL in support of NNSA's core missions will generate waste that NNSA intends to manage safely as it continues to address existing stored waste. Nearly all of the stored waste at LANL consists of legacy transuranic waste that is stored within aboveground domes in TA-54. Most of this waste was originally stored below grade, but was retrieved and placed in an aboveground, inspectable configuration as required by the State of New Mexico. NNSA is working to prepare all stored and newly generated transuranic waste for shipment to WIPP. Shipments to WIPP have increased significantly over the past several years. Refer to Section 2.7, Waste Management, of this CRD for more information.

**284-2** NNSA notes the commentor's concerns regarding projected water use and water availability. LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling of 542 million gallons (2,050 million liters) per year, as discussed in Chapter 5, Section 5.8. DOE transferred 70 percent of its water rights for LANL and leases the remaining 30 percent to Los Alamos County. DOE is a Los Alamos County water customer that is billed and pays for the water LANL uses. DOE has no plans to otherwise obtain or purchase additional water rights for LANL. NNSA continues to work cooperatively with Los Alamos County to manage water use at LANL. Please refer to Section 2.8, Water Use, of this CRD for more information on water use, available water rights, and water supply planning at LANL.

**284-3** Appendix E, Section E.7.1.1, was revised to indicate that recharge to the regional aquifer from shallow, contaminated perched groundwater bodies generally occurs slowly because the perched water is separated from the regional aquifer by hundreds of feet of unsaturated rock. Section 2.5, Water Resources, of this CRD addresses NNSA's commitment to protecting water resources. Decisions about environmental restoration, including implementation of the Removal Option, will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order. The intent of the SWEIS is to provide environmental impact information to aid decisionmaking related to the alternatives and to potential remediation action options.

**Commentor No. 284 (cont'd): Ilse Bleck, Chair,  
Pajarito Group of the Sierra Club**

The SWEIS should include an alternative focusing on research and development of renewable energy sources. We have the resources, and the impact we could have on the nation and the world would be far greater than anything we could achieve by being solely a nuclear armament facility.

Thank you for considering our comments.

Sincerely yours,  
Ilse Bleck, Chair  
Pajarito Group of the Sierra Club  
1007 Big Rock Loop  
Los Alamos, NM 87544

|| 284-5

**284-4** All LANL operations, regardless of when they began, comply with the applicable state (New Mexico Air Quality Control Act) and Federal (Clean Air Act, Toxic Substances Control Act) laws and regulations and have valid permits, as described in Chapter 6 of the SWEIS. The LANL contractor complies with its Clean Air Act, Title V, operating permit, including requirements for monitoring air pollutant emissions from sources at LANL and associated recordkeeping. Current air sampling programs at LANL include ambient nonradiological air monitoring, an ambient radiological air sampling network called AIRNET, and stack sampling for radionuclides, as described in Chapter 4, Sections 4.4.2.3 and 4.4.3.1. The LANL contractor evaluates the results from these programs and changes the sampling locations and constituents as appropriate. LANSCE operations historically have accounted for the majority of radioactive air emissions at LANL. As discussed in Chapter 5, Section 5.6.1.1, NNSA has instituted administrative controls at LANSCE to regulate beam operations as emissions levels increase. These controls require operational changes to prevent the generation of excessive radioactive air emissions so that the maximum dose to the LANL site-wide MEI from LANSCE air emissions is 7.5 millirem per year, or less, to ensure compliance with the 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants) limit of 10 millirem per year.

**284-5** NNSA notes the commentor's desire for an alternative focused on research and development of renewable energy sources. These activities were identified in the 1999 SWEIS as part of a "Greener Alternative" that was analyzed but not selected for implementation. Chapter 3, Section 3.5, discusses NNSA's decision not to analyze a "Greener Alternative" in the SWEIS. NNSA does not believe, 7 years later, that a "Greener Alternative" is reasonable for future operation of LANL to meet its mission as directed by the Congress and the President, and has identified the Expanded Operations Alternative as its Preferred Alternative. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, however, research is conducted in areas promoted by the commentor. These research areas are part of current operations; as such, they are included in the SWEIS under the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

**Commentor No. 285: Emile Sawyer**

**Comments on the Draft Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory**

September 19th, 2006  
Ms. Elizabeth Withers, SWEIS Document Manager  
NNSA Los Alamos Site Office  
528 35th St., Los Alamos, NM 87544  
E-mail: LANL\_SWEIS@doeal.gov, Fax: 505.667.5948

Dear Ms. Withers:

I respectfully submit these comments on the Draft Site-Wide Environmental Impact ("DSWEIS") Statement for Continued Operation of the Los Alamos National Laboratory (LANL). Through its preferred "Expanded Operations Alternative" LANL plans to expand nuclear weapons research and production. I join with hundreds of fellow citizens and the Santa Fe City Council in opposing these plans.

In summary:

1. The draft SWEIS process is seriously flawed and the DSWEIS must be reissued.
2. The public comment period should be extended.
3. The DSWEIS itself is seriously deficient and should be redone. Should NNSA refuse to redo the process and the DSWEIS, the rest of my comments should be considered and incorporated into the Final SWEIS.
4. LANL should disclose any plans for even greater plutonium pit production above the 80 pits per year considered in the DSWEIS.
5. Expanding pit production now is premature and must await pit lifetime studies and national review of "transformation" of the nuclear weapons complex, all of which are pending.
6. A new draft SWEIS should fully analyze the programmatic, infrastructure, production and nonproliferation implications of the Reliable Replacement Warhead Program.
7. The Non-Proliferation Treaty's mandate to disarm nuclear stockpiles must be pursued.
8. The risks of potential terrorist acts must be analyzed in this DSWEIS.
9. Other alternative Laboratory missions, such as attaining national clean energy independence and addressing the threat of global climate change, must be considered.
10. Cleanup must not include "cap and cover" of unlined waste dumps.
11. LANL must not allow contaminants to reach the groundwater aquifer or the Rio Grande.
12. LANL must stringently minimize the use of our precious water.
13. Construction of new nuclear weapons facilities should stop until seismic risks are fully understood.
14. LANL's economic benefits should be more widely distributed across northern New Mexico.
15. LANL's potential negative impacts on tourism must be analyzed.
16. The DWSEIS must be more specific in all its data and risk analyses.
17. LANL should not generate or import more radioactive and chemical wastes until it cleans up what it already has.
18. The DSWEIS must incorporate the numerous, serious safety issues raised by the independent Defense Nuclear Facilities Safety Board.
19. The "Radiological Sciences Institute", the largest construction project in the DSWEIS, is premature for consideration given its size and lack of information. It must have its own separate and independent environmental impact statement.

Comments on the Draft LANL Site-Wide Environmental Impact Statement • Page 1

285-1

285-1 NNSA notes the commentor's opposition to the Expanded Operations Alternative. Please refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. As discussed in Chapter 1, Section 1.4, decisions on the level of operations at LANL will be made by the Administrator based on the environmental analyses in the SWEIS and other factors such as programmatic need and costs. NNSA will publish these decisions in one or more Records of Decision.

**Commentor No. 285 (cont'd): Emile Sawyer**

**1. The draft SWEIS process is seriously flawed and the DSWEIS must be reissued.**

This DSWEIS started as a "supplemental" SWEIS focusing on short term environmental and cleanup actions. It was then transformed into a completely new SWEIS that lays the groundwork for LANL to become the nation's one and only permanent plutonium pit production site. The draft SWEIS violates National Environmental Policy Act (NEPA) regulations since no new Notice of Intent was published once the decision was made to expand plutonium pit production, which should have triggered a new round of scoping hearings and consideration of public scoping comments.

285-2

**2. The Public Comment Period Should Be Extended**

The minimal statutory requirement under NEPA for any ordinary environmental impact statement is 45 days. The DSWEIS is voluminous, some five inches high, in all comprising approximately 2,000 pages of often-dense material. Yet NNSA granted only a 60-day comment period (later extended by 15 days because of public pressure). This is not sufficient time for the public to make informed comments. There should be a minimum of an additional 180 days to make comments on the current and any future documents required due to an ameliorated SWEIS process.

285-3

Moreover, the draft SWEIS has 59 pages of lists of approximately 700 reference documents that largely act as the backbone of the SWEIS. NNSA expected interested citizens from around the country to travel to three controlled "reading rooms" in order to review these documents. NNSA should make all of the DSWEIS's reference documents available online and then restart the public comment period.

**3. The DSWEIS itself is seriously deficient and should be redone.**

In numerous instances, the DSWEIS relies on invalid, incomplete or future studies. An example of an invalid study is the *Public Health Assessment for Los Alamos National Laboratory* by the Agency for Toxic Substances and Disease Registry (ATSDR) of the U.S. Department of Health and Human Services. The DSWEIS relies on that assessment's conclusion that there is nothing to link environmental factors with the observed incidence of any cancer in Los Alamos County. However, that assessment was rejected by the Environmental Protection Agency who said, "ATSDR should redo their risk assessment to reduce conservatism and not assume that there is no risk." That assessment has not been redone, yet the DSWEIS relies upon the previous ATSDR risk assessment to assert that Laboratory operations have no appreciable negative effects on public health. Some of the highest rates of brain cancers in the nation occur in the project vicinity. This alone suggests that "no appreciable negative effects on public health" is an absurd conclusion. The significant impact to the locality, vicinity, State of New Mexico, the United States of America and the entire world community of this project must be addressed in the DSWEIS.

285-4

In other examples, the draft SWEIS was released before either, the risk assessment for LANL's "low-level" radioactive waste dump at Area G or the 2006 seismic hazard study by the Lab's Seismic Hazards Geology Team were completed. The 2003 *Modern Pit Facility Environmental Impact Statement*, so heavily used and quoted in the DSWEIS as the bounding analysis for the risks of increased plutonium pit production, remains a draft document. Additionally, a word search of the reference documents shows that 16 other documents used as references are still drafts. The DSWEIS cannot honestly and completely inform the northern New Mexicans of

285-5

285-2 NNSA believes that the LANL SWEIS presents appropriate and adequate analysis of LANL operations that are expected to occur through 2011. NNSA prepared this SWEIS in accordance with the Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and DOE implementing procedures (10 CFR Part 1021). NNSA did originally announce its intent to prepare a supplement to the *1999 LANL SWEIS*, which included all operations at LANL as well as newly proposed projects as part of an expanded operations alternative. Consistent with some of the comments received during the scoping period, NNSA decided to prepare a new SWEIS instead of the originally planned supplement. Please refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

285-3 NNSA published a *Federal Register* notice announcing the availability of the Draft LANL SWEIS on July 7, 2006. Responding to requests for additional review time, NNSA extended the comment period from the original 60 days to 75 days. See more discussion on the NEPA process in Section 2.2, NEPA Process, of this CRD.

285-4 The SWEIS presents an independent assessment of public health impacts from contaminants in the LANL environment. The Agency for Toxic Substances and Disease Registry is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting Public Health Assessments at each site on the U.S. Environmental Protection Agency National Priorities List. The Public Health Assessment is a relevant Federal agency study and it is therefore appropriate that the SWEIS acknowledge its conclusions. The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry Public Health Assessment in any specific way for its conclusions. The Public Health Assessment examined data from 1980 through 2001 whereas the SWEIS includes and evaluates health data through 2005 and projects impacts from operations over the next 5 years. The U.S. Environmental Protection Agency did not reject the draft Public Health Assessment; however, it did submit comments. The Public Health Assessment was finalized and released August 31, 2006 (ATSDR 2006). As detailed in Appendix I to the final Public Health Assessment, U.S. Environmental Protection Agency comments on the draft were addressed by the Agency for Toxic Substances and Disease Registry in the final document.

**Commentor No. 285 (cont'd): Emile Sawyer**

LANL's potential impacts until the draft ATSDR public health assessment, the Area G Documented Safety Analysis and the report of the LANL Seismic Hazards Geology Team have all been finalized. References to these and all draft and outdated documents in this draft SWEIS need to be qualified at a minimum. This DSWEIS process itself is invalid until these deficiencies are corrected.

The body of the reference documents itself is deficient by omissions. One example is that NNSA describes Ten Year Comprehensive Site Plans from its individual sites as the key planning documents for the future "intended" nuclear weapons complex. Yet, the DSWEIS lists only the LANL Plans for Fiscal Years 2000 and 2001, which are obviously outdated. The FY 2006 LANL Ten Year Comprehensive Site Plan, which was released to the public under Freedom of Information Act litigation, should be incorporated into the body of reference documents and made publicly available (as well as the pending FY 2007 Plan).

Finally, given its Notice of Intent in January 2005, NNSA was not exactly hurried in releasing the draft SWEIS by July 2006, but yet mandated an impractical time period in which the public is supposed to review some 2,000 technical pages and prepare comments. Moreover, to this day NNSA impedes convenient public access to crucial reference documents and substantially bases the DSWEIS on invalid and uncompleted studies. Hence, the DSWEIS process is severely flawed and the DSWEIS must be redone.

**4. LANL should disclose any plans for even greater plutonium pit production above the 80 pits per year considered in the DSWEIS.**

The central issue discussed in the DSWEIS is the proposed expansion of plutonium pit production at LANL from 20 pits per year to 80. Pits are the atomic "triggers" for today's nuclear weapons. Congress has repeatedly rejected funding for a proposed "Modern Pit Facility" (MPF) to be built at one of five candidate sites, capable of producing up to 450 pits per year. Through the DSWEIS the Lab may be laying the groundwork for a "MPF-lite."

In one reference document an aerial photograph of LANL's plutonium complex at Technical Area (TA)-55 is superimposed with speculative "Modern Pit Annexes" and "Additional Facility Sites" contiguous to the existing pit production facility. Moreover, the Radiological Sciences Institute, the single largest construction proposed in the DSWEIS (up to 13 new buildings) and also contiguous to TA-55, could directly support future plutonium pit production. Additionally, Senator Domenici's appropriations subcommittee recently noted the financial unlikelihood of locating nuclear weapons-related plutonium facilities elsewhere. His subcommittee further directed NNSA to study expanding the mission of an advanced plutonium lab now being built next to the existing plutonium pit production facility. All of these factors converge to create a plutonium-manufacturing infrastructure that likely would enable future pit production levels above the 80 pits per year considered in the DSWEIS. The Final SWEIS should disclose any such plans. The danger is that LANL may be incrementally slipping into becoming the nation's permanent site for plutonium pit production.

**5. Expanding pit production now is premature and must await pit lifetime studies and national review of "transformation" of the nuclear weapons complex, all of which are pending.** NNSA is required by legislation to complete "pit lifetime studies" and have independent senior nuclear weapons scientists review the results by the end of this year. Those senior scientists have repeatedly stated that operational plutonium pit lifetimes are more

*Comments on the Draft LANL SWEIS• Page 3*

285-5  
cont'd

285-6

285-7

285-8

**285-5** To the extent possible, the most recent technical documents, including a current version of the Area G performance assessment have been considered in the Final SWEIS analyses. The seismic hazard analysis report was completed in June 2007 and incorporated into Chapter 4, Section 4.2.2.3, Chapter 5, Section 5.12, and Appendix D, Section D.4. Information currently under development that is not available for use in the Final SWEIS will be considered as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. As the commentor observes, a number of documents referred to in the SWEIS are drafts. These include a number of DOE EISs, other EISs or related information from other Federal agencies, a Los Alamos County comprehensive plan, a LANL wildfire management plan, and a borrow source survey. For the most part, these documents have been used in the cumulative impacts analysis and are the best information available to reflect reasonably foreseeable future actions. The documents are clearly identified as being drafts.

With regard to the *Draft Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2), NNSA announced its cancellation in October 2006 in the Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (DOE/EIS-0236-S4) (71 FR 61731). Regarding the *Ten-Year Comprehensive Site Plans*, much of the information contained in the prior versions from fiscal years 2000 and 2001 is still relevant. The data in the SWEIS has been compared to that in more recent revisions of the *Ten-Year Comprehensive Site Plan* to ensure that it is consistent; however, the Plan is not a reference in the SWEIS because as an Official Use Only document it is not generally available to the public although it has been released under a specific Freedom of Information Act request.

**285-6** NNSA originally established a 60-day comment period. In response to requests for additional time, the comment period was extended to 75 days. NNSA recognizes that in light of electronic capabilities now available, commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about

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approximately 60 to 90 years without any declared expiration date, in contrast to NNSA's currently accepted 45 years. This means that plutonium pits could well last more than a hundred years. The implications could be enormous, strongly undermining the need for the production of 80 pits per year. A new draft SWEIS must fully incorporate the findings of the NNSA pit lifetime studies and their independent review. Even outside of the SWEIS process, any NNSA decision to increase plutonium pit production is premature before those results are reached.

NNSA has recently announced the process will soon start for national programmatic review of the nuclear weapons complex intended for the year 2030, and has clearly indicated that much of that review will center on future plutonium pit production. That review may also involve consolidation of special nuclear materials, particularly plutonium, at a site other than LANL. This draft LANL SWEIS, which proposes to dramatically expand pit production and plutonium storage at the Lab, could be in conflict with the pending programmatic environmental impact statement of "Complex 2030." The LANL SWEIS process must be halted until that broader review is completed and LANL's role in the future nuclear weapons complex is better defined. To do otherwise defies logic.

**6. A new draft SWEIS should fully analyze the programmatic, infrastructure, production and nonproliferation implications of the Reliable Replacement Warhead.**

The RRW program is a program for new designs of nuclear weapons. U.S. nuclear weapons have already been proven reliable through extensive full-scale testing and subsequent certification since the testing moratorium began in 1992. To introduce new, untested designs will undermine stockpile confidence and could well lead to resumed full-scale testing in the future, which would have disastrous non-proliferation implications. Further, RRW is likely a Trojan Horse whose real purpose is to introduce new-design nuclear weapons with different military characteristics for new purposes, again with potentially disastrous nonproliferation implications. Finally, RRW is becoming a means unto itself, justifying the resurgence and revitalization of a nuclear weapons complex that should be ramping down under the framework of the Non-Proliferation Treaty. A new draft LANL SWEIS should fully analyze the programmatic, infrastructure, production and nonproliferation implications of the RRW Program.

**7. The Non-Proliferation Treaty's mandate to disarm nuclear stockpiles must be honored.**

The 1970 Non-Proliferation Treaty (NPT) obliged all nuclear weapons states signatories to Article VI, which states "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament..." The DSWEIS's preferred "Expanded Operations Alternative" of increased nuclear weapons research and production at LANL directly contradicts that Treaty obligation, especially given NNSA plans to increase nuclear weapons production, including new designs under the so-called Reliable Replacement Warhead Program. The final SWEIS for Continued Operations at LANL should comport not only with the NPT's mandate to disarm nuclear stockpiles, but also with the critical need for the U.S. to lead by example in ridding the world of weapons of mass destruction. Nuclear weapons are simultaneously the most militarily useful and destructive weapons of mass destruction. Nuclear weapons have been declared a Crime Against Humanity by the World Court.

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posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in the general vicinity of LANL. Those reading rooms are located in Los Alamos, Santa Fe, and Albuquerque. The Draft LANL SWEIS also referred to a publicly available draft study by the Agency for Toxic Substances and Disease Registry; this study has since been finalized and the final version is referenced in the Final SWEIS. See the response to Comment nos. 285-3 and 285-4 above for more information.

285-7 On January 11, 2008, NNSA issued the *Complex Transformation SPEIS* (DOE/EIS-0236-S4) (73 FR 2023), which analyzes the environmental impacts from the continued transformation of the nuclear weapons complex. This includes evaluating a production level of up to 125 pits per year at a number of alternate sites including LANL. This LANL SWEIS evaluates pit production up to a level of 80 pits per year consistent with the earlier analysis in the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (DOE 1996), which led to a decision to establish an interim pit production capability at LANL.

285-8 If the missions assigned to LANL change as a result of the *Complex Transformation SPEIS* ROD, additional site-specific NEPA compliance reviews will be conducted as necessary. Results of the plutonium pit lifetime studies are addressed in Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD. While the studies show that degradation of plutonium in the majority of nuclear weapons would not impact weapon reliability for a minimum of 85 years, the analyses in this SWEIS are still valid. The analyses provide a bounding impact of annually producing up to 80 pits, consistent with LANL's current mission. NNSA can decide to operate at a lower production rate, but this analysis provides NNSA flexibility in meeting its stockpile stewardship mission based on changing geopolitical conditions. See the response to Comment no. 285-7 for further information.

285-9 The Reliable Replacement Warhead Program, if funded by the Congress, is being conducted as part of studies that would support modernization of nuclear weapons. The impacts of these modernization efforts on the nuclear weapons complex have yet to be determined; therefore it is premature to consider the environmental implications of the Reliable

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**8. The Risks of Potential Terrorist Acts Must Be Analyzed In this DSWEIS.**

NNSA should follow a recent court decision (*San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission*) and fully analyze and consider the effects of potential terrorist act at the Los Alamos National Laboratory in a new DSWEIS.

285-11

**9. Other alternative Laboratory missions, such as attaining national clean energy independence and addressing the threat of global climate change, must be considered.**

There are three alternatives analyzed in this DSWEIS:

- 1) No Action Alternative: Operations would continue at current levels consistent with previous decisions made in the Record of Decision for the previous 1999 LANL SWEIS.
- 2) Reduced Operations Alternative: Operations would be reduced at High Explosive Facilities and eliminated at the Los Alamos Neutron Science Center and Pajarito Site.
- 3) Expanded Operations Alternative: Actions would be implemented to upgrade or replace aging facilities and systems, improve security, and remediate obsolete buildings and contaminated lands. Selected operations would increase, including the production of plutonium pits. This is the preferred alternative.

Two additional alternatives need analysis:

- 1) Onsite Aboveground Waste Storage Alternative: LANL should develop an aboveground waste storage site where radioactive low-level waste is stored in engineered mounds. This monitored waste storage site would be large enough to receive all of the Lab's legacy waste after it is exhumed, all of the debris from future demolished buildings, and all future waste from future operations. This alternative would protect the regional aquifer while the waste would be easily retrievable when future advanced technologies can actually make radioactive waste safe. As an example, an analogous, albeit smaller-scale, program was recently completed at the Fernald, Ohio, Department of Energy site.
- 2) Energy Security Alternative: LANL should initiate a Manhattan-Project-like effort to solve the world's global-warming and clean, sustainable energy problems. This would do more for true, long-term national security than expanded nuclear weapons operations will ever do.

285-12

**10. Cleanup must not include "cap and cover" of unlined waste dumps.**

The DSWEIS analyzed two options for LANL's legacy buried waste. The Capping Option would leave all radioactive and chemical wastes in place in the major disposal areas and cover them with a surface rain barrier. The Removal Option would remove all legacy waste from the ground. The DSWEIS correctly notes that future cleanup decisions will be largely driven by the New Mexico Environment Department (NMED). However, internal Lab documents already point to predetermination, saying "Many contaminated sites will be remediated to industrial use standards, in part because cleaning up to residential or unrestricted use standards is prohibitively expensive." Cleanup that will protect ongoing generations who should not be dictated by today's short-term fiscal considerations. If more money is needed for comprehensive cleanup, take it from the ever-expanding budget for the Lab's nuclear weapons programs. Don't generate more radioactive and chemical wastes when cleanup costs are already "prohibitively expensive."

285-13

LANL is still burying its radioactive wastes in unlined dumps, in contrast to all new State-regulated landfills in New Mexico. The 1999 LANL SWEIS allowed more unlined waste pits, called Zone 4, near the existing unlined waste pits that NMED may require exhumation. The

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Replacement Warhead Program. The *Complex Transformation SPEIS* is being prepared to evaluate the activities associated with the continuing transformation of the nuclear weapons complex. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

**285-10** NNSA is not expanding nuclear weapons production, that is, the United States is not increasing the number of nuclear weapons in its stockpile. The United States is currently reducing its nuclear weapons stockpile. NNSA is performing activities to ensure the safety and reliability of the current stockpile, which includes replacing the plutonium pits using existing designs and possible future designs, including the Reliable Replacement Warhead (if authorized by the Congress). Operations at LANL that support NNSA's mission to ensure a safe and reliable nuclear stockpile are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, and Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

**285-11** DOE gives high priority to the safety and security of all its facilities. Security and potential acts of sabotage are integral considerations in the designs and operating procedures for new and existing DOE facilities. DOE considers the threat of terrorist attack to be real and has an established safeguards and security process it undertakes to assess facility vulnerabilities to various threats, including those from intentional destructive acts, such as acts of terrorism. Chapter 4, Section 4.6.5, of the SWEIS has been revised to include a description of the systems in place at LANL to provide the safeguards and security necessary to prevent a terrorist attack. Additional information has been added to Chapter 5, Section 5.12.6, regarding potential impacts of terrorism and a separate classified appendix has been developed.

**285-12** Chapter 3, Section 3.5, of the SWEIS provides a discussion of NNSA's consideration of, and decision to not analyze a "Greener Alternative" in the SWEIS. A "Greener Alternative" was analyzed in the *1999 SWEIS* but was not selected for implementation. NNSA does not believe, 7 years later, that a "Greener Alternative" is reasonable for the future operation of LANL to meet its mission as directed by the Congress and the President, and has identified the Expanded Operations Alternative as its Preferred Alternative. NNSA is not currently considering an alternative

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whole concept of Zone 4 requires reexamination because waste volumes are substantially higher than in the 1999 SWEIS. A new DSWEIS must consider the benefits of lining Lab dumps.

**11. LANL must not allow contaminants to reach the groundwater aquifer or the Rio Grande.** *Recharge to the regional aquifer from the shallow contaminated perched groundwater bodies occurs slowly because the perched water is separated from the regional aquifer by hundreds of feet of dry rock. (DSWEIS, p. 463)* Is the DSWEIS suggesting, because the contaminants reach the aquifer slowly, that everything is OK? The fact is that tritium, perchlorates, chromium, and high explosives contaminants from Lab operations have already reached the regional aquifer. Lab computer models show a five-year travel time from the surface to the aquifer in some areas. LANL must prioritize protecting our precious aquifer.

Sadly, the interpretation of groundwater data is complicated by problems that affect the sampling wells. Specifically, the bentonite clay used in well drilling can mask many radionuclides and other contaminants. The use of circulating muds and other drilling fluids can have a similar effect by more complex mechanisms. The groundwater data in the DSWEIS could represent systematic underestimates of the actual contamination, and cannot be relied upon in the SWEIS.

Lab analysis of stormwater runoff and surface water also shows high contamination. Americium-241, strontium-90 and plutonium-238 & 239 in particular have been measured at levels up to ten times the drinking water standard. There is a witch's brew of hundreds of other contaminants in the soil at the bottom of the canyons. Contaminated stormwater either seeps into the ground, posing a threat to groundwater, or, in intense storm events, drains to the Rio Grande. During every storm event, these contaminants migrate closer to the Rio Grande. LANL must publish its raw data, including storm-by-storm migration reports and the totals and locations of all the contaminants released. The Lab was self-serving in its choice of references that it used for this DSWEIS. Independent, outside research by experts such as Bob Gilkeson and George Rice were not included.

**12. LANL must stringently minimize the use of our precious water.** Estimated water usage for the expanded alternative will exceed LANL's current capacity. Many DOE nuclear weapons facilities have been historically located next to abundant water sources, but LANL was not. When it was primarily a design laboratory, lack of water was not quite a problem. Now that the Lab is poised to become the nation's plutonium pit production center, LANL is starting to covet the scarce water resources of the desert Southwest. The Lab plans to obtain more water rights, but what about the future? Will the Lab start buying up ever-increasing water rights, perhaps depriving others northern New Mexicans of their most precious resource?

**13. Construction of new nuclear weapons facilities should cease until seismic risks are fully understood.**

*A report in preparation by the LANL Seismic Hazards Geology Team will document a comprehensive review and re-evaluation of ...activity in the Pajarito Fault system. This study is being prepared to recalculate the probabilistic seismic hazard at LANL. The reanalysis of the seismic hazard will incorporate data from studies completed since the 1999 SWEIS (LANL 2004e). Both the comprehensive review and reanalysis of seismic hazard are planned for completion in the fourth quarter of 2006. (DSWEIS, p.4-25)*

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waste storage arrangement at LANL such as the use of above ground waste storage mounds for the storage of low-level or mixed low-level radioactive wastes. DOE's Record(s) of Decision for low-level and mixed low-level radioactive wastes supported by the *1997 Waste Management Programmatic EIS* (DOE/EIS-0200) (DOE 1997a) state DOE's decisions for the management and disposal of these waste types for DOE operations, including LANL operations. LANL was identified as a facility that would continue to dispose of its low-level radioactive wastes onsite. Additional environmental impact analysis was provided through the *1999 SWEIS* for the expansion of the Area G low-level radioactive waste disposal site. DOE decided to expand into Zones 4 and 6 of Area G and announced this decision in a *1999 LANL SWEIS* Record of Decision (64 FR 50797). Mixed waste generated by LANL is currently disposed of offsite, primarily at licensed commercial facilities. The commentor's recommendation for future LANL operations is noted. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

**285-13** NNSA notes the commentor's concern regarding the funding priorities of the U.S. government; funding decisions are not within the scope of the SWEIS, which evaluates the environmental impacts of proposed actions and alternatives. NNSA intends to conduct operations at LANL in accordance with its assigned missions while continuing the LANL environmental restoration program summarized in Chapter 2, Section 2.2.6, of the SWEIS. Appendix I evaluates the environmental impacts associated with potential remedial action alternatives, however, decisions about remediating a site will be made in accordance with established regulatory standards and processes, including those of the State of New Mexico for the Consent Order. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered such as containment in place, treatment, or removal. Any selected remediation remedy must meet several criteria including protection of human health and the environment, and attainment of applicable cleanup standards including those for ground and surface waters. If the site is to remain under DOE ownership, then cleanup



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The previous 1999 SWEIS stated that the last seismic activity occurred 45,000 years ago, and now this DSWEIS states it was less than 8,000 years ago. Will the next SWEIS, due in 2011, find even less time? The mapping of the fault lines and fracture zones under the Lab is presently incomplete, yet many new nuclear weapons facilities are being planned. The fact is that LANL is located in a severely fractured fault zone between a rift valley and an extinct volcano. This draft SWEIS is premature in its consideration of seismic risks without the new report that is to be completed by the end of the year. There should be a new DSWEIS that fully incorporates the implications of the new seismic report.

**14. LANL's economic benefits should be more widely distributed across northern New Mexico.** Three counties, Los Alamos, Rio Arriba, and Santa Fe, were analyzed for socioeconomic effects in the DSWEIS. Please state if Los Alamos County is expected to continue to receive a disproportionately large percentage of the economic benefits from the Lab and remain the richest county in the U.S. The DSWEIS must analyze whether alternative missions would be of greater economic benefit to all of northern New Mexico.

**15. LANL Impacts On Tourism Must Be Analyzed.** Tourism is a major contributor to Santa Fe's and northern New Mexico's economy. Please analyze the effects of a major accident at the Lab on tourism.

**16. The DSWEIS must be more specific in all its data and risk analyses.** The DSWEIS is full of vague and general terms. For instance, the words "likely" and "unlikely" are used over 300 times. One example, from page S-63: "In the event of a wildfire that would impact LANL, and if the fire were to burn the waste storage domes at TA-54... Should such an accident scenario occur in which the contents of the waste storage domes actually caught on fire and burned, the MEI [maximally exposed individual] would likely develop a fatal cancer during his or her lifetime and an additional 55 "Latent Cancer Fatalities" could be expected in the general area population. Any onsite worker located within about 110 yards (100 meters) of the facility during such an accident would likely develop a fatal cancer during his or her lifetime." The word "could" is used over 1200 times. "May" is used over 1100 times. In order to better understand the impacts of operations at the Lab, ratios should be used, for example, "A worker would have a 99% chance of developing a fatal cancer."

**17. LANL should not generate or import more radioactive and chemical wastes until it cleans up what it already has.** Another component of the Expanded Operations Alternative is the increased onsite storage of highly radioactive sealed sources. A sealed radioactive source is a radioisotope that is fully encapsulated in metal or other container such that the radioactive material cannot be contacted. Sealed sources have medical and well-drilling applications. It has been estimated that 21,000 sealed sources within the commercial sector will become excess and need to be managed in this Off-Site Source Recovery Project. Except for those containers of defense-related sealed sources that would be eligible for shipment to the Waste Isolation Pilot Plant, this waste has no disposal path. The waste containers are placed in storage and held until an appropriate waste disposal facility becomes available. The total volume of actinide sources with no disposal path is expected to be approximately 260 cubic yards. Is there a plan to research technologies to dispose of these safely, or is the plan to bury these? Where?

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standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted access by the public, then the site would need to meet cleanup standards for unrestricted access. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the New Mexico Environment Department using cleanup criteria documented in Section VIII of the Consent Order. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**285-14** NNSA notes the commentor's opposition to waste disposal in unlined pits at LANL. Except for low-level radioactive waste, all radioactive and chemical wastes generated at LANL are transported offsite for disposal in regulated disposal facilities authorized for the types of wastes each facility may receive. The future use of lined rather than unlined pits for low-level radioactive waste disposal is under evaluation through the Area G Performance Assessment and Composite Analysis required by DOE Order 435.1 that is periodically reviewed and updated. The Performance Assessment and Composite Analysis will guide decisions regarding operational procedures and waste disposal. The SWEIS considers impacts from the use of unlined pits as its No Action Alternative baseline; this impact analysis thereby bounds the long-term environmental consequences that could result from the use of lined disposal pits.

Much of the low-level radioactive waste projected for the Expanded Operations Alternative is attributable to remediation actions. Waste volumes generated from environmental restoration will depend significantly on future cleanup decisions made by the State of New Mexico pursuant to the Consent Order. The analysis in Appendix I of the SWEIS bounds the volumes that could be generated if all buried wastes in material disposal areas covered under the Consent Order are removed and disposed of elsewhere. In this case, offsite disposal of low-level radioactive waste would be used to supplement onsite disposal. Refer to Sections 2.7, Waste Management, and 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**285-15** Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding well construction, chromium contamination, and

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Further, the DSWEIS estimates that if the Lab were to be fully cleaned up, 100,000 offsite shipments would be required. Why make or import more chemical and radioactive wastes when the legacy waste inventory is already so immense?

**18. The DSWEIS must incorporate the numerous, serious safety issues raised by the Defense Nuclear Facilities Safety Board.** Risk analyses in this DSWEIS are based on normal operations at the Lab. The Defense Nuclear Facilities Safety Board (DNFSB), an independent safety board chartered by Congress to oversee the nuclear weapons complex, has often reported that operations at the Lab are chronically unsafe. The Safety Board has repeatedly declared that federal safety oversight at LANL has deteriorated over recent years and that many safety issues at the Lab remain unresolved. Instead of the bland assurances that all is well, the DSWEIS should fully incorporate, analyze, consider and resolve the serious safety issues raised by the DNFSB.

**19. The Radiological Sciences Institute should not proceed until it has a separate environmental impact statement.** The information and data on this proposal is insufficient and the project itself is too preliminary. A complex of this size, with up to 13 new major buildings, and multi-purpose missions, including "support for weapons manufacturing, material property evaluations for stockpile stewardship... and nuclear-weapons-related research," should have a unique environmental impact statement when the reference data are complete.

NNSA's preferred alternative of Expanded Operations requires the decontamination, decommissioning, and demolition (DD&D) of 52, or 80 percent, of LANL's existing radiological facilities and consolidating their missions in the RSI. This massive overhaul will involve handling and disposing of contaminated structures, contaminated equipment and adjacent soil contaminated from 40 to 60 years of nuclear weapons work. The DSWEIS states this DD&D "would result in some release of radionuclides", but amounts are not given. How can this lack of detail constitute a credible environmental impact statement? Operations at the new RSI, like many other nuclear weapons facilities at LANL, have so much potential for environmental impact that they should be analyzed in much greater detail than is done in this DSWEIS.

These comments are respectfully submitted on behalf of my children, their children, and their children's, children's, great grandchildren.

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radionuclide contamination. The SWEIS presents a summary description of the environmental conditions near LANL. The reports cited by the commentor did not present new data but used data that can also be found in the SWEIS. Gilkeson and Rice presented their interpretations of that data. NNSA and the LANL contractor are aware of concerns Bob Gilkeson and George Rice have expressed regarding groundwater characterization at LANL; actions to address some of these concerns are part of the monitoring program underway at LANL.

**285-16** NNSA notes the commentor's concerns regarding projected water use and existing and future water rights. LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling of 542 million gallons (2,050 million liters) per year as discussed in Chapter 5, Section 5.8, of the SWEIS. DOE transferred 70 percent of its water rights for LANL and leases the remaining 30 percent to Los Alamos County. DOE is now a County water customer and is billed and pays for the water LANL uses. DOE has no plans to otherwise obtain or purchase more water rights for LANL. Refer to Section 2.8, Water Use, of this CRD for more information. Regarding pit production, the LANL SWEIS alternatives addressing the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative) consistent with earlier decisions supported by the *Stockpile Stewardship and Management Programmatic Environmental Impact Statement* (DOE/EIS-0236) (DOE 1996). The *Complex Transformation SPEIS* includes evaluating alternative locations for a consolidated plutonium center or a consolidated nuclear production center that would have plutonium pit production as one of its functions. See the response to Comment no. 285-7 above.

**285-17** This SWEIS does not propose new nuclear weapons facilities under any of the alternatives. NNSA completed the *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, New Mexico* (DOE/EIS-0350) (DOE 2003c) in November 2003 and in February 2004 issued a Record of Decision (69 FR 6967) announcing its decision to construct a new facility. This decision is included in the No Action Alternative and the Expanded Operations Alternative of this SWEIS. On January 11, 2008, NNSA issued the Draft *Complex Transformation SPEIS* (DOE/EIS-0236-S4) (73 FR 2023), which

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evaluates the environmental impacts from the continued transformation of the nuclear weapons complex, referred to as Complex Transformation. The Reduced Operations Alternative in the Final SWEIS was revised to reflect continued use of the existing Chemistry and Metallurgy Research Building in the event that NNSA, in conjunction with its plans for Complex Transformation, decides not to construct the nuclear facility portion of the Chemistry and Metallurgy Research Replacement Facility. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

The seismic risks associated with the Chemistry and Metallurgy Research Replacement Facility have been studied and are part of the updated LANL probabilistic seismic hazard analysis (LANL 2007a). Similarly, the seismic accident analysis was updated in the Final SWEIS to reflect the recent information in the updated seismic hazards analysis. Work performed at LANL, and new construction, are both subject to existing DOE orders and standards for seismic concerns. Different construction requirements are imposed for new structures in accordance with the site locations relative to known fault lines, and in accordance with the planned future use of the structure. An update to the seismic hazard analysis was completed in June 2007. Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

The new geological information in the 2007 seismic hazard analysis report (LANL 2007a) has been interpreted as indicating that the seismic hazard at LANL is greater than previously understood. The relevance of the seismic hazard to facility accidents will undergo a rigorous and thoughtful evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

Following the NEPA process but prior to the design and operation of specific facilities, safety studies in the form of Hazard Assessment

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Documents and Safety Analysis Reports that include seismic concerns and take into account the most current seismic information would be prepared to address a comprehensive set of accident risks. The results of these safety studies would be incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

- 285-18** Because the largest concentration of LANL employees is expected to continue to reside in Los Alamos County, this county is expected to continue to receive a large share of the economic benefits in terms of wages associated with LANL employment. However, as more LANL employees move into adjoining counties as has been the case in recent years, it is expected that these counties will receive a greater share of the wages associated with LANL employment. Also, the recent change in the LANL management contract will result in the payment of gross receipts taxes to the State of New Mexico for the first time. The use of these additional tax revenues will be decided upon by the State legislature and the Governor. Analyzing alternative missions that would be of greater economic benefit to northern New Mexico is not within the scope of the SWEIS.
- 285-19** NNSA notes the commentor's concerns related to the effect a major accident would have on New Mexico's economy as a result of reduced tourism. The SWEIS impact analysis considers socioeconomic impacts of operating LANL on the general New Mexico economy of which tourism is a part. Chapter 5, Section 5.12, of the SWEIS analyzes the potential impacts from a variety of accident scenarios on members of the public, which would include visitors to the area.
- 285-20** The SWEIS is specific in presenting the consequences and risks of accidents. The terms, "likely", "unlikely", "could", and "may" are used to convey the degree of certainty of a specific accident consequence or risk. As discussed in Appendix C, Section C.1.2.1, all health impacts from radiological accidents are expressed in terms of radiation dose, number of latent cancer fatalities, and then using the frequency of such an accident, the risk to an individual or the population from this accident. This risk is expressed in terms of the annual chance of a latent cancer fatality in the Summary as well as in Chapter 5 and Appendix D. For example, in the "Facility Accidents" subsection of Section S.9.1 of the Summary, and Table S-5, the annual risk of a latent cancer fatality to the maximally exposed individual due to the wildfire accident referred to in

Commentor No. 285 (cont'd): Emile Sawyer

the comment is presented as 0.05 or 1 chance in 20. This is equivalent to 5 percent. The use of latent cancer fatality, latent cancer fatality risk, and the expression as “a chance in...” is common nomenclature used in many EISs.

- 285-21** As addressed and analyzed in the SWEIS, NNSA plans to continue to perform environmental restoration at LANL, and dispose of newly-generated and legacy radioactive and chemical wastes, as it continues its Congressionally-mandated national security missions. In March 2005, the State of New Mexico, NNSA, and the University of California, as the management and operating contractor, entered into a “Compliance Order on Consent” (Consent Order) that is currently being implemented to address the investigation and remediation of environmental contamination at LANL. The volumes of waste generated from compliance with the Consent Order, and the associated shipments of waste to on- and offsite disposal facilities, will depend on regulatory decisions made by the New Mexico Environment Department pursuant to the Consent Order. NNSA has the responsibility for safely storing unwanted radioactive sealed sources for safety and national security purposes. In addition, DOE is responsible under Public Law 99-240 for ensuring safe disposal of commercially-generated Greater-Than-Class C low-level radioactive waste (see below). Over a number of years, NNSA has been recovering and storing actinide-bearing sealed sources at LANL under its Off-Site Source Recovery Project, and proposes to store additional sources containing other isotopes, if appropriate and safe commercial or other Federal management options cannot be identified. Stored sources containing transuranic isotopes that are determined to be defense-related are eligible for disposal at WIPP. This includes all the plutonium-239 sources that have been collected, and, as stated in the SWEIS, 132 drums of plutonium-239 sealed sources have already been shipped to WIPP. Recently, some of the americium-241 and plutonium-238 sealed sources have been determined to be defense-related and eligible for disposal at WIPP. Stored sources containing these and other isotopes that are determined to be not defense-related may be considered Greater-Than-Class C or similar DOE waste. At this time, there is no disposal path for Greater-Than-Class C low-level radioactive waste; however, DOE has issued a Notice of Intent to Prepare an *Environmental Impact Statement for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste* (72 FR 40135). Several options for disposal of Greater-Than-Class C

Commentor No. 285 (cont'd): Emile Sawyer

waste, as well as DOE waste having similar characteristics, are being considered. Clarifying language has been added to Appendix J of the SWEIS.

**285-22** The Defense Nuclear Facilities Safety Board does not regulate nor authorize operation of facilities at LANL. Its function, as mandated by the Congress, is to provide independent safety oversight of the NNSA nuclear weapons complex. As in the case of all NNSA nuclear weapons complex sites, the Defense Nuclear Facilities Safety Board reviews safety issues and prepares reports regarding the safety of nuclear weapons complex facilities, which are submitted to NNSA. NNSA and the LANL contractor have reviewed Defense Nuclear Facilities Safety Board reports and responded with commitments to update and improve safety basis documentation. The Los Alamos Site Office Safety Authorization Basis Team assures the development and approval of adequate controls in support of safe operations at LANL. All LANL facility operations are based on authorization and approval by NNSA from evaluation of the acceptability of existing relevant safety documentation. Reports and recommendations made by the Defense Nuclear Facilities Safety Board that are relevant to NEPA are taken into account in analyses in the SWEIS. Refer to Section 2.13, Recommendations of the Defense Nuclear Facilities Safety Board, of this CRD for more information.

**285-23** The LANL SWEIS evaluates the potential impacts of constructing and operating a new Radiological Sciences Institute in Appendix G based on the functions such a facility would be expected to fulfill and the estimated number of structures required. As described in Appendix G, Section G.3, of the SWEIS, phase 1 of this Radiological Sciences Institute, construction of the Institute for Nuclear Nonproliferation Science and Technology, is expected to start within the time frame covered by the SWEIS. Subsequent phases of the project will be evaluated as they are further planned and more fully defined. Based on these evaluations, NNSA will make a determination whether additional NEPA analysis and documentation are needed. Radiological air emissions and associated radiological doses to workers and the public are quantified in Section G.3.3.2. Projected annual radiological air emissions from the Radiological Sciences Institute were estimated to be the combined total of the projected emissions from the individual facilities whose functions would be moved to the Radiological Sciences Institute.

Commentor No. 286: Grace Clearsen

From: lightenupj@aol.com [mailto:lightenupj@aol.com]  
Sent: Wednesday, September 20, 2006 6:22 AM  
To: LANL\_SWEIS  
Subject: No to increased plutonium pit....

To whom it may concern:

Please note my vigorous protest against depositing any additional nuclear waste in the ground, or indeed, CREATING additional nuclear waste. Please understand that this earth is our mother and we are, step by step, destroying her ability to nurture us. We cannot continue to take actions which do not consider the long term effects of our actions on future generations.

286-1

Thank you for NOT increasing your plutonium output. I know you will do the right thing.

Sincerely,  
Grace Clearsen

286-1 NNSA notes the commentor's opposition to the generation and disposal of nuclear waste. Refer to Section 2.7, Waste Management, of this CRD for more information.

**Commentor No. 287: Daniel Gibson**

COMMENTS RE: LANL DRAFT SWEIS  
September 19, 2006

To: Ms. Elizabeth Withers, SWEIS Document Manager  
NNSA Los Alamos Site Office  
528 35th St., Los Alamos, NM 87544  
E-mail: LANL\_SWEIS@doeal.gov, Fax: 505.667.5948

From: Daniel Gibson  
518 Juniper Drive  
Santa Fe NM 87501  
505-986-6124  
dbgibson@newmexico.com

The Site-Wide Environmental Impact Statement for Los Alamos Laboratory, now in Draft form, reveals a terribly flawed process and set of conclusions for this vital national science laboratory.

|| 287-1

Instead of a facility that could bring great weight to bear and solutions to hand on immense problems facing the nation and the world—from global warming and the need for renewable fuels, to mass starvation, pending pandemics, loss of oceanic resources, desertification, etc., etc. Instead, the powers that be want another high tech weapons factory to produce more weapons that the United States should never, ever, put to use, especially offensive-style tactical nukes now under development.

|| 287-2

Nor have we paid for nor cleaned up the horrific pollution and contamination issues associated with our earlier nuclear weapons building binge.

|| 287-3

I call for a SWEIS that would study the potential benefits LANL research could bring to bear on any number of pressing problems, and a plan that calls for our public resources to be put to good use, versus more death and destruction!

|| 287-2  
cont'd

Specifically, I point to the following flaws in the SWEIS:

It seems that the expanded pit production infrastructure being planned at Los Alamos is an attempt to replace, under a different name, the "Modern Pit Facility" that has been rejected by Congress and the public.

|| 287-4

In order to justify this lopsided emphasis on plutonium pit manufacturing capabilities, it has been necessary for DOE to completely overlook a mounting body of recent evidence concerning viable pit lifetimes, now widely conceded to be decades longer than once thought. Expanding pit production now is premature and must await pit lifetime studies and national review of "transformation" of the nuclear weapons complex, all of which are pending. The SWEIS must address this issue, first and foremost.

|| 287-5

**287-1** NNSA believes that the LANL SWEIS presents appropriate and adequate analysis of LANL operations that are expected to occur through 2011. NNSA prepared this SWEIS in accordance with the Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and the DOE implementing procedures (10 CFR Part 1021).

**287-2** NNSA notes the commentor's opposition to activities related to nuclear weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

**287-3** Chapter 2, Section 2.2.6, of the SWEIS describes the progress that DOE has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Decisions about environmental remediation will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Compliance Order on Consent (Consent Order) that was entered into in March 2005. Appendix I of the SWEIS presents options and environmental analyses for conducting remediation activities at LANL primarily related to the Consent Order. These analyses address LANL waste disposal sites and other contaminated areas, and provide environmental impact information to facilitate environmental remediation decisions that will be made by DOE and the New Mexico Environment Department. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**287-4** Reference to a modern pit facility in the Draft LANL SWEIS was in the context of ensuring that reasonably foreseeable future actions were



**Commentor No. 287 (cont'd): Daniel Gibson**

We have on-going revelations about on- and off-site releases at Los Alamos. Moreover, the consumption of enormous quantities of water to build and run the CMRR and other new facilities and the exposure of our groundwater to illegal levels of contamination pose a two-fold threat to the region's most precious resource. The SWEIS needs to address the outcomes to regional water supplies should the groundwater beneath Pajarito Plateau is found to be massively contaminated in 10 years.

287-6

A new draft SWEIS should fully analyze the programmatic, infrastructure, production and nonproliferation implications of the Reliable Replacement Warhead Program.

287-7

The NonProliferation Treaty's mandate to disarm nuclear stockpiles must be honored.

Other alternative Laboratory missions, such as attaining national clean energy independence and addressing the threat of global climate change, must be considered.

287-2  
cont'd

Cleanup must not include "cap and cover" of unlined waste dumps.

287-8

LANL's economic benefits should be more widely distributed across northern New Mexico. THE SWEIS should study the potential job creation from transforming LANL into a center for research and development center for addressing the national and global problems noted above.

287-9

I grew up in New Mexico and am a nearly lifetime resident. I attended the University of New Mexico and today am the editor of a national magazine. Personally and professionally, I am opposed to the plans of making LANL the de facto nuclear weapons production factory for the nation. I am almost sickened by the thought of the wasted resources and money and brainpower evident at LANL, and the production of new mountains of highly dangerous wastes and toxins this plan would entail.

287-10

Sincerely,

Daniel Gibson

addressed in accordance with the Council on Environmental Quality NEPA regulations addressing cumulative impacts. The LANL SWEIS alternatives addressing operational levels for the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative). In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (71 FR 61731). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). The Final LANL SWEIS does not include reference to a modern pit facility. Please refer to Section 2.2, National Environmental Policy Act (NEPA) Process and Section 2.4 Modernization of the Nuclear Weapons Complex, of this CRD for more discussion.

287-5

If the missions assigned to LANL change as a result of the *Complex Transformation SPEIS* ROD, additional site-specific NEPA compliance reviews will be conducted as necessary. Results of the plutonium pit lifetime studies are addressed in Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD. While the studies show that degradation of plutonium in the majority of nuclear weapons would not impact weapon reliability for a minimum of 85 years, the analyses in this SWEIS are still valid. The analyses provide a bounding impact of annually producing up to 80 pits, consistent with LANL's current mission. NNSA can decide to operate at a lower production rate, but this analysis provides NNSA flexibility in meeting its stockpile stewardship mission based on changing geopolitical conditions. See the response to Comment no. 287-4 above for further information.

287-6

Chapter 5, Section 5.3.2, of the SWEIS describes the impacts to the groundwater from the alternatives evaluated in the SWEIS. As described in Section 5.3.2.1, groundwater modeling performed for the Area G performance assessment indicated that groundwater ingestion doses 330 feet (100 meters) downgradient from Area G at 4,000 years and

Commentor No. 287 (cont'd): Daniel Gibson

in Pajarito Canyon at 700 years would be a very small fraction of the 4 millirem per year standard for groundwater protection.

Refer to Section 2.6, Offsite Contamination, of this CRD for more information.

**287-7** The Reliable Replacement Warhead Program, if funded by the Congress, is being conducted as part of studies that would support modernization of nuclear weapons. The impacts of these modernization efforts on the nuclear weapons complex have yet to be determined; therefore it is premature to consider the environmental implications of the Reliable Replacement Warhead Program. The *Complex Transformation SPEIS* is being prepared to evaluate the activities associated with the continuing transformation of the nuclear weapons complex. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

Operations at LANL that support NNSA's mission to ensure a safe and reliable nuclear stockpile do not violate the Treaty on Non-Proliferation of Nuclear Weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**287-8** Decisions about remediation measures at LANL will be made in the future in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order. The intent of the SWEIS is not to prejudge these decisions but to provide environmental impact information to be used for the decision-making process, and for the benefit of the reader regarding potential remediation action options. Several alternative remedies may be considered for a contaminated site or waste disposal area, including containment in place, treatment, removal, or other remedies. Any selected remedy, or combination of remedies, must meet several criteria including protection of human health and the environment and attainment of applicable cleanup standards considering the designated future use of the site. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the New Mexico Environment Department considering cleanup standards for groundwater, surface water, and soils as documented in Section VIII of the Consent Order. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

Commentor No. 287 (cont'd): Daniel Gibson

- 287-9** Because the largest concentration of LANL employees is expected to continue to reside in Los Alamos County, this county is expected to continue to receive a large share of the economic benefits in terms of wages received by LANL employees associated with LANL operations. However, as more LANL employees move into adjoining counties as has been the case in recent years, it is expected that these counties will receive a greater share of the wages associated with LANL employment. Also, the recent change in the LANL management contract will result in the payment of gross receipts taxes to the State of New Mexico for the first time. The use of these additional tax revenues will be decided upon by the State legislature and the Governor. Analyzing alternative missions that would be of greater economic benefit to northern New Mexico is not within the scope of the SWEIS.
- 287-10** NNSA notes the commentor's opposition to pit production at LANL. See the response to Comment nos. 287-4 and 287-5 above and to Section 2.1, Opposition to Nuclear Weapons and Pit Production, and Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information related to the concerns voiced in this comment. Chapter 5 of the SWEIS evaluates the impacts, including waste generation, of all three alternatives including the Expanded Operations Alternative. Increasing pit production up to an 80 pit per year production rate would not significantly increase waste generation, as shown in Section 5.9.3; however, if selected, the Complete Removal Option evaluated in Appendix I would potentially generate a significant amount of waste as a result of removing buried legacy waste from existing material disposal areas at LANL.

Commentor No. 288: Jamie Chase

From: j.chase2754 [mailto:j.chase2754@comcast.net]  
Sent: Tuesday, September 19, 2006 8:35 PM  
To: LANL\_SWEIS  
Subject: Citizen Comments regarding LANL draft SWEIS

> Now that America is widely viewed as a destabilizing force by both  
> friend and foe, a new arms race would seem the worst path to choose  
> and the worst signal to send the world.

> As a 25 year resident artist of Santa Fe, I believe that the life's  
> blood of New Mexico's economy is  
its culture and natural beauty, both of which are continually  
jeopardized by the ever encroaching ambitions of nuclear industries  
which have made our state both a potential terrorist target and/or an  
environmental sacrifice zone.

For a more technical breakdown of risks involved in proposed expansions  
of pit production programs, I would refer you to a detailed analysis  
provided by Nukewatch.org

> I implore you, as architects of our collective futures, to seek  
> wisdom over profit, to harness the great scientific talent and  
> financial wealth of our nation toward positive solutions; alternative  
> energy strategies, water purification, transportation, rather than  
> violate non-proliferation treaties pursuing a dark and dangerous  
> future of new nuclear weapons systems.

> I consider this proposed misuse of public resources a threat to  
> global security, and another tragedy of missed opportunity.

> Jamie Chase  
> Santa Fe, NM

>  
>>

>

288-1

288-2

**288-1** NNSA notes the commentor's opposition to nuclear-related activities within the State of New Mexico. With regard to the terrorism concern raised in this comment, DOE gives high priority to the safety and security of all its facilities. Security and potential acts of sabotage are integral considerations in the designs and operating procedures for new and existing DOE facilities. DOE considers the threat of terrorist attack to be real and has an established safeguards and security process it undertakes to assess facility vulnerabilities to various threats, including those from intentional destructive acts, such as acts of terrorism. Chapter 4, Section 4.6, of the SWEIS has been revised to include additional discussion of the measures taken to protect assets at LANL from terrorist activities. As discussed in Chapter 5, Section 5.12.6, the impacts of terrorist action have been considered in a separate classified appendix to the SWEIS.

**288-2** NNSA notes the commentor's desire for research to be conducted in areas not related to nuclear weapons production and concern that current activities violate nonproliferation treaties. U.S. efforts to ensure a safe and reliable nuclear stockpile, including activities conducted at LANL, violate none of the terms of the Treaty on the Non-Proliferation of Nuclear Weapons. Cessation of these activities at LANL would be counter to national security policy as established by the Congress and the President. In addition to these stockpile stewardship activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

**Commentor No. 289: Hollis C. Wood**

**From:** Hollis wood [mailto:hollydotwood@earthlink.net]  
**Sent:** Tuesday, September 19, 2006 6:32 PM  
**To:** LANL\_SWEIS  
**Subject:** Comments on DSWEIS

Comments on the Draft Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory

September xxxx, 2006

Ms. Elizabeth Withers, SWEIS Document Manager NNSA Los Alamos Site Office  
 528 35th St., Los Alamos, NM 87544

E-mail: HYPERLINK "mailto:LANL\_SWEIS@doeal.gov" LANL\_SWEIS@doeal.gov,  
 Fax: 505.667.5948

Dear Ms. Withers:

I respectfully submit these comments on the Draft Site-Wide Environmental Impact ("DSWEIS") Statement for Continued Operation of the Los Alamos National Laboratory (LANL). Through its preferred "Expanded Operations Alternative" LANL plans to expand nuclear weapons research and production. I join with hundreds of fellow citizens and the Santa Fe City Council in opposing these plans.

289-1

In summary:

1. The draft SWEIS process is seriously flawed and the DSWEIS must be reissued.
2. The public comment period should be extended.
3. The DSWEIS itself is seriously deficient and should be redone, which is primary. Should NNSA refuse, the rest of my comments should be nevertheless be considered and incorporated into the Final SWEIS.
4. LANL should disclose any plans for even greater plutonium pit production above the 80 pits per year considered in the DSWEIS.
5. Expanding pit production now is premature and must await pit lifetime studies and national review of "transformation" of the nuclear weapons complex, all of which are pending.
6. A new draft SWEIS should fully analyze the programmatic, infrastructure, production and nonproliferation implications of the Reliable Replacement Warhead Program.
7. The NonProliferation Treaty's mandate to disarm nuclear stockpiles must be honored.

289-1

NNSA notes the commentor's opposition to the Expanded Operations Alternative. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. As discussed in Chapter 1, Section 1.4, decisions on the level of operations at LANL will be made by the Administrator based on the environmental analyses in this SWEIS and other factors such as programmatic need and costs. NNSA will publish these decisions in one or more Records of Decision.

**Commentor No. 289 (cont'd): Hollis C. Wood**

8. The risks of potential terrorist acts must be analyzed in this DSWEIS.
9. Other alternative Laboratory missions, such as attaining national clean energy independence and addressing the threat of global climate change, must be considered.
10. Cleanup must not include “cap and cover” of unlined waste dumps.
11. LANL must not allow contaminants to reach the groundwater aquifer or the Rio Grande.
12. LANL must stringently minimize the use of our precious water.
13. Construction of new nuclear weapons facilities should stop until seismic risks are fully understood.
14. LANL's economic benefits should be more widely distributed across northern New Mexico.
15. LANL's potential negative impacts on tourism must be analyzed.
16. The DWSEIS must be more specific in all its data and risk analyses.
17. LANL should not generate or import more radioactive and chemical wastes until it cleans up what it already has.
18. The DSWEIS must incorporate the numerous, serious safety issues raised by the independent Defense Nuclear Facilities Safety Board.
19. The “Radiological Sciences Institute”, the single biggest construction project in the DSWEIS, is premature for consideration given its size and lack of information. It must have its own separate and independent environmental impact statement.

1. The draft SWEIS process is seriously flawed and the DSWEIS must be reissued.

This DSWEIS started as a “supplemental” SWEIS focusing on short term environmental and cleanup actions. It then morphed into a completely new SWEIS that lays the groundwork for LANL to become the nation’s permanent plutonium pit production site. It violates National Environmental Policy Act (NEPA) regulations to not have published a new Notice of Intent once the decision was made to expand plutonium pit production, which would have triggered a new round of scoping hearings and consideration of public scoping comments.

**289-2**

2. The Public Comment Period Should Be Extended

The minimal statutory requirement under NEPA for any run-of-the-mill environmental impact statement is 45 days. The DSWEIS is voluminous, some five inches high, in all comprising approximately 2,000 pages of often-dense material. Yet NNSA

**289-3**

**289-2** NNSA believes that the LANL SWEIS presents appropriate and adequate analysis of LANL operations that are expected to occur through 2011. NNSA prepared this SWEIS in accordance with the Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and DOE implementing procedures (10 CFR Part 1021). NNSA did originally announce its intent to prepare a supplement to the 1999 LANL SWEIS, which included all operations at LANL as well as newly proposed projects as part of an expanded operations alternative. Consistent with some of the comments received during the scoping period, NNSA decided to prepare a new SWEIS instead of the originally planned supplement. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

**289-3** NNSA published a *Federal Register* notice announcing the availability of the Draft LANL SWEIS on July 7, 2006. Responding to requests for additional review time, NNSA extended the comment period from the original 60 days to 75 days. See additional discussion on the NEPA process in Section 2.2 of this CRD.

**Commentor No. 289 (cont'd): Hollis C. Wood**

granted only a 60-day comment period (later extended by 15 days because of public pressure). This is not sufficient time for the public to make informed comments.

Moreover, the draft SWEIS has 59 pages of lists of approximately 700 reference documents that largely act as the backbone of the SWEIS. NNSA expected interested citizens from around the country to travel to three controlled "reading rooms" in order to review these documents. NNSA should make all of the DSWEIS's reference documents available online and then restart the public comment period.

3. The DSWEIS itself is seriously deficient and should be redone. In numerous instances the DSWEIS relies on invalid, incomplete or future studies. An example of an invalid study is the Public Health Assessment for Los Alamos National Laboratory by the Agency for Toxic Substances and Disease Registry (ATSDR) of the U.S. Department of Health and Human Services. The DSWEIS relies on that assessment's conclusion that there is nothing to link environmental factors with the observed incidence of any cancer in Los Alamos County. However, that assessment was rejected by the Environmental Protection Agency who said, "ATSDR should redo their risk assessment to reduce conservatism and not assume that there is no risk." That assessment has not been redone, but yet the DSWEIS relies upon it to assert that Laboratory operations have no appreciable negative effects on public health.

In other examples, the draft SWEIS was released before either the risk assessment for LANL's "low-level" radioactive waste dump at Area G or the 2006 seismic hazard study by the Lab's Seismic Hazards Geology Team were completed. The 2003 Modern Pit Facility Environmental Impact Statement, so heavily used and quoted in the DSWEIS as the bounding analysis for the risks of increased plutonium pit production, remains a draft document. Additionally, a word search of the reference documents shows that 16 other documents used as references are still drafts. The DSWEIS cannot honestly and completely inform the northern New Mexicans of LANL's potential impacts until the draft ATSDR public health assessment, the Area G Documented Safety Analysis and the report of the LANL Seismic Hazards Geology Team have all been finalized. References to these and all draft and outdated documents in this draft SWEIS need to be qualified. This DSWEIS process itself is invalid until those deficiencies are corrected.

The body of the reference documents itself is deficient by omissions. One example is that NNSA describes Ten Year Comprehensive Site Plans from its individual sites as the key planning documents for the future "intended" nuclear weapons complex. Yet, the DSWEIS lists only the LANL Plans for Fiscal Years 2000 and 2001, which are obviously outdated. The FY 2006 LANL Ten Year Comprehensive Site Plan, which has already been released to the public under Freedom of Information Act litigation, should be incorporated into the body of reference documents and made publicly available (as well as the pending FY 2007 Plan).

**289-3  
cont'd**

**289-4**

**289-5**

**289-4** The SWEIS presents an independent assessment of public health impacts from contaminants in the LANL environment. The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry Public Health Assessment in any specific way for its conclusions. The Public Health Assessment examined data from 1980 through 2001 whereas the SWEIS includes and evaluates health data through 2005 and projects impacts from operations over the next 5 years. The Agency for Toxic Substances and Disease Registry is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting Public Health Assessments at each site on the U.S. Environmental Protection Agency National Priorities List. The Public Health Assessment is a relevant Federal agency study and it is therefore appropriate that the SWEIS acknowledge its conclusions. The U.S. Environmental Protection Agency did not reject the draft Public Health Assessment; however, it did submit comments. The Public Health Assessment was finalized and released August 31, 2006 (ATSDR 2006). As detailed in Appendix I to the final Public Health Assessment, U.S. Environmental Protection Agency comments on the draft were addressed by the Agency for Toxic Substances and Disease Registry in the final document.

**289-5** To the extent possible, the most recent technical documents, including a current version of the Area G performance assessment, have been considered in the Final SWEIS analyses. The seismic hazard analysis report was completed in June 2007 and incorporated into Chapter 4, Section 4.2.2.3, Chapter 5, Section 5.12, and Appendix D, Section D.4. Information under development that is not available for use in the Final SWEIS will be considered as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

As the commentor observes, a number of documents referred to in the SWEIS are drafts. These include a number of DOE EISs, EISs or related information from other Federal agencies, a Los Alamos County comprehensive plan, a LANL wildfire management plan, and a borrow source survey. For the most part, these documents have been used in the cumulative impacts analysis and are the best information available to reflect reasonably foreseeable future actions. The documents are

**Commentor No. 289 (cont'd): Hollis C. Wood**

In closing, given its Notice of Intent in January 2005, NNSA was not exactly hurried in releasing the draft SWEIS by July 2006, but yet mandated an impractical time period in which the public is supposed to review some 2,000 technical pages and prepare comments. Moreover, to this day NNSA impedes convenient public access to crucial reference documents and substantially bases the DSWEIS on invalid and uncompleted studies. Hence the DSWEIS process is severely flawed and the DSWEIS should be redone.

4. LANL should disclose any plans for even greater plutonium pit production above the 80 pits per year considered in the DSWEIS.

The central issue discussed in the DSWEIS is the proposed expansion of plutonium pit production at LANL from 20 pits per year to 80. Pits are the atomic "triggers" for today's nuclear weapons. Congress has repeatedly rejected funding for a proposed "Modern Pit Facility" (MPF) to be built at one of five candidate sites, capable of producing up to 450 pits per year. Through the DSWEIS the Lab may be laying the groundwork for a "MPF-lite."

In one reference document an aerial photograph of LANL's plutonium complex at Technical Area (TA)-55 is superimposed with speculative "Modern Pit Annexes" and "Additional Facility Sites" contiguous to the existing pit production facility. Moreover, the Radiological Sciences Institute, the single biggest construction proposed in the DSWEIS (up to 13 new buildings) and also contiguous to TA-55, could directly support future plutonium pit production. Additionally, Senator Domenici's appropriations subcommittee recently noted the financial unlikelihood of constructing nuclear weapons-related plutonium facilities other than at LANL. His subcommittee further directed NNSA to study expanding the mission of an advanced plutonium lab now being built next to the existing plutonium pit production facility. All of these factors seem to converge to create a plutonium-manufacturing infrastructure that would enable future pit production levels above the 80 pits per year considered in the DSWEIS. The Final SWEIS should disclose any such plans. The danger is that LANL may be incrementally slipping into becoming the nation's permanent site for plutonium pit production.

5. Expanding pit production now is premature and must await pit lifetime studies and national review of "transformation" of the nuclear weapons complex, all of which are pending. NNSA is required by legislation to complete "pit lifetime studies" and have independent senior nuclear weapons scientists review the results by the end of this year. Those senior scientists have repeatedly stated that operational plutonium pit lifetimes are more on the order of 60 to 90 years without any declared expiration date, in contrast to NNSA's currently accepted 45 years. This means that plutonium pits could well last more than a hundred years. The implications could be enormous, strongly undermining the need for the production of 80 pits per year. A new draft

289-6

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289-8

clearly identified as being drafts. With regard to the *Draft Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2), NNSA announced its cancellation in October 2006 in the Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (DOE/EIS-0236-S4) (71 FR 61731). Regarding the *Ten-Year Comprehensive Site Plan*, much of the information contained in the prior versions from fiscal years 2000 and 2001 is still relevant. The data in the SWEIS has been compared to that in more recent revisions of the *Ten-Year Comprehensive Site Plan* to ensure that it is consistent; however, the Plan is not a reference in the SWEIS because as an Official Use Only document it is not generally available to the public although it has been released under a specific Freedom of Information Act request.

289-6

NNSA originally established a 60-day comment period. In response to requests for additional time, the comment period was extended to 75 days. NNSA recognizes that in light of electronic capabilities now available, that commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in the general vicinity of LANL. Those reading rooms are located in Los Alamos, Santa Fe, and Albuquerque. In the Draft LANL SWEIS, reference is made to an update to the performance assessment for Area G. Until this update has been completely developed, thoroughly reviewed, and released, the existing document that they will eventually replace remain valid; therefore, it is entirely appropriate to use the current approved version of this document as a reference in the LANL SWEIS. The Draft LANL SWEIS also referred to a publicly available draft study by the Agency for Toxic Substances and Disease Registry and a seismic hazard analysis report under development; these reports have been finalized and the final versions are referenced in the Final SWEIS. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.



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SWEIS must fully incorporate the findings of the NNSA pit lifetime studies and their independent review. Even outside of the SWEIS process, any NNSA decision to increase plutonium pit production is premature before those results are reached.

NNSA has recently announced the process will soon start for national programmatic review of the nuclear weapons complex intended for the year 2030, and has clearly indicated that much of that review will center on future plutonium pit production.

That review may also involve consolidation of special nuclear materials, particularly plutonium, at a site other than LANL. This draft LANL SWEIS, which proposes to dramatically expand pit production and plutonium storage at the Lab, could be in conflict with the pending programmatic environmental impact statement of "Complex 2030." The LANL SWEIS process must be halted until that broader review is completed and LANL's role in the future nuclear weapons complex is better defined. To do otherwise defies logic.

6. A new draft SWEIS should fully analyze the programmatic, infrastructure, production and nonproliferation implications of the Reliable Replacement Warhead. The RRW program is a program for new designs of nuclear weapons. U.S. nuclear weapons have already been proven reliable through extensive full-scale testing and subsequent certification since the testing moratorium began in 1992. To introduce new, untested designs will undermine stockpile confidence and could well lead to resumed full-scale testing in the future, which would have disastrous non-proliferation implications. Further, RRW is likely a Trojan Horse whose real purpose is to introduce new-design nuclear weapons with different military characteristics for new purposes, again with potentially disastrous nonproliferation implications. Finally, RRW is becoming a means unto itself, justifying the resurgence and revitalization of a nuclear weapons complex that should be ramping down under the framework of the NonProliferation Treaty. A new draft LANL SWEIS should fully analyze the programmatic, infrastructure, production and nonproliferation implications of the RRW Program.

7. The NonProliferation Treaty's mandate to disarm nuclear stockpiles must be honored.

The 1970 NonProliferation Treaty (NPT) obliged all nuclear weapons states signatories to Article VI, which states "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament..." The DSWEIS's preferred "Expanded Operations Alternative" of increased nuclear weapons research and production at LANL directly contradicts that Treaty obligation, especially given NNSA plans to increase nuclear weapons production, including new designs under the so-called Reliable Replacement Warhead Program. The final SWEIS for Continued Operations at LANL should comport not only with the NPT's mandate

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**289-7** On January 11, 2008, NNSA issued the Draft *Complex Transformation SPEIS* (DOE/EIS-0236-S4) (73 FR 2023), which analyzes the environmental impacts from the continued transformation of the nuclear weapons complex. This includes evaluating a production level of up to 125 pits per year at a number of alternate sites including LANL. This LANL SWEIS evaluates pit production up to a level of 80 pits per year consistent with the earlier analysis in the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (DOE 1996), which led to a decision to establish interim pit production capability at LANL.

**289-8** DOE prepared the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (DOE 1996) in 1996 to address the configuration of the weapons complex. In accordance with the ensuing ROD, LANL is to provide a limited pit production capability. This LANL SWEIS evaluates the environmental impacts of continuing to operate LANL to fulfill the mission established in the ROD. As discussed in Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD, the proposed Complex Transformation is being evaluated in a supplement to the above-referenced programmatic environmental impact statement (DOE/EIS-0236-S4) (DOE 2007). If the missions assigned to LANL change as a result of the *Complex Transformation SPEIS* ROD, additional site-specific NEPA compliance reviews will be conducted as necessary. Results of the plutonium pit lifetime studies are addressed in Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD. While the studies show that degradation of plutonium in the majority of nuclear weapons would not impact weapon reliability for a minimum of 85 years, the analyses in this SWEIS are still valid. The analyses provide a bounding impact of annually producing up to 80 pits, consistent with LANL's current mission. NNSA can decide to operate at a lower production rate, but this analysis provides NNSA flexibility in meeting its stockpile stewardship mission based on changing geopolitical conditions.

**289-9** The Reliable Replacement Warhead Program, if funded by the Congress, is being conducted as part of studies that would support modernization of nuclear weapons. The impacts of these modernization efforts on the nuclear weapons complex have yet to be determined; therefore it is

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to disarm nuclear stockpiles, but also with the critical need for the U.S. to lead by example in ridding the world of weapons of mass destruction. Nuclear weapons are simultaneously the most militarily useful and destructive weapons of mass destruction.

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8. The Risks of Potential Terrorist Acts Must Be Analyzed In this DSWEIS.

NNSA should follow a recent court decision (San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission) and fully analyze and consider the effects of potential terrorist act at the Los Alamos National Laboratory in a new DSWEIS.

289-11

9. Other alternative Laboratory missions, such as attaining national clean energy independence and addressing the threat of global climate change, must be considered.

There are three alternatives analyzed in this DSWEIS:

1) No Action Alternative: Operations would continue at current levels consistent with previous decisions made in the Record of Decision for the previous 1999 LANL SWEIS.

2) Reduced Operations Alternative: Operations would be reduced at High Explosive Facilities and eliminated at the Los Alamos Neutron Science Center and Pajarito Site.

3) Expanded Operations Alternative: Actions would be implemented to upgrade or replace aging facilities and systems, improve security, and remediate obsolete buildings and contaminated lands. Selected operations would increase, including the production of plutonium pits.

289-12

This is the preferred alternative.

Two additional alternatives must be analyzed:

1) Onsite Aboveground Waste Storage Alternative: LANL should develop an aboveground waste storage site where radioactive low-level waste is stored in engineered mounds. This monitored waste storage site would be large enough to receive all of the Lab's legacy waste after it is exhumed, all of the debris from future demolished buildings, and all future waste from future operations. This alternative would protect the regional aquifer while the waste would be easily retrievable for when future advanced technologies can actually make radioactive waste safe.

As an example, an analogous, albeit smaller-scale, program was recently completed at the Fernald, Ohio, Department of Energy site.

2) Energy Security Alternative: LANL should initiate a Manhattan-Project-like effort to solve the world's global-warming and clean, sustainable energy problems. This

premature to consider the environmental implications of the Reliable Replacement Warhead Program. The *Complex Transformation SPEIS* is being prepared to evaluate the activities associated with the continuing transformation of the nuclear weapons complex. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

289-10 NNSA is not expanding nuclear weapons production, that is, the United States is not increasing the number of nuclear weapons in its stockpile. The United States is currently reducing its nuclear weapons stockpile. NNSA is performing activities to ensure the safety, security, and reliability of the current stockpile, which includes replacing the plutonium pits using existing designs and possible future designs, including the Reliable Replacement Warhead (if authorized by the Congress). Operations at LANL that support NNSA's mission to ensure a safe and reliable nuclear stockpile are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, and Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

289-11 DOE gives high priority to the safety and security of all its facilities. Security and potential acts of sabotage are integral considerations in the designs and operating procedures for new and existing DOE facilities. DOE considers the threat of terrorist attack to be real and has an established safeguards and security process it undertakes to assess facility vulnerabilities to various threats, including those from intentional destructive acts, such as acts of terrorism. Chapter 4, Section 4.6.5, of the SWEIS has been revised to include a description of the systems in place at LANL to provide the safeguards and security necessary to prevent a terrorist attack. Additional information has been added to Chapter 5, Section 5.12.6, regarding potential impacts of terrorism and a separate classified appendix has been developed.

289-12 Chapter 3, Section 3.5, of the SWEIS provides a discussion of NNSA's consideration of, and decision to not analyze a "Greener Alternative" in the SWEIS. A "Greener Alternative" was analyzed in the *1999 SWEIS* but was not selected for implementation. NNSA does not believe, 7 years later, that a "Greener Alternative" is reasonable for the future operation of LANL to meet its mission as directed by the Congress and the

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would do more for true, long-term national security than expanded nuclear weapons operations will ever do.

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10. Cleanup must not include "cap and cover" of unlined waste dumps.

The DSWEIS analyzed two options for LANL's legacy buried waste. The Capping Option would leave all radioactive and chemical wastes in place in the major disposal areas and cover them with a surface rain barrier. The Removal Option would remove all legacy waste from the ground. The DSWEIS correctly notes that future cleanup decisions will be largely driven by the New Mexico Environment Department (NMED). However, internal Lab documents already point to predetermination, saying "Many contaminated sites will be remediated to industrial use standards, in part because cleaning up to residential or unrestricted use standards is prohibitively expensive." Cleanup that will protect ongoing generations cannot be dictated today's short-term fiscal considerations. If more money is needed for comprehensive cleanup, take it from the ever-expanding budget for the Lab's nuclear weapons programs. Don't generate more radioactive and chemical wastes when cleanup costs are already "prohibitively expensive."

**289-13**

LANL still is burying its radioactive wastes in unlined dumps, in contrast to all new State-regulated landfills in New Mexico. The 1999 LANL SWEIS allowed more unlined waste pits, called Zone 4, near the existing unlined waste pits that NMED may require to be exhumed. The whole concept of Zone 4 should be reexamined because waste volumes are substantially higher than in the 1999 SWEIS. A new DSWEIS must consider the benefits of lining Lab dumps.

**289-14**

11. LANL must not allow contaminants to reach the groundwater aquifer or the Rio Grande. Recharge to the regional aquifer from the shallow contaminated perched groundwater bodies occurs slowly because the perched water is separated from the regional aquifer by hundreds of feet of dry rock. Is the DSWEIS suggesting, because the contaminants reach the aquifer slowly, that everything is OK? The fact is that tritium, perchlorates, chromium, and high explosives contaminants from Lab operations have already reached the regional aquifer. Lab computer models show a five-year travel time from the surface to the aquifer in some areas. LANL must prioritize protecting our precious aquifer.

**289-15**

Sadly, the interpretation of groundwater data is complicated by problems that affect the sampling wells. Specifically, the bentonite clay used in well drilling can mask many radionuclides and other contaminants. The use of circulating muds and other drilling fluids can have a similar effect by more complex mechanisms. The groundwater data in the DSWEIS could represent systematic underestimates of the actual contamination, and cannot be relied upon in the SWEIS.

Lab analysis of stormwater runoff and surface water also shows high contamination. Americium-241, strontium-90 and plutonium-238 & 239 in particular have been

President, and has identified the Expanded Operations Alternative as its Preferred Alternative. NNSA is not currently considering an alternative waste storage arrangement at LANL such as the use of above ground waste storage mounds for the storage of low-level or mixed low-level radioactive wastes. DOE's Record(s) of Decision for low-level and mixed low-level radioactive wastes supported by the *1997 Waste Management Programmatic EIS* (DOE/EIS-0200) (DOE 1997a) state DOE's decisions for the management and disposal of these waste types for DOE operations, including LANL operations. LANL was identified as a facility that would continue to dispose of its low-level radioactive wastes onsite. Additional environmental impact analysis was provided through the *1999 SWEIS* for the expansion of the Area G low-level radioactive waste disposal site. DOE decided to expand into Zones 4 and 6 of Area G and announced this decision in *1999 LANL SWEIS* Record of Decision (64 FR 50797). Mixed waste generated by LANL is currently disposed of offsite, primarily at licensed commercial facilities. The commentor's recommendation for future LANL operations is noted. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3 of this CRD, Alternative Missions, for more information.

**289-13** NNSA notes the commentor's concern regarding the funding priorities of the U.S. government; funding decisions are not within the scope of this SWEIS, which evaluates the environmental impacts of proposed actions and alternatives. NNSA intends to conduct operations at LANL in accordance with its assigned missions while continuing the LANL environmental restoration program summarized in Chapter 2, Section 2.2.6. Although Appendix I evaluates the environmental impacts associated with potential remedial action alternatives, decisions about remediating a site will be made in accordance with established regulatory standards and processes, including those of the State of New Mexico for the Consent Order. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered such as containment in place, treatment, or removal. Any selected remediation remedy must meet several criteria including protection of human health and the environment, and attainment of applicable cleanup standards

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measured at levels up to ten times the drinking water standard. There is a witch's brew of hundreds of other contaminants in the soil at the bottom of the canyons. Contaminated stormwater either seeps into the ground, posing a threat to groundwater, or, in intense storm events, drains to the Rio Grande. During every storm event, these contaminants migrate closer to the Rio Grande. LANL must publish its raw data, including storm-by-storm migration reports and the totals and locations of all the contaminants released. The Lab was self-serving in its choice of references that it used for this DSWEIS. Independent, outside research by experts such as Bob Gilkeson and George Rice were not included.

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12. LANL must stringently minimize the use of our precious water.

Estimated water usage for the expanded alternative will exceed LANL's current capacity. Many DOE nuclear weapons facilities have been historically located next to abundant water sources, but LANL was not. When it was primarily a design laboratory, lack of water was not quite a problem. But now that the Lab is poised to become the nation's plutonium pit production center, LANL is starting to covet the scarce water resources of the desert Southwest. The Lab plans to obtain more water rights, but what about the future? Will the Lab start buying up ever-increasing water rights, perhaps depriving others northern New Mexicans of their most precious resource?

**289-16**

13. Construction of new nuclear weapons facilities should cease until seismic risks are fully understood.

A report in preparation by the LANL Seismic Hazards Geology Team will document a comprehensive review and re-evaluation of...activity in the Pajarito Fault system. This study is being prepared to recalculate the probabilistic seismic hazard at LANL. The reanalysis of the seismic hazard will incorporate data from studies completed since the 1999 SWEIS (LANL 2004e). Both the comprehensive review and reanalysis of seismic hazard are planned for completion in the fourth quarter of 2006. (DSWEIS, p.4-25) The previous 1999 SWEIS stated that the last seismic activity occurred 45,000 years ago, and now this DSWEIS states it was less than 8,000 years ago. Will the next SWEIS, due in 2011, find even less time? The mapping of the fault lines and fracture zones under the Lab is presently incomplete, yet many new nuclear weapons facilities are being planned. The fact is that LANL is located in a severely fractured fault zone between a rift valley and an extinct volcano. This draft SWEIS is premature in its consideration of seismic risks without the new report that is to be completed by the end of the year. There should be a new DSWEIS that fully incorporates the implications of the new seismic report.

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14. LANL's economic benefits should be more widely distributed across northern New Mexico. Three counties, Los Alamos, Rio Arriba, and Santa Fe, were analyzed for socioeconomic effects in the DSWEIS. Please state if Los Alamos County

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including those for ground and surface waters. If the site is to remain under DOE ownership, then cleanup standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted access by the public, then the site would need to meet cleanup standards for unrestricted access. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the New Mexico Environment Department using cleanup criteria documented in Section VIII of the Consent Order.

**289-14** NNSA notes the commentor's opposition to waste disposal in unlined pits at LANL. Except for low-level radioactive waste, all radioactive and chemical wastes generated at LANL are transported offsite for disposal in regulated disposal facilities authorized for the types of wastes each facility may receive. The future use of lined rather than unlined pits for low-level radioactive waste disposal is under evaluation through the Area G performance assessment and composite analysis required by DOE Order 435.1 which is periodically reviewed and updated. The updated performance assessment and composite analysis will guide decisions regarding operational procedures and waste disposal. This SWEIS considers impacts from the use of unlined pits as its No Action Alternative baseline; this impact analysis thereby bounds the long-term environmental consequences that could result from the use of lined disposal pits. Much of the low-level radioactive waste projected for the Expanded Operations Alternative is attributable to remediation actions. Waste volumes generated from environmental restoration will depend significantly on future cleanup decisions made by the State of New Mexico pursuant to the Consent Order. The analysis in Appendix I of the SWEIS bounds the volumes that could be generated if all buried wastes in material disposal areas covered under the Consent Order are removed and disposed of elsewhere. In this case, offsite disposal of low-level radioactive waste would be used to supplement onsite disposal. Refer to Sections 2.7, Waste Management, and 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**289-15** Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding well construction, chromium contamination, and radionuclide contamination. The SWEIS presents a summary description of the environmental conditions near LANL. Because of the large volume of information characterizing the environment near LANL, the detailed

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is expected to continue to receive a disproportionately large percentage of the economic benefits from the Lab and remain the richest county in the U.S. The DSWEIS must analyze whether alternative missions would be of greater economic benefit to all of northern New Mexico.

15. LANL Impacts On Tourism Must Be Analyzed. Tourism is a major contributor to Santa Fe's and northern New Mexico's economy. Please analyze the effects of a major accident at the Lab on tourism.

16. The DWSEIS must be more specific in all its data and risk analyses.

The DSWEIS is too full of vague and general terms. For instance, the words "likely" and "unlikely" are used over 300 times. One example, from page S-63: "In the event of a wildfire that would impact LANL, and if the fire were to burn the waste storage domes at TA-54... Should such an accident scenario occur in which the contents of the waste storage domes actually caught on fire and burned, the MEI [maximally exposed individual] would likely develop a fatal cancer during his or her lifetime and an additional 55 "Latent Cancer Fatalities" could be expected in the general area population. Any onsite worker located about 110 yards (100 meters) of the facility during such an accident would likely develop a fatal cancer during his or her lifetime." The word "could" is used over 1200 times. "May" is used over 1100 times. In order to better understand the impacts of operations at the Lab, ratios should be used, for example, "A worker would have a 99% chance of developing a fatal cancer."

17. LANL should not generate or import more radioactive and chemical wastes until it cleans up what it already has. Another component of the Expanded Operations Alternative is the increased onsite storage of highly radioactive sealed sources. A sealed radioactive source is a radioisotope that is fully encapsulated in metal or other container such that the radioactive material cannot be contacted. Sealed sources have medical and well-drilling applications. It has been estimated that 21,000 sealed sources within the commercial sector will become excess and need to be managed in this Off-Site Source Recovery Project. Except for those containers of defense-related sealed sources that would be eligible for shipment to the Waste Isolation Pilot Plant, this waste has no disposal path. The waste containers are placed in storage and held until an appropriate waste disposal facility becomes available. The total volume of actinide sources with no disposal path is expected to be approximately 260 cubic yards. Is there a plan to research technologies to dispose of these safely, or is the plan to bury these? Where? Further, the DSWEIS estimates that if the Lab were to be fully cleaned up, 100,000 offsite shipments would be required. Why make or import more chemical and radioactive wastes when the legacy waste inventory is already so immense?

18. The DSWEIS must incorporate the numerous, serious safety issues raised by the Defense Nuclear Facilities Safety Board. Risk analyses in this DSWEIS

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information contained in the reference documents is not presented.

**289-16** NNSA notes the commentor's concerns regarding projected water use and existing and future water rights. LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling of 542 million gallons (2,050 million liters) per year as discussed in Chapter 5, Section 5.8 of the SWEIS. DOE transferred 70 percent of its water rights for LANL and leases the remaining 30 percent to Los Alamos County. DOE is now a Los Alamos County water customer and is billed and pays for the water LANL uses. DOE has no plans to otherwise obtain or purchase additional water rights for LANL. Refer to Section 2.8, Water Use, of this CRD for more information. Regarding pit production, the LANL SWEIS alternatives addressing the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative) consistent with earlier decisions supported by the *Stockpile Stewardship and Management Programmatic Environmental Impact Statement* (DOE/EIS-0236) (DOE 1996). In January 2008, NNSA issued a Draft *Complex Transformation SPEIS* (DOE/EIS-0236-S4), which assesses the environmental impacts from the continued transformation of the nuclear weapons complex. This includes evaluating alternative locations for a consolidated plutonium center or a consolidated nuclear production center that would have plutonium pit production as one of its functions.

**289-17** This SWEIS does not propose new nuclear weapons facilities under any of the alternatives. NNSA completed the *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, New Mexico* (DOE/EIS-0350) (DOE 2003c) in November 2003 and in February 2004 issued a Record of Decision (69 FR 6967) announcing its decision to construct a new facility. This decision is included in the No Action Alternative and the Expanded Operations Alternative of this SWEIS. On January 11, 2008, NNSA issued the Draft *Complex Transformation SPEIS* (DOE/EIS-0236-S4) (73 FR 2023), which evaluates the environmental impacts from the continued transformation of the nuclear weapons complex, referred to as Complex Transformation. The Reduced Operations Alternative in the Final SWEIS was revised to reflect continued use of the existing Chemistry and Metallurgy Research Building in the event that NNSA, in conjunction with its plans for

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are based on normal operations at the Lab. The Defense Nuclear Facilities Safety Board (DNFSB), an independent safety board chartered by Congress to oversee the nuclear weapons complex, has often reported that operations at the Lab are chronically unsafe. The Safety Board has repeatedly declared that federal safety oversight at LANL has deteriorated over recent years and that many safety issues at the Lab remain unresolved. Instead of the bland assurances that all is well, the DSWEIS should fully incorporate, analyze, consider and resolve the serious safety issues raised by the DNFSB.

19. The Radiological Sciences Institute should not proceed until it has a separate environmental impact statement.

The information and data on this proposal is insufficient and the project itself is too preliminary. A complex of this size, with up to 13 new major buildings, and multi-purpose missions, including "support for weapons manufacturing, material property evaluations for stockpile stewardship... and nuclear-weapons-related research," should have it's own environmental impact statement when the reference data are complete.

NNSA's preferred alternative of Expanded Operations requires the decontamination, decommissioning, and demolition (DD&D) of 52, or 80 percent, of LANL's existing radiological facilities and consolidating their missions in the RSI. This massive overhaul will involve handling and disposing of contaminated structures, contaminated equipment and adjacent soil contaminated from 40 to 60 years of nuclear weapons work.

The DSWEIS states this DD&D "would result in some release of radionuclides", but amounts are not given. How can this lack of detail constitute a credible environmental impact statement? Operations at the new RSI, like many other nuclear weapons facilities at LANL, have so much potential for environmental impact that they should be analyzed far more closely than is done in this DSWEIS.

These comments respectfully submitted,

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Complex Transformation, decides not to construct the nuclear facility portion of the Chemistry and Metallurgy Research Replacement Facility. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

The seismic risks associated with the Chemistry and Metallurgy Research Replacement Facility have been studied and are part of the updated LANL probabilistic seismic hazard analysis (LANL 2007a). Similarly, the seismic accident analysis was updated in the Final SWEIS to reflect the recent information in the updated seismic hazards analysis. Work performed at LANL, and new construction, are both subject to existing DOE orders and standards for seismic concerns. Different construction requirements are imposed for new structures in accordance with the site locations relative to known fault lines, and in accordance with the planned future use of the structure. To the extent possible, the most recent technical documents have been considered in the Final SWEIS analysis. Information under development that is not available for use in the Final SWEIS will be considered as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. An update to the seismic hazard analysis was completed in June 2007. Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

The new geological information in the 2007 seismic hazard analysis report has been interpreted as indicating that the seismic hazard at LANL is greater than previously understood. The relevance of the seismic hazard to facility accidents will undergo a rigorous and thoughtful evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

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Following the NEPA process but prior to the design and operation of specific facilities, safety studies in the form of Hazard Assessment Documents and Safety Analysis Reports that include seismic concerns and take into account the most current seismic information would be prepared to address a comprehensive set of accident risks. The results of these safety studies would be incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

- 289-18** Los Alamos County is likely to continue to receive the largest share of the economic benefits from LANL because the largest concentration of LANL employees is expected to continue to reside in this county. However, as more LANL employees move into adjoining counties as has been the case in recent years, it is expected that these counties will receive a greater share of the benefits. Analyzing alternative missions that would be of greater economic benefit to northern New Mexico is not within the scope of this SWEIS.
- 289-19** NNSA notes the commentor's concerns related to the effect a major accident would have on New Mexico's economy as a result of reduced tourism. The SWEIS impact analysis considers socioeconomic impacts of operating LANL on the general New Mexico economy of which tourism is a part. Chapter 5, Section 5.12, of the SWEIS analyzes the potential impacts from a variety of accident scenarios on members of the public, which would include visitors to the area.
- 289-20** The SWEIS is specific in presenting the consequences and risks of accidents. The terms, "likely", "unlikely", "could", and "may" are used to convey the degree of certainty of a specific accident consequence or risk. As discussed in SWEIS Appendix C, Section C.1.2.1, all health impacts from radiological accidents are expressed in terms of radiation dose, number of latent cancer fatalities, and then using the frequency of such an accident, the risk to an individual or the population from this accident. This risk is expressed in terms of the annual chance of a latent cancer fatality in SWEIS summary section on accidents as well as in Chapter 5 and Appendix D. For example, in the "Facility Accidents" subsection of Section S.9.1 of the Summary, and in Table S-5, the annual risk of a latent cancer fatality to the maximally exposed individual due to a wildfire accident is presented as 0.05 or 1 chance in 20. This is the equivalent to 5 percent. The use of latent cancer fatality risk and the expression as "a

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chance in..." is common nomenclature used in many EISs.

**289-21** As addressed and analyzed in the SWEIS, NNSA plans to continue to perform environmental restoration at LANL, and dispose of newly-generated and legacy radioactive and chemical wastes, as it continues its Congressionally-mandated national security missions. In March 2005, the State of New Mexico, DOE, and the University of California, as the management and operating contractor, entered into a Compliance Order on Consent (Consent Order) that is currently being implemented to address the investigation and remediation of environmental contamination at LANL. The volumes of waste generated from compliance with the Consent Order, and the associated shipments of waste to on- and offsite disposal facilities, will depend on regulatory decisions made by the New Mexico Environment Department pursuant to the Consent Order.

NNSA has the responsibility for safely storing unwanted radioactive sealed sources for safety and national security purposes. In addition, DOE is responsible under Public Law 99-240 for ensuring safe disposal of commercially-generated Greater-Than-Class C low-level radioactive waste (see below). Over a number of years, NNSA has been recovering and storing actinide-bearing sealed sources at LANL under its Off-Site Source Recovery Project, and proposes to store additional sources containing other isotopes, if appropriate and safe commercial or other management options cannot be identified. Stored sources containing transuranic isotopes that are determined to be defense-related are eligible for disposal at WIPP. This includes all the plutonium-239 sources that have been collected, and, as stated in the SWEIS, 132 drums of plutonium-239 sealed sources have already been shipped to WIPP. Recently, some of the americium-241 and plutonium-238 sealed sources have been determined to be defense-related and eligible for disposal at WIPP. Stored sources containing these and other isotopes that are determined to be not defense-related may be considered Greater-Than-Class C or similar DOE waste. At this time, there is no disposal facility for Greater-Than-Class C low-level radioactive waste; however, DOE has issued a Notice of Intent to prepare an *Environmental Impact Statement for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste* (72 FR 40135). Several options for disposal of Greater-Than-Class C waste, as well as DOE waste having similar characteristics, are being considered. Clarifying language has been added to Appendix J of this SWEIS.



Commentor No. 289 (cont'd): Hollis C. Wood

**289-22** The Defense Nuclear Facilities Safety Board does not regulate nor authorize operation of facilities at LANL. Its function, as mandated by the Congress, is to provide independent safety oversight of the NNSA nuclear weapons complex. As in the case of all NNSA nuclear weapons complex sites, the Defense Nuclear Facilities Safety Board reviews safety issues and prepares reports regarding the safety of nuclear weapons complex facilities, which are submitted to NNSA. NNSA and the LANL contractor have reviewed Defense Nuclear Facilities Safety Board reports and responded with commitments to update and improve safety basis documentation. The Los Alamos Site Office Safety Authorization Basis Team assures the development and approval of adequate controls in support of safe operations at LANL. All LANL facility operations are based on authorization and approval by NNSA from evaluation of the acceptability of existing relevant safety documentation. Reports and recommendations made by the Defense Nuclear Facilities Safety Board that are relevant to NEPA are taken into account in analyses in the SWEIS. Refer to Section 2.13, Recommendations of the Defense Nuclear Facilities Safety Board, of this CRD for more information.

**289-23** The LANL SWEIS evaluates the potential impacts of constructing and operating a new Radiological Sciences Institute in Appendix G based on the functions such a facility would be expected to fulfill and the estimated number of structures required. As described in Section G.3, phase 1 of this Radiological Sciences Institute, construction of the Institute for Nuclear Nonproliferation Science and Technology, is expected to start within the time frame covered by the SWEIS. Subsequent phases of the project will be evaluated as they are further planned and more fully defined. Based on these evaluations, NNSA will make a determination whether additional NEPA analysis and documentation are needed. Radiological air emissions and associated radiological doses to workers and the public are quantified in Section G.3.3.2. Projected annual radiological air emissions from the Radiological Sciences Institute were estimated to be the combined total of the projected emissions from the individual facilities whose functions would be moved to the Radiological Sciences Institute.

**Commentor No. 290: Loulena Miles, Tri-Valley CAREs**

**From:** Loulena Miles [mailto:loulena@trivalleycares.org]  
**Sent:** Tuesday, September 19, 2006 5:59 PM  
**To:** LANL\_SWEIS  
**Subject:** Comment on the SWEIS

September 20, 2006  
Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office  
National Nuclear Security Administration  
US Department of Energy  
528 35th Street  
Los Alamos, New Mexico, 87544-2201  
E-mail: LANL\_SWEIS@doeal.gov  
Fax: 505.667.5948  
RE: Comment on the Draft Site Wide Environmental Impact Statement for  
Los Alamos National Laboratory

Dear Ms. Withers:

Tri-Valley CAREs is a non-profit organization located in Livermore, California. On behalf of our 4,500 members, we have undertaken an analysis of the Department of Energy (DOE)/National Nuclear Security Administration (NNSA) Draft Site-Wide Environmental Impact Statement (SWEIS) for LANL. We urge you to reissue the draft SWEIS due to gaps in the analysis that render it insufficient. I also urge you to extend the public comment period so that more of the public may weigh in on this decision.

290-1

First I would like to state that we are very concerned that the character of the overall LANL enterprise seems to be shifting even farther away from science and toward a manufacturing "pit production" future. LANL has an opportunity to become a world class laboratory in the benefit of humanity rather than just another weapons plant. We urge you to withdraw the plans to quadruple plutonium pit production, double the generation of radioactive wastes, and more than double storage capacity of special nuclear materials to 7.3 tons. Instead, evaluate a future where you can find new ways to reduce carbon dependence and give the world options for a renewable future.

290-2

Purpose and Need Statement

According to the SWEIS, LANL's future will continue to include production of war reserve products, assessment and certification of the nuclear weapons stockpile, surveillance of war reserve components and weapons systems, ensuring safe and secure storage of strategic materials, and management of excess plutonium

290-3

290-1 Responding to requests for additional review time, NNSA extended the public comment period from the original 60 days to 75 days. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

290-2 NNSA notes the commentor's concerns about the continued operation of LANL and perceptions about its future direction. U.S. efforts to ensure a safe and reliable nuclear stockpile, including activities conducted at LANL, violate none of the terms of the Treaty on the Non-Proliferation of Nuclear Weapons. Cessation of these activities at LANL would be counter to national security policy as established by the Congress and the President and is not being considered in the SWEIS. In addition to stockpile stewardship activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations; as such, they are included in the SWEIS under the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

290-3 As stated in Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD, the United States is not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons by performing stockpile stewardship activities. Article VI of the Treaty does not prevent maintaining a safe and secure nuclear weapons stockpile, and any nuclear weapons state can perform activities to ensure its stockpile is safe and secure. The United States is currently reducing the size of its stockpile to meet its obligations to the Treaty on the Non-Proliferation of Nuclear Weapons and the most recent nonproliferation treaty signed by the President, the Treaty on Strategic Offensive Reductions, as discussed in Chapter 2, Section 2.1, of the SWEIS. NNSA is analyzing alternatives for continued transformation of the nuclear weapons complex in the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*, (DOE/EIS-0236-S4) as discussed in Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD.

**Commentor No. 290 (cont'd): Loulena Miles, Tri-Valley CAREs**

inventories. It also states that nuclear weapons pit production work takes place at LANL on a limited scale.

How do the above mentioned "purposes and needs" fulfill US obligation to Article VI of the NPT? How do they serve DOE's own mission of preventing the use and spread of nuclear weapons worldwide?

**290-3  
cont'd**

The US disarmament obligations under the Article VI of the NPT states that:

"Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control."

Is DOE supporting a long-term commitment to a complete US nuclear arsenal, despite US disarmament requirements? To sustain the nuclear weapons arsenal in the U.S. means we are not working toward disarmament. How does DOE explain this violation of Article VI? How does DOE reconcile the internal contradiction in its own mission and needs section?

Need for an Expanded Alternatives Analysis

This section of the NEPA document allows you to envision a different future for the laboratory. With our severe weather patterns and other effects of global warming, it would make perfect sense to take a look at how LANL could be a more significant scientific player in providing society with alternative to fossil fuels. We believe that a future in nuclear weapons is an antiquated path that should be sidelined and phased out for much more lucrative work to help the planet.

Given the internal contradiction in the DOE's purpose and need section we believe it is reasonable to consider an alternative in the SWEIS that does not commit the vast majority of the lab's resources to a nearly exclusive weapons research future. This would serve DOE's purpose of reducing global proliferation. A revised purpose and need statement could accurately reflect the lab's legal responsibility with regard to US law under the NPT. This omission in the purpose and need statement has fatally flawed the alternatives analysis by neglecting to consider the expanded role that civilian science programs at the LANL could play in the next decade. The alternatives analysis should be revised to consider a complete phasing out of nuclear weapons development and design activities at LANL. The alternative should expand work in civilian sciences and clean-up looking toward long term solutions for the legacy waste and current waste created by nuclear weapons activities.

**290-2  
cont'd**

In fact, at the US Nonproliferation Treaty (NPT) review conference, the US contended that plans for modernization of the US arsenal were purely "conceptual". However, the SWEIS provides for empirical modernization. This violates the US commitments under the NPT. Modernization is likely to ignite a new arms race

**290-3  
cont'd**

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**Commentor No. 290 (cont'd): Loulena Miles, Tri-Valley CAREs**

and is not necessary for maintaining the current stockpile. The purpose and need statement in the SWEIS should be amended to include a discussion of the US obligations under the NPT, the highest law of the land. Please incorporate the NPT for consideration in the SWEIS.

**290-3  
cont'd**

**Pit Production**

There is no demonstrated need for a pit production capability at this time. All the evidence that has been put forward to support this need has been naked conjecture and is generally not based upon science. If there is truly a need for pit production at this time, taking into the account the drastic downsizing of the US arsenal that is the stated policy, then the Pit Lifetime Studies should be released and the details of how the US stockpile will be transformed should be released. At that point it will be possible to evaluate the need and parameters for such a facility and meaningful public comment could follow.

**290-4**

**Reliable Replacement Warhead Program**

According to the Department of Energy, the RRW will transform the US stockpile. Parts of this program are slated to be “operationalized” at LANL. We believe the DOE is remiss in its responsibility to do a stand alone NEPA document on this program, rather than doing a piecemeal evaluation of the program through NEPA documents at different sites where different aspects of the program will be realized.

**290-5**

**Need Security / Terrorism Analysis**

NEPA has the twin aims of obligating a federal agency to consider environmental impacts before undertaking or approving a proposed action, and ensuring that the public is informed. The draft SWEIS is inadequate under the National Environmental Policy Act because it lacks a “hard look” at the impacts of a possible terrorist attack. There is no “national security” exemption from NEPA. Allowing a “security exemption” from NEPA would be inconsistent with one of NEPA’s purposes: to ensure that the public can contribute to the body of information being considered by the agency. The recent Mother’s for Peace decision in the 9th Circuit Court of Appeals held that if the risk of a terrorist attack is significant (which it is at Los Alamos) then NEPA requires taking a “hard look” at the environmental consequences of a terrorist attack. Please revise your draft SWEIS and re-release it so that that public will have an opportunity to comment on this important aspect of the required NEPA analysis.

**290-6**

**BSL-3 and/or BSL-4 Laboratory Space**

The Department of Energy is going full speed ahead in building more and more biodefense labs and facilities, including the one being reviewed at the Los Alamos National Lab. All of this work is going forward without a national plan that assesses where these labs should be, what their role is, how many are really needed, methods

**290-7**

**290-4** Results of the plutonium pit lifetime studies are addressed in Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD. While the studies show that degradation of plutonium in the majority of nuclear weapons would not impact weapon reliability for a minimum of 85 years, the analyses in this SWEIS are still valid. The SWEIS analyses provide a bounding impact of annually producing up to 80 pits, the same production rate analyzed in the *1999 SWEIS*. NNSA can decide to operate at a lower production rate, but this analysis provides NNSA with flexibility in meeting its stockpile stewardship mission based on changing geopolitical conditions. If the missions assigned to LANL change as a result of decisions made in the *Complex Transformation SPEIS* ROD, additional site-specific NEPA compliance reviews will be conducted as necessary.

**290-5** Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for information regarding the Reliable Replacement Warhead Program.

**290-6** NNSA revised the SWEIS to consider the potential impacts of terrorism consistent with the decision of the U.S. Court of Appeals for the Ninth Circuit. DOE gives high priority to the safety and security of all its facilities. Security and potential acts of sabotage are integral considerations in the designs and operating procedures of new and existing DOE facilities. DOE considers the threat of terrorist attack to be real and has an established safeguards and security process to assess facility vulnerabilities to various threats, including those from intentional destructive acts such as terrorism. Chapter 4, Section 4.6, of the SWEIS was revised to include additional discussion of the measures taken to protect assets at LANL from terrorist activities. As discussed in Chapter 5, Section 5.12.6, the impacts of terrorist action were considered in a separate, classified appendix to the SWEIS.

**290-7** When considering preparation of a programmatic NEPA analysis, a Federal agency must determine whether the program in question meets the definition of a major Federal action according to the Council on Environmental Quality’s NEPA Implementing Regulations (40 CFR 1508.18(b)(3)), which includes “Adoption of programs, such as a group of concerted actions to implement a specific policy or plan; systematic and connected agency decisions allocating agency resources to implement a specific statutory program or executive

**Commentor No. 290 (cont'd): Loulena Miles, Tri-Valley CAREs**

of oversight, transparency, and reporting requirements. A NEPA document is urgently needed to assess these issues in a forum where the public can comment. We believe Homeland Security should not be locating these advanced biodefense facilities inside nuclear weapons labs because it cloaks this work in a veil of secrecy and creates a “perception problem” whereas other countries could assume we’re conducting offensive research and / or may choose to collocate their advance biodefense research inside their nuclear weapons facilities.

290-7  
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**Nonproliferation Study**

The Department of Energy should look at the potential proliferation impacts of LANL’s work on the Nuclear Nonproliferation Treaty and the Biological Weapons Convention. The movement toward a greatly expanded nuclear weapons core production mission and a greatly expanded biodefense mission should be evaluated for treaty compliance. An important paper could inform your analysis on whether the bio-defense work at the lab could broach treaty obligations. Please incorporate as a reference in the SWEIS the paper entitled: Biodefense Crossing the Line, authored by Milton Leitenberg, a Senior Research Scholar at the Center for International and Security Studies at Maryland School of Public Policy; Ambassador James Leonard, the Head of the United States Delegation to the Biological Weapons Convention Negotiations, 1972; and Dr. Richard Spertzel Former Deputy Director, USAMRIID, and Senior Biologist on the Staff of the United Nations Special Commission (UNSCOM), 1994-1998. (Paper is attached to this email).

290-8

**Groundwater Contamination**

We would also like to echo the concerns about the groundwater contamination that are outlined in the local nonprofit groups comments that you will receive. Please do not allow contamination to reach the aquifer or the Rio Grande. The West’s precious water supplies must be protected – particularly in the fragile New Mexico desert environment. Also – “Cap and Cover” methods of disposal may be inappropriate as a cleanup option at the LANL site.

290-9

290-10

Sincerely,  
Loulena Miles  
Staff Attorney  
Tri-Valley CAREs

--  
(P) (925) 443-7148  
(F) (925) 443-0177  
[www.trivalleycares.org](http://www.trivalleycares.org)

directive.” The regulations also address when an agency must prepare a programmatic analysis. A programmatic analysis is necessary when the proposals for Federal action “are related to each other closely enough to be, in effect, a single course of action.” Additionally, the Council on Environmental Quality regulations speak to the scope of NEPA EISs (40 CFR 1508.25(a)(1)) and to connected actions such as those that “automatically trigger other actions which may require EISs”; “cannot or will not proceed unless other actions are taken previously or simultaneously”; or “are interdependent parts of a larger action and depend on the larger action for their jurisdiction.” At this time, NNSA believes that the research efforts of various DOE laboratories include projects too diverse and discrete to constitute either a “major Federal action” or activities sufficiently “systematic and connected” to require a programmatic NEPA analysis. While NNSA’s biological research projects all pertain to biota and are ultimately directed toward support of NNSA’s national security mission, these rudimentary similarities are not sufficient to bind the universe of research projects conducted by DOE and NNSA into a program as identified by the Council on Environmental Quality’s NEPA Implementing Regulations (40 CFR 1508.18(b)(3)). Therefore, NNSA believes that no programmatic NEPA analysis is necessary at this time for biological research conducted at its facilities. While a number of biosafety laboratories are located on DOE property, they are not located inside nuclear weapons laboratories. They do benefit, however, from the security provided to DOE sites.

290-8

NNSA notes the commentor’s opinion that activities related to pit production or biological safety research should be viewed in terms of treaty compliance. LANL operations that support NNSA’s mission to ensure a safe and reliable nuclear stockpile do not violate the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation’s nonproliferation objectives, and confidence in its stockpile stewardship capabilities is likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. The United States is a signatory to the Biological and Toxins Weapons Convention Treaty and thus has agreed not to perform actual development and production of bioweapons. The United States is meeting its obligations in accordance with all currently recognized nonproliferation and biological treaties to which it is a signatory.

*Commentor No. 290 (cont'd): Loulena Miles, Tri-Valley CAREs*

**290-9** Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding groundwater contamination, PCB contamination in the Rio Grande, and groundwater monitoring.

**290-10** Decisions about environmental restoration of any contaminated site will be made in accordance with established regulatory standards and processes, including those related to the March 2006 Consent Order. To arrive at a decision about remediating a contaminated site, several alternative remedies such as containment in place, treatment, or removal may be considered as needed. Any selected remediation remedy must meet several criteria, including protection of human health and the environment and attainment of applicable cleanup standards such as those for groundwater and surface water. If the site is to remain under DOE ownership, then cleanup standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted public access, then it would need to meet cleanup standards for unrestricted access. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the New Mexico Environment Department. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**Commentor No. 291: Anna L. Maggiore**

**From:** Anna Maggiore [mailto:anna\_maggiore@yahoo.com]  
**Sent:** Tuesday, September 19, 2006 5:28 PM  
**To:** LANL\_SWEIS  
**Subject:** No More Nuclear Weapons

Dear DOE and LANL,

I absolutely, positively oppose expanded plutonium pit production at LANL. Quadrupling pit production will turn LANL into a nuclear materials storage and radioactive waste dump facility, and a NUCLEAR BOMB FACTORY.

- 1) I oppose the increased toxic and radioactive waste generated by expanded operations.
- 2) I oppose LANL's continuing pollution of our precious water resources.
- 3) I oppose the Lab's continuing burial of radioactive and chemical wastes in unlined dumps.
- 4) I oppose the construction of new nuclear weapons facilities near earthquake fault lines

THE US SHOULD LEAD BY EXAMPLE IN THE GLOBAL ELIMINATION OF WEAPONS OF MASS DESTRUCTION.

LOS ALAMOS SHOULD SUPPORT THAT NEED INSTEAD OF DESIGNING AND PRODUCING NEW NUCLEAR WEAPONS.

THERE IS NO NEED FOR NEW NUCLEAER WEAPONS. IT WILL ACCOMPLISH NOTHING.

Anna L. Maggiore  
 19September06

291-1

291-2

**291-1** NNSA notes the commentor's opposition to pit production at LANL for the reasons enumerated. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President, and is therefore not being considered in the SWEIS. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

The environmental impacts of waste generation and disposal are addressed in Chapter 5 of the SWEIS. While increased waste generation would occur as a result of expanded pit production, not all waste would be disposed of at LANL. Chemical waste and low-level radioactive mixed waste from LANL operations are sent offsite for treatment and disposal; transuranic waste is stored until shipped to WIPP for disposal, and low-level radioactive waste is either disposed of onsite at Area G or shipped offsite for disposal. The future use of lined rather than unlined pits for low-level radioactive waste disposal is under evaluation through the Area G Performance Assessment and Composite Analysis required by DOE Order 435.1, which is periodically reviewed and updated. The Performance Assessment and Composite Analysis will guide decisions regarding operational procedures and waste disposal. This SWEIS considers impacts from the use of unlined pits as its No Action Alternative baseline; this impact analysis therefore bounds the long-term environmental consequences that could result from the use of lined disposal pits. Refer to Section 2.7, Waste Management, of this CRD for more information.

Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, of the SWEIS, over the past 6 years, LANL has had a very good record of complying with permit conditions, which are set to protect health and safety. It is expected that LANL would continue to meet permit conditions designed to protect water resources under all alternatives. As described in Chapter 4, Section 4.3.2, past waste disposal practices at LANL (conducted in a manner consistent with standards in effect at that time) have contaminated the shallow groundwater, which in turn has the potential to contaminate portions of the regional aquifer under the Pajarito Plateau. As standards have evolved, waste disposal practices have also evolved to be more protective of the environment. As described

Commentor No. 291 (cont'd): Anna L. Maggiore

in Chapter 5, Section 5.3.2.1, groundwater modeling performed for the Area G performance assessment indicates that groundwater ingestion doses 330 feet (100 meters) down gradient from Area G at 4,000 years and in Pajarito Canyon at 700 years would be a very small fraction of the 4 millirem per year standard for groundwater protection. NNSA is required to follow the Consent Order that stipulates that groundwater will be protected and that groundwater cleanup levels will be protective of human health. In addition, NNSA operates a monitoring program (described in Section 4.3.1.5) to detect contamination that has resulted from past practices. LANL staff evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters in accordance with applicable regulations and agreements. NNSA intends to continue to safely manage waste and conduct environmental restoration activities at LANL as it carries out its missions. Refer to Section 2.5, Water Resources, of this CRD for more information.

No new nuclear weapons facilities are proposed under any of the alternatives evaluated in the SWEIS. NNSA completed the *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, New Mexico* (DOE/EIS-0350) (DOE 2003c) in November 2003 and in February 2004 issued a Record of Decision (69 FR 6967) announcing its decision to construct a new facility. This decision is included in the No Action Alternative and the Expanded Operations Alternative of this SWEIS. On January 11, 2008, NNSA issued the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (Complex Transformation SPEIS)* (DOE/EIS-0236-S4) (73 FR 2023), which evaluates the environmental impacts from the continued transformation of the nuclear weapons complex. The Reduced Operations Alternative in the Final SWEIS was revised to reflect continued use of the existing Chemistry and Metallurgy Research Building in the event that NNSA, in conjunction with its plans for Complex Transformation, decides not to construct the nuclear facility portion of the Chemistry and Metallurgy Research Replacement Facility. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

New construction at LANL is subject to existing DOE orders and standards for seismic concerns. Different construction requirements are imposed for new structures in accordance with site locations relative to



Commentor No. 291 (cont'd): Anna L. Maggiore

known fault lines, and in accordance with the planned future use of the structure.

- 291-2** NNSA notes the commentor's preference that activities at LANL be focused on areas other than nuclear weapons technology. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor, including nuclear nonproliferation. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Commentor No. 292: Janet Urian

From: J. URIAN [mailto:J\_Urian@msn.com]  
Sent: Tuesday, September 19, 2006 5:10 PM  
To: LANL\_SWEIS  
Cc: Dianna Woods; Brinda Ramanathan; Elizabeth Holmes-de Forest;  
Karen Strickholm; David Herzog  
Subject: INCREASED NUCLEAR WEAPONS PRODUCTION

SEPT. 19, 2006

DEAR DOE AND LANL:

I absolutely oppose expanded plutonium pit production at the Los Alamos National Laboratory, which would turn the Lab into a nuclear materials storage and radioactive waste dump facility, and a nuclear bomb factory. I also oppose:

The increased toxic and radioactive waste generated by expanded operations; LANL's continuing pollution of our precious water resources; the Lab's continuing burial of radioactive and chemical wastes in unlined dumps; the construction of new nuclear weapons facilities near earthquake fault lines.

LANL's long history of safety violations compromises worker and public protection and should be corrected before the Lab even considers expanded nuclear weapons operations.

The Lab should prioritize cleanup and the development of improved cleanup technologies.

The lab should prioritize renewable energy programs such as wind and solar energy, instead of building MORE nuclear weapons.

The U.S. should lead by example in the global elimination of weapons of mass destruction.

LOS ALAMOS SHOULD SUPPORT THAT NEED INSTEAD OF DESIGNING AND PRODUCING NEW NUCLEAR WEAPONS.

SIGNED: JANET URIAN, 551 CORDOVA RD., #169, SANTA FE, NM 87505

292-1

292-2

292-1 NNSA notes the commentor's opposition to pit production at LANL for the reasons enumerated. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President, and is therefore not being considered in the SWEIS. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

The environmental impacts of waste generation and disposal are addressed in Chapter 5 of the SWEIS. While increased waste generation would occur as a result of expanded pit production, not all waste would be disposed of at LANL. Chemical waste and low-level radioactive mixed waste from LANL operations are sent offsite for treatment and disposal; transuranic waste is stored until shipped to WIPP for disposal, and low-level radioactive waste is either disposed of onsite at Area G or shipped offsite for disposal. The future use of lined rather than unlined pits for low-level radioactive waste disposal is under evaluation through the Area G Performance Assessment and Composite Analysis required by DOE Order 435.1, which is periodically reviewed and updated. The Performance Assessment and Composite Analysis will guide decisions regarding operational procedures and waste disposal. This SWEIS considers impacts from the use of unlined pits as its No Action Alternative baseline; this impact analysis therefore bounds the long-term environmental consequences that could result from the use of lined disposal pits. Refer to Section 2.7, Waste Management, of this CRD for more information.

Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, of the SWEIS, over the past 6 years, LANL has had a very good record of complying with permit conditions, which are set to protect health and safety. It is expected that LANL would continue to meet permit conditions designed to protect water resources under all alternatives. As described in Chapter 4, Section 4.3.2, past waste disposal practices at LANL (conducted in a manner consistent with standards in effect at that time) have contaminated the shallow groundwater, which in turn has the potential to contaminate portions of the regional aquifer under the Pajarito Plateau. As standards have evolved, waste disposal practices

Commentor No. 292 (cont'd): Janet Urian

have also evolved to be more protective of the environment. As described in Chapter 5, Section 5.3.2.1, groundwater modeling performed for the Area G performance assessment indicates that groundwater ingestion doses 330 feet (100 meters) down gradient from Area G at 4,000 years and in Pajarito Canyon at 700 years would be a very small fraction of the 4 millirem per year standard for groundwater protection. NNSA is required to follow the Consent Order that stipulates that groundwater will be protected and that groundwater cleanup levels will be protective of human health. In addition, NNSA operates a monitoring program (described in Section 4.3.1.5) to detect contamination that has resulted from past practices. LANL staff evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters in accordance with applicable regulations and agreements. NNSA intends to continue to safely manage waste and conduct environmental restoration activities at LANL as it carries out its missions. Refer to Section 2.5, Water Resources, of this CRD for more information.

No new nuclear weapons facilities are proposed under any of the alternatives evaluated in the SWEIS. NNSA completed the *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, New Mexico* (DOE/EIS-0350) (DOE 2003c) in November 2003 and in February 2004 issued a Record of Decision (69 FR 6967) announcing its decision to construct a new facility. This decision is included in the No Action Alternative and the Expanded Operations Alternative of this SWEIS. On January 11, 2008, NNSA issued the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (Complex Transformation SPEIS)* (DOE/EIS-0236-S4) (73 FR 2023), which evaluates the environmental impacts from the continued transformation of the nuclear weapons complex. The Reduced Operations Alternative in the Final SWEIS was revised to reflect continued use of the existing Chemistry and Metallurgy Research Building in the event that NNSA, in conjunction with its plans for Complex Transformation, decides not to construct the nuclear facility portion of the Chemistry and Metallurgy Research Replacement Facility. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

Commentor No. 292 (cont'd): Janet Urian

New construction at LANL is subject to existing DOE orders and standards for seismic concerns. Different construction requirements are imposed for new structures in accordance with site locations relative to known fault lines, and in accordance with the planned future use of the structure.

Internal NNSA and contractor organizations area dedicated to safe operation of their nuclear facilities. DOE has issued regulations, standards, and guidance for nuclear facility operations including requirements for performance of safety evaluations and risk assessments which become the basis for facility operating parameters. The NNSA goal is to eliminate accidents. These regulations and standards of operations reduce the likelihood of accidents, but cannot eliminate them completely. Chapter 4, Section 4.6.3 contains a discussion of accidents and safety at LANL facilities. The LANL contractor applies lessons learned from past accidents to improve overall safety performance. LANL staff takes actions in the areas of procedures, training, inspection, and component upgrading and replacement in order to address the root causes of accidents and to preclude their recurrence.

- 292-2** NNSA notes the commentor's preference that activities at LANL be focused on cleanup of the site and areas other than nuclear weapons technology. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor, including nuclear nonproliferation. Refer to Section 2.3, Alternative Missions, of this CRD for more information.


For many years, DOE has been working to implement and improve technologies for environmental restoration. Chapter 2, Section 2.2.6 describes the progress that NNSA has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Appendix I presents options and environmental analyses for conducting remediation activities at

Commentor No. 292 (cont'd): Janet Urian

LANL, primarily related to the Consent Order that was entered into in March 2005. Appendix I also summarizes several technologies for cleanup of soil, water, and air, and references additional information about existing and emerging cleanup technologies. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

Commentor No. 293: Sylvia Ginder

Dear *Ms. Withers* 9/15/06



The United States already possesses 29,000 nuclear pits, (the plutonium triggers for nuclear warheads), that have been proven to be reliable for at least another 80 years. Senior scientists now concur these pits will be reliable for another 60-90 years without a determined end date. Yet, in the coming year, Los Alamos National Laboratories plans to quadruple plutonium pit production.

The Nuclear Nonproliferation Treaty, ratified by the USA in 1970, mandates that all the nuclear arsenals be dismantled in concert with the other nuclear powers. As the leading nuclear weapons state, it is our responsibility to take the first steps to abide by the Treaty. This accelerated production of nuclear pits - as well as a new generation of nuclear weapons activities at our nation's National Laboratories - clearly violates the intent of the Treaty.

Our Constitution states that all treaties ratified by the United States shall be the "Supreme Law of the Land". It is your duty as our elected official, bound by oath to uphold the Constitution, to stand in firm opposition to taxpayer money being allocated for continued nuclear weapon production. The U.S. budget for weapons activities in 2006 is \$6.6 billion.

It is time to reallocate these funds for the research and development of renewable and sustainable technologies and to convert our National Laboratories to deal with the real national security issues of energy independence, interdependence and global climate change.

It is time to take a stand to create a just, socially responsible and compassionate society.

It is time to wake up to peace!

Respectfully yours,  
 Sylvia Ginder  
 2512 S. University Blvd. Suite 200  
 Denver, CO 80210-6149

*DOE is going to increase production of plutonium pits for nuclear weapons at Los Alamos and Sandia (1997 ratified state must at the UN) because they are impossible to stop. The pits are reliable for 60-90 years. If the pits are reliable for 60-90 years, they will be reliable for 80-90 years. It is time to take a stand to create a just, socially responsible and compassionate society.*

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 USA 38

*Ms. Elizabeth Withers  
 Civil Document Manager  
 U.S. DOE/NN 5A  
 Los Alamos Site Office  
 528 35th Street  
 Los Alamos NM  
 87544-2201*

Your reply to this letter will be greatly appreciated.

293-1

293-1

NNSA has recently completed a series of pit lifetime studies and has concluded that degradation of plutonium in the majority of nuclear weapons will not affect warhead reliability for a minimum of 85 years. The weapons laboratories, including LANL, will annually re-assess plutonium in nuclear weapons. Since LANL has the only operational capabilities in the DOE complex for producing certified pits, LANL must have, at least in the near term, the responsibility of producing these pits in limited quantities so that the Nation can maintain a safe, secure, and reliable nuclear weapons stockpile. The LANL SWEIS analyzes a production rate of 80 pits per year as a bounding scenario to provide NNSA flexibility in being able to meet its stockpile stewardship obligations and to give the United States future flexibility to meet changing global geopolitical threats. Operations at LANL are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Continuing to ensure a safe and reliable nuclear stockpile violates none of the terms of the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.



Commentor No. 295: William F. Santelmann, Jr.

From: Bill Santelmann [mailto:n1au@comcast.net]  
Sent: Wednesday, September 20, 2006 11:52 AM  
To: LANL\_SWEIS  
Cc: marylia@trivalleycares.org  
Subject: I oppose expanded nuclear weapons production at Los Alamos

I understand that NNSA is proposing that LANL's production of plutonium pits be quadrupled to 80 per year.

I strongly oppose any such increase on the grounds that such production is not only unnecessary but illegal!

First, we already have far more nuclear weapons than are needed, so we should be dismantling rather than assembling new ones. None, zero, have been used since Nagasaki despite the many wars and conflicts we have been engaged in. The reason is that nuclear weapons are too indiscriminately destructive to be of any military value. They are useless! How can they possibly help us in the "War On Terror"?

Secondly, it is illegal, since we are bound by the Non-Proliferation Treaty (NPT), which we signed on July 1, 1969, (37 years ago) to nuclear disarmament as specified in its Article VI:

" Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict and effective international control."

For this pledge, the non-nuclear states agreed in the NPT not to develop their own nuclear weapons. Every day that we ignore our solemn promise "in good faith" to disarm our nuclear weapons encourages others such as Iran and North Korea to develop their own!

I recommend that every member of the NNSA be given a copy of the NPT and required to take a closed-book exam on its meaning.

This exam must also require a listing of proposed targets for each of our 5,500 nuclear weapons now deployed, with a detailed justification for the destruction of each target and an estimate of collateral deaths.

Humans and nuclear weapons cannot coexist forever!

William F. Santelmann, Jr.  
304 Brooksby Village Drive  
Apt 415  
Peabody, MA 01960-8585  
XXX-XXX-XXXX  
n1au@comcast.net

295-1

295-1

NNSA notes the commentor's opposition to increased pit production. Continuing to ensure a safe and reliable nuclear stockpile violates none of the terms of the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

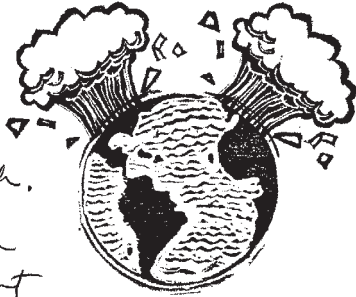
295-1  
cont'd



Commentor No. 296: Chrysa Wikstrom

To: The National <sup>NUCLEAR</sup> Security Admin

No one will ever  
take us seriously  
until we begin to  
practice what we preach.



I urge you to begin  
nuclear disarmament  
now. Use your brilliant minds for  
good instead of evil. Develop some  
weapons of mass instruction instead  
of WMD's. Ignorance is the  
largest, most widespread problem on  
our planet.

296-1

296-1

NNSA notes the commentor's support for nuclear disarmament. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Make pie, not war.



Sincerely,  
Chrysa H. Wikstrom

From:



Chrysa Wikstrom  
1830 Kiva Rd.  
Santa Fe, NM 87505

*Commentor No. 297: Daniel Craig, DOM*

From: Daniel Craig [mailto:domdanc@yahoo.com]  
Sent: Wednesday, September 20, 2006 2:43 PM  
To: LANL\_SWEIS  
Subject: against plutonium pit production

To Whom It May Concern,

I oppose the pit production. I also oppose LANL's existence. Nuclear weapons production is an affront to peace. You create weapons not energy production for this country. That little george's stance against Iran is what it is stands as hypocrisy given your work. This country murdered hundreds of thousands of innocent Japanese civilians for no

good reason. You continue to do so today through the use of Depleted Uranium. Stop. Your children also have to live in this toxic waste you produce.

Daniel Craig, DOM

A healthy human being is an explorer of boundaries, of limits, and of possibilities.

A healthy human being seeks ideas not only to confirm his beliefs, but to risk the possibility of discovering information that shakes those beliefs to their foundations.

|| 297-1

297-1 NNSA notes the commentor's opposition to pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**Commentor No. 298: John Stroud**

**Comments on the Draft Environmental Impact Statement for Continued Operation of the Los Alamos National Laboratory**

September 20, 2006  
Ms. Elizabeth Withers, SWEIS Document Manager  
NNSA Los Alamos Site Office  
528 35th St., Los Alamos, NM 87544  
E-mail: LANL\_SWEIS@doeal.gov, Fax: 505.667.5948

Dear Ms. Withers:

I offer the following comments on the Draft Site-Wide Environmental Impact ("DSWEIS") Statement for Continued Operation of the Los Alamos National Laboratory (LANL).

First, I am aware of, and agree with, the detailed comments made by Nuclear Watch of New Mexico, and I request that you register my agreement with those comments as if they had been fully reproduced here.

Second, DOE has initiated a fundamentally unfair and flawed process for public comment on this document. It is disingenuous to rely, as you have done, upon hundreds of undisclosed reference documents. I say "undisclosed" because that is the practical effect of your failure to make those reference documents available on-line. Instead, you have cynically limited public access to them by unfairly restricting their availability to a very few locations, inadequately noticed and staffed, with cumbersome electronic access and inadequate printing and copying capability. Further, you have, in the case of the LANL Ten Year Comprehensive Site Plans, referred only to the 2000 and 2001 documents, even though those documents for the years through 2006 have already been released to the public (through legal action, not through your cooperation). I conclude, as any objective observer would, that you are not making a good faith effort to fulfill your obligation of informing the public of these matters. I further conclude that it evidences institutional disdain for the public, for its role, and a desire to shield your decisionmaking from any effective public review. These deficiencies should be remedied and the comment period extended. Shame on you.

Third, it is clear from your direct statements and the context that this five-year SWEIS is intended to lay the foundation for expansion of LANL's pit production capability from some 20 to 80 or more pits per year. I strongly object that such a plan is even under consideration, given that: a) a substantial increase in waste production will occur, even though you claim that lands already contaminated are "economically impractical" to cleanup to residential standards; and b) this action would go a long way to making LANL the *de facto* Modern Pit Facility site, even though that project has been rejected by Congress.

Fourth, the fact that LANL hid from State regulators its discovery of very high rates of chromium contamination in wells monitoring the regional aquifer confirms that: a) all your decades of assurances that contaminant transport to the regional aquifer would take "millennia" are shown to be falsehoods – i.e., assurances offered to the public for your own gain without regard to the truth of the matter; and b) LANL "science" is still as tendentious as ever: you have no credibility and you deserve none.

298-1

298-2

298-3

298-4

**298-1** NNSA prepared the SWEIS in accordance with the Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and the DOE implementing procedures (10 CFR Part 1021). NNSA recognizes that in light of electronic capabilities now available, that commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in the general vicinity of LANL. Those reading rooms are located in Los Alamos, Santa Fe, and Albuquerque. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional discussion of the NEPA Process. Regarding the *Ten-Year Comprehensive Site Plan*, much of the information contained in the prior versions from fiscal years 2000 and 2001 is still relevant. The data in the SWEIS has been compared to that in more recent revisions of the *Ten-Year Comprehensive Site Plan* to ensure that it is consistent; however, the Plan is not a reference in the SWEIS because as an official use only document it is not generally available to the public.

**298-2** NNSA notes the commentor's opposition to expanded pit production based on concerns about increased waste generation and proposed remediation activities. Additional waste would be generated under the Expanded Operations Alternative. Chapter 5, Section 5.9, of the SWEIS evaluates the impacts of increased waste generation and demonstrates that all waste would be properly and safely managed under all three alternatives. Decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the State of New Mexico in the Consent Order. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered such as containment in place, treatment, or removal. Any remedy selected for a site requiring environmental restoration must meet several criteria including protection of human health and the environment, and attainment of applicable cleanup standards including those for ground and surface waters and soil. If a site is to remain under DOE ownership, cleanup standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted access by the public, then the site would need

**Commentor No. 298 (cont'd): John Stroud**

I look forward to finding that these comments, and those incorporated by reference to Nuclear Watch of New Mexico's submissions, are properly counted and displayed in your formal response to comments. It is little to ask, but probably even that is beyond your ability to perform honestly.

With regret that you are the way you are, I am

Sincerely,

John Stroud  
815 Don Diego Ave.  
Santa Fe, NM 87505

to meet cleanup standards for unrestricted access. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the New Mexico Environment Department using cleanup criteria documented in Section VIII of the Consent Order. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**298-3** NNSA is analyzing the same level of pit production that was analyzed in the *1999 LANL SWEIS*. The Modern Pit Facility, which is no longer being pursued, had a production capacity much greater than what is being analyzed in this LANL SWEIS. As presented in Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD, NNSA is currently analyzing a possible consolidated plutonium center or consolidated nuclear production center in the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (Complex Transformation SPEIS)*. The *Draft Complex Transformation SPEIS* was issued on January 11, 2008 (73 FR 2023).

**298-4** Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding chromium contamination and groundwater monitoring. As described in Chapter 5, Section 5.3.2, natural infiltration rates on the mesa tops at LANL are very low. In areas where large quantities of liquid wastes were disposed of, enhanced infiltration has occurred.

Commentor No. 299: Jim Bock

Ms Elizabeth Withers  
 Office of Environmental Stewardship  
 Los Alamos Site Office  
 528 35<sup>TH</sup> St  
 Los Alamos, N.M. 87544

Dear Ms Withers, 28 Sept '06

I know the comment period for the expansion of pit production has expired but this issue gets me so mad, I have to write something.

I get mad when a great nation acts so stupid. It's high time we pulled up and asked ourselves what the heck we are doing. We are raising a big stink over Iran & N. Korea getting into atomic weaponry while we are cranking up our own production.

Can you think of a better way to spread nuclear weapons to every country in the world? Is this not telling Iran "We can have nukes, but you can't"? Is there a snowball's chance in Hell this won't be interpreted as racist and anti-Muslim? I have heard all the arguments that the Bomb won the 2nd world war; that it kept Communism in check; that it is essential that we maintain a "credible deterrent". All hogwash as far as I'm concerned.

The more pits we manufacture, the more nukes we deploy, the more ICBM's we have on hair trigger alert, the more dangerous the world is.

Now is an excellent time to stop producing pits. Nuclear winter is not the answer to global warming.

Sincerely  
 Jim Bock

299-1

299-1 NNSA notes the commentor's statements regarding pit production and nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Commentor No. 300: Anonymous

Draft Site-Wide Environmental Impact Statement  
for Continued Operation of Los Alamos National Laboratory,  
Los Alamos, New Mexico (Draft SWEIS)

Comment Form  
Forma para comentarios

Thank you for your input  
Gracias por su participación Date/Fecha: 8/29/06

PLEASE PRINT / FAVOR DE ESCRIBIR CLARAMENTE

1. What comments do you have on the Draft SWEIS?  
¿Que comentarios tiene usted sobre el Draft SWEIS?

*I am a member of the Santa Clara Pueblo. I would like to make a few comments concerning the draft Site-wide Environmental Statement.*

*1) My concern is the nuclear hazardous waste. I feel that this problem should be taken care of by cleaning it up instead of expansion of the lab's operations.*

300-1

300-1

NNSA notes the commentor's concern about nuclear and hazardous waste and preference that activities at LANL be focused on cleanup. For many years, NNSA has been working to implement and improve technologies for environmental restoration. Chapter 2, Section 2.2.6 describes the progress that NNSA has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Appendix I presents options and environmental analyses for conducting remediation activities at LANL, primarily related to the Consent Order that was entered into in March 2005. Appendix I also summarizes several technologies for cleanup of soil, water, and air, and references additional information about existing and emerging cleanup technologies. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for additional information.

*2) We are concerned about the water contamination that is known and should be monitored more efficiently so that we can feel safe.*

300-2

300-2

Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding groundwater contamination, PCB contamination in the Rio Grande, and groundwater monitoring.

*3) Lab property on on Pueblo Sacred site and should be respected, cleaned up instead of expanding lab operations.*

300-1  
cont'd

\*\* CONTINUE ON BACK FOR MORE SPACE \*\*  
\*\* CONTINUAR AL DORSO PARA MAS ESPACIO \*\*

Name/Nombre: Thank you  
Address/Dirección: Santa Clara Pueblo  
City, State, Zip Code/Ciudad, Estado, Zona Postal: \_\_\_\_\_



PLEASE HAND THIS FORM IN OR MAIL BEFORE SEPTEMBER 5, 2006 to:  
FAVOR DE ENTREGAR ESTA FORMA O ENVIARLA POR CORREO  
ANTES DEL DIA 5 DE SEPTIEMBRE DE 2006 A:

Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office • National Nuclear Security Administration • U.S. Department of Energy • 526 25th Street • Los Alamos, NM 87544-2201

Commentor No. 301: Roxanne Swentzell

Draft Site-Wide Environmental Impact Statement  
for Continued Operation of Los Alamos National Laboratory,  
Los Alamos, New Mexico (Draft SWEIS)

**Comment Form**  
**Forma para comentarios**

Thank you for your input  
Gracias por su participación

Date/Fecha: 9/4/06

PLEASE PRINT / FAVOR DE ESCRIBIR CLARAMENTE

1. What comments do you have on the Draft SWEIS?  
¿Que comentarios tiene usted sobre el Draft SWEIS?

\_\_\_\_\_  
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*Comments on sheets attached*  
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\*\* CONTINUE ON BACK FOR MORE SPACE \*\*  
\*\* CONTINUAR AL DORSO PARA MAS ESPACIO \*\*

Name/Nombre: Roxanne Swentzell

Address/Dirección: PO Box 4154

City/State, Zip Code/Ciudad, Estado, Zona Postal: Fairview, NM 87533

PLEASE HAND THIS FORM IN OR MAIL BEFORE SEPTEMBER 5, 2006 to:  
FAVOR DE ENTREGAR ESTA FORMA O ENVIARLA POR CORREO  
ANTES DEL DIA 5 DE SEPTIEMBRE DE 2006 A:



Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office • National Nuclear Security Administration • U.S. Department of Energy • 528 35th Street • Los Alamos, NM 87544-2201

Comment side of this page intentionally left blank.

Commentor No. 301 (cont'd): Roxanne Swentzell

**Comments on the expansion of Los Alamos Labs**

***When the damaging effects of the wastes products for the Labs is no secret, then why is there even a consideration for expansion when the obvious energies should be directed to finding ways to "clean up" the mess already made?***

***As a Santa Clara person who sees this valley, mountains, and rivers...as "home", it is vitally important that we protect it. Where do we go if our "home" is wasted? This is it, and if we don't protect her from people that would use her to dump their toxic wastes, then we do not love our children or ourselves.***

***We are living in a time that we have to make some very important choices for our future. I see these choices as a matter of life or death. These are serious life threatening things they are doing up on the hill and we need them to be responsible to the world around them.***

***Los Alamos does affect us. We are down hill from them and buried waste seeps into the ground water and runs downhill into all the different water sheds until they reach the Rio Grande and continue polluting down stream. The wind currents travel right over Santa Clara Pueblo from Los Alamos right over Picuris and up into Taos Canyon carrying air born toxins that are extremely hazardous to our health (do we not breath or drink our water?) And what about all the animals roaming the hills and valleys that we then eat, also the fish in the rivers and the birds in the air that travel far and wide?***

***How many health issues are connected to radiation and other waste products of the Labs? Our glands are highly susceptible to these***

301-1

301-1 NNSA notes the commentor's concern about prioritizing cleanup before contemplating an expansion of LANL activities. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed (see Chapter 2, Section 2.2.6, of the SWEIS). Appendix I of the SWEIS presents options and environmental analyses for conducting future remediation activities at LANL primarily related to the Consent Order that was entered into in March 2005. Appendix I also summarizes several technologies for cleanup of soil, water, and air, and references additional information about existing and emerging cleanup technologies. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS.

301-2

Chapter 5 of the SWEIS describes the environmental impacts of each of the three alternatives for continuing to operate LANL and includes the effects on surface waters, groundwater, and air. Section 5.13 states that contamination from LANL or changes in Rio Grande flows are not likely to affect water quality. In addition, a special pathways analysis has been added to Appendix C to address concerns expressed regarding contamination of the Rio Grande. The analysis shows that drinking Rio Grande water that could potentially be impacted by LANL activities is comparable to drinking water from the Jemez River, which is not downstream of LANL. The health impacts analysis uses projected air emissions data to estimate dose to the population within a 50-mile (80-kilometer) radius of LANL. The maximum projected annual population dose would be 36 person-rem under the Expanded Operations Alternative. This dose would not be expected to result in any additional latent cancer fatalities in the affected population. Efforts to consider LANL operational impacts with respect to "special pathways" were initiated in the 1990s through the LANL environmental cleanup project and the 1999 SWEIS. The "special pathways" receptor was developed to represent Native Americans, Hispanics, and other residents whose traditional living habits and diets could cause greater exposure to environmental contaminants than those experienced by the hypothetical "offsite resident." Foodstuffs and pathways of specific interest include ingestion of game animals, including consumption of some organ meats, nongame fish, native vegetation through use of Indian Tea (cota), surface

301-2



Commentor No. 301 (cont'd): Roxanne Swentzell

**sorts of poisons. How is your thyroid? How is your immune system or lymphatic system doing? How many people in your family do you know have or had cancer? These are all good signs of the effects we are seeing. These will continue or get worse if something isn't done to stop it.**

**Because we are the first people of this land, we are deeply connected to her. All our songs and dances are about this place. When someone is disrespectful of what gives them life and love, then we let them know it is not alright. Let us not be intimidated by Los Alamos. Let us let them know how they are disrespecting the Earth, which is our life. We have that right because we learned how to live in relative harmony with our environment and they have not. We have been here for thousands of years and in the short 50 years they have been up on that hill, they have damage the air, water and land to such a degree, we don't know if we can even clean it up yet. Lets think of all that is important to us and measure what they are doing to this love. If it does not love us back it is not right. And they need to stop. WE are that important!**

**Ask questions. I don't know a lot of technical terms. I'm not a scientist, but I know that all things affect each other. We pray to many things because we know they are all connected. It takes not just the water to make things all right...it takes the air and the trees and the animals, etc... to come together and dance well. It takes everyone feeling good and healthy and happy to do their jobs well. When things aren't going well, something is hurting, something is wrong and we look around to see what it is. We ask questions and see why something is hurting so we can put it straight again. I want to ask Los Alamos why they continue to hurt the world around them in the name of progress(is it progress to destroy the world?), or "helping with defense of our country"(by poisoning it?). Why has**

301-3

301-4

water and incidental ingestion of soil and sediments in surface water and from swallowing inhaled dust, these pathways are in addition to the meat, milk, produce, water, and sediment consumption reflected in the "offsite resident" pathway assumption. These pathways are described in detail in Appendix C of the SWEIS.

This special pathways analysis was performed again for this SWEIS. Based on this analysis, it was determined that a person subsisting on such a diet would receive a higher dose than someone who subsisted on a less traditional diet, but that the increase in risk as a result of these special pathways is not considered significant. The annual dose to an individual who participated in all of the special pathways shown in Appendix C, Section C.1.4.2, would be between 4.5 and 10.7 millirem higher per year from these special pathways. For comparison, the average resident of northern New Mexico receives a dose of approximately 400 millirem per year from background radiation sources. Therefore, the average annual dose to those individuals subsisting on all of the special pathways would increase by between approximately 1.1 to 2.7 percent due to these special pathways. Refer to Section 2.6, Offsite Contamination, of this CRD for more information related to this comment.

301-3 Past operation of LANL was conducted in a manner consistent with contemporary standards. As standards have evolved, operational practices including waste disposal and discharge of effluents have also evolved. Chapter 2, Section 2.2.6, of the SWEIS describes the progress DOE has made in conducting the environmental restoration program at LANL. Environmental restoration at LANL is currently being conducted primarily in accordance with the Consent Order discussed above. Criteria for cleanup of sites subject to the Consent Order are documented in Section VIII of the Consent Order and include standards for soil, surface water, and groundwater as well as standards for screening for ecological risks. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

301-4 NNSA notes the commentor's concerns regarding the impacts of continued operation of LANL. Chapter 5 of the SWEIS evaluates the potential environmental, health and safety impacts of continued operation of LANL under the three proposed alternatives. These analyses demonstrate

Commentor No. 301 (cont'd): Roxanne Swentzell

***“help” turned into a lie? They say they are “creating energy for our use”(there is very well known renewable energy resources that don’t hurt the environment, why create ones that destroy?), or “We are creating jobs”(imagine all the jobs they could create to do “good” things, like cleaning up the mess already made, finding ways to take good care of our land, animals, air and water).***

***As Santa Clara People, we have a responsibility to our home and families to make sure they are safe and healthy. Letting Los Alamos do whatever they want without respect to our world, is not right. Lets be strong together for this mutual cause (to question and do what needs to be done to protect our home so that we even have a future).***

301-4  
cont'd

that NNSA can continue to operate LANL safely under any of the three alternatives. Refer to Section 2.6, Offsite Contamination, of this CRD for more information on the potential impacts to the air, water, and other environmental media. Chapter 2, Section 2.2.6, of the SWEIS summarizes the progress made in the LANL environmental restoration program since 1999: while LANL staff identified over 2,000 sites in the early 1990s potentially requiring environmental restoration, due to remediation and consolidation, only about 800 remain to be addressed. In addition to LANL’s primary mission activities supporting NNSA’s Stockpile Stewardship Program, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Commentor No. 302: Gilbert L. Naranjo

**Draft Site-Wide Environmental Impact Statement  
for Continued Operation of Los Alamos National Laboratory,  
Los Alamos, New Mexico (Draft SWEIS)**

**Comment Form  
Forma para comentarios**

Thank you for your input  
Gracias por su participación

Date/Fecha: Sept 6 2006

PLEASE PRINT / FAVOR DE ESCRIBIR CLARAMENTE

1. What comments do you have on the Draft SWEIS?  
¿Que comentarios tiene usted sobre el Draft SWEIS?

To whom it may concern  
My comments are attach to this  
Form. Gilbert L Naranjo

\*\* CONTINUE ON BACK FOR MORE SPACE \*\*  
\*\* CONTINUAR AL DORSO PARA MAS ESPACIO \*\*

Name/Nombre: Gilbert L. Naranjo  
Address/Dirección: P.O. Box 1149 Escondido, N.M. 87532  
City, State, Zip Code/Ciudad, Estado, Zona Postal: SANTA CLARA PUEBLO

PLEASE HAND THIS FORM IN OR MAIL BEFORE SEPTEMBER 5, 2006 to:  
FAVOR DE ENTREGAR ESTA FORMA O ENVIARLA POR CORREO  
ANTES DEL DIA 5 DE SEPTIEMBRE DE 2006 A:



Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office • National Nuclear Security Administration • U.S. Department of Energy • 528 35th Street • Los Alamos, NM 87544-2201

**302-1** NNSA notes the commentor's concerns regarding potential environmental impacts on the Santa Clara Pueblo from commuter traffic. Impacts from radiological and non-radiological air pollution are addressed in Chapter 5, Sections 5.4.1, 5.4.2, 5.6.1, and 5.6.2. Text has been added to Section 5.4.1.3 discussing the potential increase in emissions from increases in commuter traffic to LANL. The increase in employee vehicles and the increase in other vehicles resulting from the population increase that the State projects will occur would result in increases in vehicle emissions along routes used to access the site. Increased employment of 2.2 percent per year under the Expanded Operations Alternative could result in similar increases in LANL commuter-specific vehicle emissions from additional employee vehicles commuting from Santa Fe and Rio Arriba County and other locations. The cumulative increase in traffic flow associated with LANL is discussed in Section 5.13 under Transportation. Similar increases in accidents (see Chapter 4, Section 4.10.2 for existing accident rates by county) would be expected. The primary pollutants from commuter vehicles are hydrocarbons, carbon monoxide, and nitrogen oxides. As discussed in Section 4.4.2.1 the area around Los Alamos and most of New Mexico is designated as attaining the National Ambient Air Quality Standards for carbon monoxide, nitrogen oxides, ozone, and the other criteria pollutants. Even with the continuing growth in population there has been a decreasing or steady trend in concentrations in the region for carbon monoxide, nitrogen oxides, and ozone. Carbon monoxide, nitrogen oxides, and ozone concentrations are below the ambient standards and are expected to remain below these standards. The ambient standards are set to protect the public health and welfare.

**302-2** NNSA recognizes the presence of seismic and geologic features in and around LANL, as discussed in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). NNSA is also aware of the estimated human health impacts from postulated facility accidents at LANL, including earthquakes, as described in Chapter 5, Section 5.12, and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard.

NNSA has used previous seismic analysis as a basis to review operations and planned alternatives. The results have required relocation of some missions and have been used to set the construction standards for new

Commentor No. 302 (cont'd): Gilbert L. Naranjo

September 6, 2006

Comments by: Gilbert L. Naranjo, Santa Clara Pueblo

To whom this may concern,

I am a tribal member of the Santa Clara Pueblo. I appreciate this opportunity to comment on the draft Site-Wide Environmental Impact Statement for continued Operations of Los Alamos National Laboratory.

My first comment is the commuter traffic that comes through our Pueblo, twice a day, five days a week, for the past sixty years.

1) I am a traditional farmer, my home is approx. 50 ft. from the Los Alamos highway. Because of the exhaust from the commuters, I can not dry my food naturally outside in the sun.

2) Our ancestors taught us how to care for traditional seeds that have been passed down for over a hundred years. These seeds are not producing in the soil like they are supposed to.

3) Our ancestors also taught us how to gather certain wild plants and herbs that grow along the highway. Again, my concern is the contamination by commuters and air pathways from the lab to Santa Clara.

4) I also see that certain viable insects have been and are being disrupted. These insects are the food supply for some species of migratory birds. There are at least three species that I know of, that don't come any more.

5) Members of our community including myself and children, have experienced some of the rudeness and disrespectful behavior from lab workers who are in a hurry going or coming from work, they even make obscene gestures. This too has been going on for over 60 years.

6) The noise is mentally disturbing.

When I was young, sometimes we could tell when the lab was doing testing or something, because explosions were felt in the household. The windows would shake and dirt would fall from the ceiling of our adobe house. Sometimes we would have to cover our food when we were having a meal. I was also told by some tribal elders that what ever they were doing at Los Alamos was causing damage to our ancestral homes at Puye Cliffs.

The area in which the lab is located is on lands that have been and continue to be sacred to pueblo people and other tribes. This was once pristine land, air and water. And not that long ago. Within these sacred places are known faults, and known seismic activity. Not a very safe place for making nuclear weapons or storing nuclear waste.

I feel that as a taxpayer and neighbor to Los Alamos National Laboratory, that the lab should concentrate on research to clean up the contamination that has threatened many aspects of our lives as a people. It's only common sense that this should happen first before the lab talks about expansion. I understand that the lab provides jobs for our neighbors in Espanola and a few for people from Santa Clara. What I don't understand is why the labs mission of making components to Weapons of Mass Destruction is located in a place where the people are known as "The Peace Keepers".

302-1

302-2

302-3

buildings and upgrades. Similarly, the updated seismic hazard analysis for LANL will provide a basis for a rigorous and thoughtful evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

302-3

NNSA notes the commentor's concerns about focusing on cleanup before contemplating an expansion of LANL activities. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Appendix I of the SWEIS presents options and environmental analyses for conducting future remediation activities at LANL primarily related to the Consent Order that was entered into on March 1, 2005. Appendix I also summarizes several technologies for cleanup of soil, water, and air and references additional information about existing and emerging cleanup technologies. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.



**Commentor No. 303 (cont'd): Mr. and Mrs. Raymond Naranjo**

August 7, 2006  
Comments by Mr. & Mrs. Raymond Naranjo

To whom this may concern,

Thank you for the opportunity to make comments on the draft Site-Wide Environmental Impact Statement. We are a married couple, and Elders of the community of Santa Clara Pueblo. We are unknowledgeable to the operations at Los Alamos National Laboratory, and can only assume that some of the illnesses that are occurring is caused by those operations. We have raised eight children and are grandparents and great-grandparents. One of our children is suffering from a rare type of muscle disorder that is a known environmental exposure.

We have received information on water contamination that is leaving the lab property. Our concern is the wild game that is known to migrate all through the mountains including LANL property. They drink the water and eat the plants. We in turn eat this meat. This has been part of the native diet since ancestral times.

What about the airborne contamination from LANL operations. We use evergreens and wood for ceremonial purposes. Are these things contaminated? And what about our clay, sand and wood used for pottery making? Pottery making is a major source of income and ceremonial purposes for many people at Santa Clara.

Another comment is the traffic that passes through the pueblo. Do the vehicles carry sorts of contamination? Has anyone checked this?

When it rains and snows contamination must flow downstream and eventually go into the Rio Grande. Even though we are at Santa Clara, we go to other pueblos for feast days, religious ceremonies and we also have relatives and friends at other pueblos. WE DRINK THE WATER.

What do we do if there's an accident of hazardous waste or a terrorist attack? Who's going to let us know what kind of contamination? Where do we go? How do we protect ourselves?

Los Alamos National Laboratory needs to clean up the mess that already exists. If the lab wishes to expand their operations, they should consider doing it somewhere else.

303-1

303-2

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cont'd

303-3

303-4

Vehicles carrying radioactive materials are checked prior to leaving the site to ensure that the materials are packaged in accordance with U.S. Department of Transportation regulations and that radiation and contamination levels are below U.S. Department of Transportation requirements.

**303-3** Emergency response facilities and equipment, trained staff, and effective interface and integration with offsite emergency response authorities and organizations support LANL's emergency management system. LANL staff maintains the necessary equipment and an Emergency Operations Center to respond to virtually any type of emergency, not only on the LANL site, but throughout the local community. Chapter 4, Section 4.6.4, of the SWEIS describes the Los Alamos National Laboratory Emergency Management and Response Program.

**303-4** NNSA notes the commentor's concern about prioritizing cleanup before contemplating an expansion of LANL activities. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed (see Chapter 2, Section 2.2.6, of the SWEIS). Appendix I of the SWEIS presents options and environmental analyses for conducting future remediation activities at LANL primarily related to the Consent Order that was entered into in March 2005. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

Commentor No. 304: Anonymous

Draft Site-Wide Environmental Impact Statement  
for Continued Operation of Los Alamos National Laboratory,  
Los Alamos, New Mexico (Draft SWEIS)

Comment Form  
Forma para comentarios

Thank you for your input  
Gracias por su participación

Date/Fecha: 9/13/06

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1. What comments do you have on the Draft SWEIS?  
¿Que comentarios tiene usted sobre el Draft SWEIS?

*Comments attached*

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\*\* CONTINUE ON BACK FOR MORE SPACE \*\*  
\*\* CONTINUAR AL DORSO PARA MAS ESPACIO \*\*

Name/Nombre: \_\_\_\_\_

Address/Dirección: Santa Clara Pueblo

City/State, Zip Code/Ciudad, Estado, Zona Postal: 87532



PLEASE HAND THIS FORM IN OR MAIL BEFORE SEPTEMBER 5, 2006 to:  
FAVOR DE ENTREGAR ESTA FORMA O ENVIARLA POR CORREO  
ANTES DEL DIA 5 DE SEPTIEMBRE DE 2006 A:

Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office • National Nuclear Security Administration • U.S. Department of Energy • 528 35th Street • Los Alamos, NM 87544-2201

*Commentor No. 304 (cont'd): Anonymous*

We appreciate the work that has been done at Los Alamos National Laboratory. As a person who has lived through World War II, and 9/11 we appreciate the necessity of weapons which will deter terrorists from our land.

The lab has brought many changes to Santa Clara Pueblo. Many people are employed by the lab allowing them a means to support their families. Many lab employees have worked as tutors for our children to help with homework, especially in math and science. The tutors have volunteered their time, they are kind and charismatic people. The Los Alamos National Laboratory has provided grants to help us with language programs to address Native language loss.

Having our people work away from home has also resulted in the loss of traditional farming, families working together; loss of language and traditions has resulted. Technology has brought further division to our traditional way of life in a manner that the oppression of the Spanish and the boarding schools of the American government did not accomplish. Children are occupied with TV and video games so their parents can rest after a day away from home. Our traditional form of government of not campaigning against each other but selecting our leaders in a traditional manner is constantly under threat. Rather than helping people to come to a peaceful and prayerful resolution in conflict our tribal courts encourage representation that urge people to try to win the judge over to their point of view.

I digress. The concern of the day is to find solutions to pollution. We want to know that our land which has been contaminated by radiation can be cleaned up. We want to know that the lab is working on solutions. We want to know that the water is good to drink, the air is good to breathe, and land that we are encouraging people to plant on is safe. We want to know that we can trust our government to be honest about contamination. We want to know that technology and expertise is directed toward solutions.

304-1

304-1

NNSA notes the commentor's concerns about environmental contamination. Waste minimization and pollution prevention efforts at LANL are summarized in Chapter 4, Section 4.9, of the SWEIS. Chapter 2, Section 2.2.6 describes the progress that has been made in conducting environmental restoration at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Appendix I of the SWEIS presents options and environmental analyses for conducting future remediation activities at LANL, primarily related to the Consent Order that was entered into in March 2005. Appendix I also summarizes several technologies for cleanup of soil, water, and air and references additional information about existing and emerging cleanup technologies. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the New Mexico Environment Department using cleanup criteria documented in Section VIII of the Consent Order. These criteria include standards for cleanup of soil, surface water, and groundwater, as well as standards for screening for ecological risks. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS.



Commentor No. 305: Ray Naranjo

Draft Site-Wide Environmental Impact Statement  
for Continued Operation of Los Alamos National Laboratory,  
Los Alamos, New Mexico (Draft SWEIS)

Comment Form  
Forma para comentarios

Thank you for your input  
Gracias por su participación Date/Fecha: 9-16-06

PLEASE PRINT / FAVOR DE ESCRIBIR CLARAMENTE

1. What comments do you have on the Draft SWEIS?  
¿Que comentarios tiene usted sobre el Draft SWEIS?

To whom this may concern:  
Thank you for this opportunity to make comments  
on Draft SWEIS.  
I would like to see public health studies published in  
local newspapers and local broadcast in language that  
is understandable to the general public. I am  
not in favor of the expansion of LANL operations  
because of the present problems with air emissions  
and water contamination that hasn't been taken  
care of.

\*\* CONTINUE ON BACK FOR MORE SPACE \*\*  
\*\* CONTINUAR AL DORSO PARA MAS ESPACIO \*\*

Name/Nombre: Ray Naranjo  
Address/Dirección: Corte de Pueblo  
City, State, Zip Code/Ciudad, Estado, Zona Postal:

PLEASE HAND THIS FORM IN OR MAIL BEFORE SEPTEMBER 5, 2006 to:  
FAVOR DE ENTREGAR ESTA FORMA O ENVIARLA POR CORREO  
ANTES DEL DIA 5 DE SEPTIEMBRE DE 2006 A:



Mx. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office • National Nuclear Security Administration • U.S. Department of Energy • 528 35th Street • Los Alamos, NM 87544-2201

305-1

305-1

NNSA notes the commentor's desire to have public health studies distributed by the local news media. While it is not possible for NNSA to ensure that such reports are published in the local newspapers or written in easy to understand language, in the past, the LANL contractor has placed public health studies on its website to allow increased access to such reports. For example, the Agency for Toxic Substances and Disease Registry released a public health assessment of LANL dated April 26, 2005. This document is available on the LANL website at [www.lanl.gov/orgs/pa/newsbulletin/documents/LANL\\_PHA\\_042605.pdf](http://www.lanl.gov/orgs/pa/newsbulletin/documents/LANL_PHA_042605.pdf).

305-2

305-2

NNSA notes that the commentor is not in favor of the expansion of LANL operations. Chapter 5 of the SWEIS addresses the environmental impacts of LANL operations, including air and water quality. LANL operations are in compliance with the air and water regulations that protect public health and the environment and, based on the SWEIS analysis, would continue to be in compliance under all proposed alternatives including the Expanded Operations Alternative. There are areas of known or suspected contamination due to historical site operations at LANL. In 2005, the State of New Mexico, NNSA and the University of California, as the LANL management and operating contractor, entered into a "Compliance Order on Consent" (Consent Order) that is currently being implemented to address the investigation and remediation of legacy environmental contamination at LANL.

Commentor No. 306: Marian Naranjo

Draft Site-Wide Environmental Impact Statement  
for Continued Operation of Los Alamos National Laboratory,  
Los Alamos, New Mexico (Draft SWEIS)

Comment Form  
Forma para comentarios

Thank you for your input  
Gracias por su participación

Date/Fecha: September 18, 2006

PLEASE PRINT / FAVOR DE ESCRIBIR CLARAMENTE

1. What comments do you have on the Draft SWEIS?  
¿Que comentarios tiene usted sobre el Draft SWEIS?

My comments are attached to this form!

Comment side of this page intentionally left blank.

\*\* CONTINUE ON BACK FOR MORE SPACE \*\*  
\*\* CONTINUAR AL DORSO PARA MAS ESPACIO \*\*

Name/Nombre: Marian Naranjo  
Address/Dirección: P.O. Box 474 Santa Clara Pueblo  
City, State, Zip Code/Ciudad, Estado, Zona Postal: Esperanza, New Mexico 87532



PLEASE HAND THIS FORM IN OR MAIL BEFORE SEPTEMBER 5, 2006 to:  
FAVOR DE ENTREGAR ESTA FORMA O ENVIARLA POR CORREO  
ANTES DEL DIA 5 DE SEPTIEMBRE DE 2006 A:

Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office • National Nuclear Security Administration • U.S. Department of Energy • 528 35th Street • Los Alamos, NM 87544-2201

Commentor No. 306 (cont'd): Marian Naranjo

September 18, 2006

Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office  
National Nuclear Security Administration  
U.S. Department of Energy  
528 35<sup>th</sup> Street  
Los Alamos, New Mexico 87544-2201

Dear Ms. Withers,

Thank you for this opportunity to comment on the draft Site-Wide Environmental Impact Statement (SWEIS) for Continued Operation of Los Alamos National Laboratory.

I am a tribal member and reside at the Pueblo of Santa Clara. I took the time to read and research some of the material in the draft document. This was a major task and I feel that there was not enough time to fully research all the material. Part of this feeling is due to the fact that Pueblo feast days and other events are held during this time of the year. I feel that to achieve better documentation and response to the draft SWEIS, the Department of Energy must make every effort to educate the public and be aware of the scheduling of annual events in the surrounding communities.

So, my comments are on those issues which I feel are pertinent and the priority. My first comment is that this draft document should have included alternative independent scientific studies, the final SWEIS must do so. This draft document should have included more than Alternative and Expanded Operations focusing on nuclear weapons production. The final SWEIS must include activities that support life.

I would have liked to have seen more aggressive and ambitious promotion of clean up efforts in all three Operation Alternatives, not just in the Expanded Operations. Many times the draft document said there were no impacts to health or environment. After 60+ years of operations, during many of which there were no environmental laws to protect the land, air and water, it's only common sense that there has been and will continue to be impacts to the environment and the health of people in surrounding communities. After doing research and learning that in it's analysis of risks to human health, the draft SWEIS uses the Agency for Toxic Substances and Disease Registry (ATSDR) public health assessment for impact analyses. I know this to be true. The ATSDR assessment was criticized by the Environment Protection Agency (EPA). EPA recommended that the risk assessment be redone. This leaves me to question the validity of other assessments in this draft document. What is the true risk?

306-1

**306-1** NNSA understands that there are events unique to the Pueblos that could interfere with their participation in a public comment process. NNSA believes that the process implemented for public input on the Draft LANL SWEIS provided reasonable accommodation for such events. The comment period was extended from 60 to 75 days and people of northern New Mexico Pueblos, including the Pueblo of San Ildefonso, were invited to a special briefing on the Draft LANL SWEIS about 3 weeks after it was made available. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

306-2

**306-2** NNSA included the analyses of studies not sponsored by NNSA or DOE when appropriate and available. For example, Chapter 4, Section 4.6.1.1 includes discussion of the Public Health Assessment prepared by the Agency for Toxic Substances and Disease Registry and the Analysis of Exposure and Risks to the Public from Radionuclides and Chemicals Released by the Cerro Grande Fire at Los Alamos that was sponsored by the State of New Mexico.

306-3

**306-3** NNSA notes the commentor's desires regarding the mission of LANL. LANL scientists currently conduct research in areas such as renewable energy and global climate change, and support nonproliferation programs in addition to their efforts in support of LANL's Stockpile Stewardship mission. Refer to Section 2.3, Alternative Missions, of this CRD for more information. NNSA does not consider compliance with the Consent Order to be optional, and is not linking Consent Order compliance with decisions about pit production; proposed new projects or activities; increased operational levels; or waste generated from other LANL activities. Chapter 1, Section 1.3, of the SWEIS defines the three alternatives and explains why activities to comply with the Consent Order are included only in the Expanded Operations Alternative. Section 1.4 states that NNSA could choose to implement the alternatives either in whole or in part and that NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

306-4

**306-4** The SWEIS presents an independent assessment of public health impacts from contaminants in the LANL environment. The Agency for Toxic

**Commentor No. 306 (cont'd): Marian Naranjo**

(Comments continued)

It is a known fact that the Jemez Mountain, sacred to the Pueblo people and other tribes, is an ancient dormant volcano and there are major faults within and around this mountain. Volcanic activity and earthquakes are not controlled by man and are unpredictable. Doing research and learning that there were ten (10) recorded earthquakes in the Pajarito Fault System since 2002, the latest on August 7, 2006, makes me question the risk LANL Operations pose to the environment and human health even more. I also learned that a seismic hazard study was being done, but not included in this document. Which confirms my doubt about the assessments in this draft document.

306-5

Not much was discussed in this document as far as Environmental Justice. It seems to me that the existence of Area G which borders a sacred site, and located a couple miles from the baseball fields where many children from the Pueblos and the Espanola Valley play during the summer months, is a violation of Environmental Justice. After drinking the water and breathing the air, and learning about the drums of transuranic waste that is there and the waste that is buried and the method of burial in unlined pits, trenches and shafts, and the fact that there are fifteen (15) Pueblos within a fifty (50) mile radius of Area G, it sure seems like the discussion of environmental justice should be elaborated.

306-6

Researching information on impacts to water, I learned that on September 15, 2006, a Notice of Violation was sent to LANL from the State of New Mexico Environment Department in the amount of \$795,620, for not reporting for almost two years, elevated toxic hexavalent chromium contamination in the groundwater, in the regional aquifer, where the surrounding Pueblos rely on this water for survival. This document noted the Consent Order which was made because of previous violations. This practice of violations is not of merit to LANL. Also looking at the data published in this document and asking for expert opinions about the data, it is agreed by all that the data is not clear. Not to mention the other existing problems caused by the use of drilling fluids in characterization wells and the many unmonitored contaminated sites.

306-7

As I write these comments and visualize the hunters that are in our sacred mountain at this time of the year, bringing down the elk to provide food for the winter months, it saddens me to realize that the wildlife, especially the Bull elk, which are known to migrate, drink water and eat the plants in and on LANL property, present health risks which truly exists upon consumption.

306-8

To my understanding, the Expanded Operations will utilize more regional water, which is supposed to be for future generations, and increase hazardous waste without ensuring proper clean up. There is also the concern of increased air emissions.

306-9

I realize that some of the buildings are old and contamination in the workplace is unacceptable. LANL should take them down, and clean up the areas. It is important to provide better and safer workplaces. I also realize that LANL provides much needed funds to the surrounding communities for education and programs. This should be commended.

306-10

Substances and Disease Registry is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting Public Health Assessments at each site on the U.S. Environmental Protection Agency National Priorities List. The Public Health Assessment is a relevant Federal agency study and it is therefore appropriate that the SWEIS acknowledge its conclusions. The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry Public Health Assessment in any specific way for its conclusions. The Public Health Assessment examined data from 1980 through 2001 whereas the SWEIS includes and evaluates health data through 2005, and projects impacts over the next 5 years. The Public Health Assessment was finalized and released August 31, 2006 (ATSDR 2006). As detailed in Appendix I to the final Public Health Assessment, U.S. Environmental Protection Agency comments on the draft were addressed by the Agency for Toxic Substances and Disease Registry in the final document.

306-5 NNSA recognizes the presence of volcanic activity as well as seismic and geologic features in and around LANL. These are discussed in Chapter 4, Sections 4.2.2.2 and 4.2.2.3. NNSA is conducting ongoing studies to update the large base of research in this area, with a focus on continuous improvement in understanding of the seismic setting at LANL. An update to the seismic hazard analysis was completed in June 2007. Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

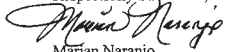
The new geological information in the 2007 seismic hazard analysis report has been interpreted as indicating that the seismic hazard at LANL is greater than previously understood. The relevance of the seismic hazard to facility accidents will undergo a rigorous and thoughtful evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

Commentor No. 306 (cont'd): Marian Naranjo

(comments continued)

Because of the above stated comments, I conclude that LANL should **NOT** expand the Operations for Plutonium Pit Production or a Modern Pit Facility.

Respectfully Submitted,



Marian Naranjo  
Rt. 5 Box 474  
Española New Mexico 87532

|| 306-9  
cont'd

Following the NEPA process but prior to the design and operation of specific facilities, safety studies in the form of Hazard Assessment Documents and Safety Analysis Reports that include seismic concerns and take into account the most current seismic information would be prepared to address a comprehensive set of accident risks. The results of these safety studies would be incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

- 306-6** Chapter 5, Section 5.11, of the SWEIS has been revised to include more information related to environmental justice concerns and why NNSA believes that no disproportionately high and adverse environmental impacts on minority and low-income populations would be expected to result from LANL operations. Dose calculations were performed for the area surrounding Area G and the results are presented in Chapter 5, Tables 5-17 and 5-18, of the SWEIS. As shown in these tables, the projected doses to the Maximally Exposed Individual and the General Public from normal LANL operations were very low under all of the alternatives and would not be expected to present a significant risk to individuals living nearby. Refer to Section 2.11, Environmental Justice, of this CRD for more information.
- 306-7** Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding well construction, chromium contamination, and groundwater monitoring.
- 306-8** Efforts to consider LANL operational impacts with respect to “special pathways” were initiated in the 1990s through the LANL environmental cleanup project and the *1999 SWEIS*. The “special pathways” receptor was developed to represent Native Americans, Hispanics, and other residents whose traditional living habits and diets could cause greater exposure to environmental contaminants than those experienced by the hypothetical “offsite resident.” Foodstuffs and pathways of specific interest include ingestion of game animals, including consumption of some organ meats, nongame fish, native vegetation through use of Indian Tea (cota), surface water and incidental ingestion of soil and sediments in surface water and from swallowing inhaled dust, these pathway are in addition to the meat, milk, produce, water, and sediment consumption reflected in the “offsite resident” pathway assumption. These pathways are described in detail in Appendix C of the SWEIS.

Commentor No. 306 (cont'd): Marian Naranjo

This special pathways analysis was performed again for this SWEIS. Based on this analysis, it was determined that a person subsisting on such a diet would receive a higher dose than someone who subsisted on a less traditional diet, but that the increase in risk as a result of these special pathways is not considered significant. The annual dose to an individual who participated in all of the special pathways shown in Appendix C, Section C.1.4.2, would be between 4.5 and 10.7 millirem higher per year from these special pathways. For comparison, the average resident of northern New Mexico receives a dose of approximately 400 millirem per year from background radiation sources. Therefore, the average annual dose to those individuals subsisting on all of the special pathways would increase by between approximately 1.1 to 2.7 percent due to these special pathways.

**306-9** NNSA notes the commentor's concerns regarding increased water use, pollutant emissions, and hazardous waste generation under the Expanded Operations Alternative, and suggestion that activities related to nuclear weapons production at LANL are not necessary. Although the Expanded Operations Alternative would result in increased water usage, amounts of radioactive and chemical waste, air emissions, and wastewater discharges, as demonstrated in Chapter 5 of the SWEIS, these increases can be safely managed. LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling as discussed in Chapter 5, Section 5.8. Refer to Section 2.8, Water Use, of this CRD for more information on water use, available water rights, and water supply planning at LANL.

Chapter 2, Section 2.2.6, of the SWEIS describes progress made by NNSA in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Continuation of cleanup activities at a pre-Consent Order level is included in the No Action Alternative, while actions necessary to comply with the Consent Order are evaluated under the Expanded Operations Alternative. As stated in Chapter 1, Section 1.4, of the SWEIS, however, NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. For more information about proposed activities in support of the Consent

Commentor No. 306 (cont'd): Marian Naranjo

Order, refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD.

Reference to a modern pit facility in the Draft SWEIS was in the context of ensuring that reasonably foreseeable future actions were addressed in accordance with the Council on Environmental Quality NEPA regulations regarding cumulative impacts. In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (71 FR 61731). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). Therefore, the Final SWEIS does not include analyses related to a modern pit facility. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

- 306-10** NNSA recognizes that some processes, buildings and structures at LANL should undergo decontamination, decommissioning, and demolition. Many of the activities proposed in the SWEIS are meant to provide better and safer workplaces. Appendix H evaluates the environmental impacts for decontamination, decommissioning, and demolition of processes and structures in TA-18, TA-21 and TA-54, Area G. Some or all processes and structures in TA-18 may be relocated or removed from this technical area. Processes and structures in TA-21 are proposed to be removed to allow remediation of material disposition areas and potential release sites in this area in compliance with a Consent Order. Portions of TA-21 are also designated for conveyance to the Incorporated County of Los Alamos or to the U.S. Department of the Interior in trust for the Pueblo of San Ildefonso. In TA-54, Area G, processes and structures associated with waste management operations are proposed to be removed or relocated to allow closure of MDA G in compliance with the Consent Order, as well as closure of certain other disposal units not subject to the Consent Order.

Commentor No. 307: Governor James R. Mountain,  
Pueblo San Ildefonso

James R. Mountain  
Governor



Pueblo de San Ildefonso  
Office of the Governor

SI-GC06-272

September 18, 2006

Ms. Elizabeth Withers  
U.S. DOE/NNSA  
Los Alamos Site Office  
528 35<sup>th</sup> Street  
Los Alamos, NM 87544-2201

Re: San Ildefonso Comments on Draft SWEIS

Dear Ms. Withers:

The Pueblo de San Ildefonso (the Pueblo) has reviewed the Draft *Site Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory Los Alamos New Mexico* (SWEIS) dated June, 2006. Comments are enclosed.

We at the Pueblo are disappointed to see that the SWEIS is essentially unchanged from the standpoint of our previous comments. There has been no apparent effort to address Pueblo issues and concerns. Granted, in such a massive document there is a chance that a response may have been inadvertently overlooked, but no such responses were to be found in our review. This serves to undermine our faith in this process, which we understood to be collaborative, with the Pueblo as a partner.

Despite our disappointment, the Pueblo shall continue to be a contributing agency to the SWEIS, and we shall continue to present our views, concerns and issues, and hope that we are able to make a meaningful and constructive contribution.

Thank you for your attention to this important matter.

Sincerely,

James R. Mountain, Governor  
Pueblo de San Ildefonso

Cc: Neil Weber, DECP Director

Route 5 Box 315-A · Santa Fe, NM 87506 · (505) 455-2273 · (505) 455-4153 Fax

307-1

307-1

NNSA thanks the people of the Pueblo of San Ildefonso for their continued involvement in the SWEIS preparation process and for the government-to-government relationship enjoyed by NNSA and the Pueblo. Pueblo issues and concerns were considered in the process of developing the SWEIS analysis; however, the NEPA compliance process, particularly as it relates to the SWEIS preparation effort, is not necessarily the appropriate venue for addressing Pueblo issues and concerns. NNSA pledges to continue to work through its government-to-government relationship with the Pueblo of San Ildefonso to address members' concerns.



**Commentor No. 307 (cont'd): Governor James R. Mountain,  
Pueblo San Ildefonso**

**Comments on June 2006 Working Draft of the LANL SWEIS**

**General Comments**

- 1. The time allotted for review of the Draft SWEIS was insufficient. The reviewer struggled to review the chapters and was unable to review appendices I and J. More time should have been allowed for review. || 307-2
- 2. The SWEIS should present alternatives to expansion of TA-54 Area G into Zones 4 and 6. This expansion into unlined pits increases the potential impacts of releases of contaminants to Tribal lands. || 307-3
- 3. The SWEIS should clarify the possible or likely fates of waste for the various DD&D projects. TA-54 Area G seems a likely disposal choice for these wastes. The Pueblo opposes this option. || 307-4

**Specific Comments by Section**

**Summary**

***S.1 Background***

Paragraph 3 of page S-3 states: "Another benefit of preparing a new SWEIS is the reevaluation of cumulative impacts associated with LANL operations." This is an excellent argument for including alternatives to expansion of TA-54 Area G into Zone 4 in the SWEIS. || 307-3 cont'd

***S.9.1 Comparison of Potential Consequences of Alternatives for Continued Operation at Los Alamos National Laboratory***

The previous version of Table S-5 indicated that DD&D of TA-21 might harm wetlands. The current version does not discuss wetlands. The table should clarify the effect of DD&D of TA-21 on wetlands. || 307-4 cont'd

***S.9.3 Summaries of Potential Consequences from Project-specific Analyses***

On page S-78, the *Summary of Impacts for Los Alamos Neutron Science Center Refurbishment Project* does not address Tribal issues with extending the operating life on LANSCE. This facility releases radionuclides upwind of Tribal land, and is an insult to the viewshed from Tribal land. || 307-5

On page S-78, the *Summary of Impacts for the Radiography Facility Project* does not address the Environmental Justice concern of concentrating several facilities with the potential to release large amounts of radionuclides upstream and upwind of Tribal lands. || 307-6

Table S-11 states: "Accident impacts are bounded by those analyzed for the TA-55 Plutonium Facility Complex." This statement should clarify what analysis this refers to (i.e. an analysis done as part of this new SWEIS or an earlier SWEIS/other document). It is counterintuitive that || 307-7

**307-2** NNSA notes the commentor's opinion that insufficient time was allowed for review of the Draft LANL SWEIS. Responding to requests for additional review time, NNSA extended the comment period from the original 60 days to 75 days. See additional discussion of the NEPA process in Section 2.2 of this CRD.

**307-3** Expansion of low-level radioactive waste disposal into Zones 4 and 6 of Area G was analyzed in the *1999 SWEIS* and a decision was issued in the Record of Decision for the *1999 SWEIS* (64 FR 50797). Therefore, use of Zones 4 and 6 for low-level radioactive waste disposal is included under the No Action Alternative in the new SWEIS. NNSA is not revisiting that decision in this SWEIS.

**307-4** NNSA notes the commentor's opposition to disposing of decontamination, decommissioning, and demolition (DD&D) waste at TA-54, Area G. As addressed in Chapter 5, Section 5.9.3, and Appendix H, Section H.2.3.2, low-level radioactive waste and nonradioactive construction debris would make up the majority of waste generated by TA-21 DD&D activities. Low-level radioactive waste from DD&D activities may be disposed of in TA-54 or sent offsite to DOE or commercial facilities. The Record of Decision for the *1999 LANL SWEIS* indicated that waste disposal operations in Area G would be expanded into Zones 4 and 6 (64 FR 50797). No additional expansion of waste disposal capacity is addressed in this SWEIS.

As noted by the commentor, neither Section 3.3.2.2 nor Section 3.3.3.5 in Chapter 3, describes the disposition of DD&D wastes; rather, disposition of all waste types generated by DD&D activities at TA-21 is addressed in Section H.2.3.2. Because Section 3.3.2.2 summarizes DD&D activities of TA-21 under the Expanded Operations Alternative, it does not provide details on DD&D wastes. Similarly, because Section 3.3.3.5 summarizes the activities that would occur at the Pajarito Site under the Expanded Operations Alternative, it does not provide details on DD&D wastes. Also, the waste management discussion in Chapter 3, Section 3.6.2, only summarizes the cumulative impacts associated with waste generation. Additional details of the impacts of DD&D waste are provided in Chapter 5, Sections 5.9 and 5.13.

Solid waste (defined in Appendix H, Section H.1.3.2 as construction, demolition, and sanitary waste) resulting from DD&D of TA-18 buildings

**Commentor No. 307 (cont'd): Governor James R. Mountain,  
Pueblo San Ildefonso**

San Ildefonso Comments on June 2006 Draft SWEIS

an accident analysis performed for an earlier SWEIS or other document would apply to TA-55 after the proposed changes are complete.

307-7  
cont'd

On page S-90, *Summary of Impacts for Increase in Type and Quantity of Sealed Sources Managed at LANL by the Off-Site Source Recovery Project* describes TA-54 Area G as a storage area for the increased numbers of sealed sources which may be brought to LANL. The SWEIS should present alternatives to storage of these sources at Area G, which would increase a possible source of contamination to the Tribal lands which border Area G.

307-8

**CHAPTER 1**

1.3.3 Expanded Operations Alternative

This section discusses the increase of plutonium pit production for 20 pits per year to 50. The Tribe has concerns with this increase in the amount of plutonium, and the increased likelihood of plutonium accidents at TA-55.

307-9

307-5

Page 1-17 lists the three types of new projects are addressed in the new SWEIS under the Expanded Operations Alternative, two of which are:

- Projects that maintain existing capabilities at LANL; and
- Projects that add new or expand existing capabilities at LANL.

307-3  
cont'd

It seems that either of these could reasonably be used as justification for more in depth analysis of the Area G expansion.

Section 1.3.4

This section discusses the increase of plutonium pit production for 20 pits per year to 50. The Tribe has concerns with this increase in the amount of plutonium, and the increased likelihood of plutonium accidents at TA-55.

307-9  
cont'd

**CHAPTER 2**

Section 2.4.1

This section describes the CMR building and the proposed move to TA-55. The Tribe has concerns with the move of another potentially polluting facility to upstream of our border, especially one that regularly exceeds NPDES flow projections. The SWEIS should discuss the possible cumulative effects of siting multiple potential contaminant sources upstream of our border.

307-10

**CHAPTER 3**

3.1.3.15 Waste Management Operations: Solid Radioactive and Chemical Waste Facilities

and structures and all other DD&D activities would be disposed of offsite. After closure of the Los Alamos County Landfill, as discussed in Chapter 2, Section 2.3, there will be no onsite capability to dispose of solid waste. Therefore, the SWEIS assumes that all solid waste would be transported offsite.

Regarding impacts to wetlands caused by DD&D of TA-21, the SWEIS does not refer to impacts to wetlands in Table S-5 of the Summary because there are no wetlands located in the area in which DD&D activities would be performed (ACE 2005). The reference to potential impacts to wetlands in the discussion of TA-21 in Section 5.5.3 was deleted in the Final SWEIS.

The SWEIS addresses the potential for health and safety risks to populations living in the potentially affected area surrounding LANL, including those residing on Tribal lands. These environmental impacts, including those resulting from the LANSCE Refurbishment Project, are presented in Chapter 5, Section 5.6.1.3. LANSCE operations historically have accounted for the majority of radioactive air emissions at LANL. Increased use of these facilities could increase air emissions. An analysis of doses to minority and low-income populations was performed and it has been added to Section 5.11 of the SWEIS. It confirmed that the largest doses under any of the alternatives would be received by the white (non-Hispanic) population.

Currently, these air emissions are monitored and LANSCE operations are discontinued when the resulting dose to the maximally exposed individual at LANL approaches the annual limit. The maximally exposed individual for LANL is a hypothetical resident at the East Gate, north-northeast of LANSCE; at a distance of approximately 0.5 miles (800 meters). Impacts to an individual in the direction of Tribal lands would be smaller than impacts to the maximally exposed individual because Tribal Lands are generally further away or located in a different direction. For example, the closest Tribal Land to LANSCE would be on the San Ildefonso Pueblo due east of the site.

To minimize the impact on the visual environment, refurbishment occurs within existing structures; none of the analyzed options included moving or removing LANSCE. Appendix G, Section G.5.2.3, describes why those options are not feasible at this time.

**Commentor No. 307 (cont'd): Governor James R. Mountain,  
Pueblo San Ildefonso**

San Ildefonso Comments on June 2006 Draft SWEIS

This section states; "As evaluated in the 1999 SWEIS and documented in the ROD, as disposal capacity in MDA G is used up, Zone 4 is being developed for continued low-level radioactive waste disposal." Unless the 1999 SWEIS addressed the threat to San Ildefonso lands and culture from the siting of additional unlined disposal pits and possible cumulative effects of siting multiple potential contaminant sources upstream and/or bordering our land, the current draft SWEIS should do this..

307-10  
cont'd

3.3.2.2 Technical Area 21 Structure Decontamination, Decommissioning, and Demolition Project  
This section should address proposed fates of DD&D wastes.

307-4  
cont'd

3.3.3.5 Pajarito Site  
This section should address proposed fates of DD&D wastes.

3.6.1 Comparison of Potential Consequences of Alternatives for Continued Operation at Los Alamos National Laboratory  
- Environmental Justice

This section states; "However, analyses show the human health impacts associated with these special pathways would not present disproportionately high and adverse impacts to minority or low-income populations." This section should discuss whether DOE/LANL has worked with any local tribes to create a reasonably accurate Native American exposure scenario. Also, this section should clarify whether an Environmental Justice evaluation included the possible effects of numerous polluting facilities grouped together near the border between LANL and San Ildefonso.

307-11

3.6.2 Summary of Cumulative Impacts  
- Human Health

This section states; "At a collective dose of 1,080 person-rem per year, less than 1 (0.71) LCF would be expected." The Human Health subsection in the November draft states; "Collective worker doses would substantially increase if a 450-pits per year Modern Pit Facility were located at LANL. There would be an approximately 1 in 2 cumulative chance per year of a fatal worker cancer after the addition of doses that could be experienced at the modern pit facility. There would be a 1 in 10 chance per year of a fatal worker cancer under the SWEIS alternatives." The last two sentences have been deleted from the current language. This essentially and profoundly diminishes the impact of the Modern Pit Facility on worker health. This language should be returned to this section.

307-12

3.6.2 Summary of Cumulative Impacts

This section should address proposed fates of DD&D wastes.

307-4  
cont'd

**CHAPTER 5**

**Section 5.13**

307-12  
cont'd

- 307-6 The Radiography Facility project would not be expected to result in any radiation dose to the public or, by extension, to any minority or low-income populations; therefore, this issue was not addressed. A discussion was added to Appendix G, Section G.6, of the SWEIS to clarify this project's potential health impacts on the public.
- 307-7 The statement in Table S-11 of the Summary refers to the analyses included in the current SWEIS. Note that the table is a summary of impacts associated with the proposal to build a new radiography facility in TA-55, as analyzed in Appendix G of the SWEIS. The impacts of an accident at such a facility would be much smaller than the impacts of an accident at the Plutonium Facility Complex because of the smaller amount of radioactive material involved at any time.
- 307-8 The noted Summary of Impacts on page S-90 of the Draft Summary addresses the bounding of potential accident scenarios. The descriptions in Appendix J, Section J.3.1 and Chapter 3, Section 3.1.1.7, indicate that the Off-Site Source Recovery Project is responsible for identifying, recovering, and storing excess and unwanted sealed radiological sources on behalf of NNSA in cooperation with the U.S. Nuclear Regulatory Commission. The Off-Site Source Recovery Project intends to use commercial organizations and facilities for reuse, storage, or disposal when appropriate, and LANL facilities when commercial storage is not appropriate, until a final disposal pathway is determined. As noted in the definition, because sealed sources consist of radioactive material contained within a sealed capsule, no potential for contamination exists during normal operations. The sealed sources are stored in TA-54, the Chemistry and Metallurgy Research Building, or other facilities that are designed to protect public health and the environment in the event of an accident.
- 307-9 NNSA notes the commentor's concern that increased pit production would increase the likelihood of an accident. This SWEIS analyzes a spectrum of accidents that represents and bounds potential accidents. In the event of an accident that is not explicitly addressed in the SWEIS, there is reasonable assurance that the impacts to workers and the public would be no greater than those that have been analyzed. Due to limitations on the amount of material allowed to be processed at one time and the amount of material allowed to be stored in a specific location where it would be potentially available for release (material at risk), there would be no

Commentor No. 307 (cont'd): Governor James R. Mountain,  
Pueblo San Ildefonso

San Ildefonso Comments on June 2006 Draft SWEIS

This section is remarkably different than the November 28, 2005 draft. The "Human Health" subsection in the November draft states; "Collective worker doses would substantially increase if a 450-pits per year Modern Pit Facility were located at LANL. There would be an approximately 1 in 2 cumulative chance per year of a fatal worker cancer after the addition of doses that could be experienced at the modern pit facility. There would be a 1 in 10 chance per year of a fatal worker cancer under the SWEIS alternatives."

The last two sentences have been deleted from the current language. This essentially and profoundly diminishes the impact of the Modern Pit Facility on worker health. This language should be returned to this section.

**APPENDIX H**

H.1.3.2 Disposition of Technical Area 18 Buildings and Structures

Page H-20 states; "The generated solid waste could also be managed at LANL or could be transported to a local offsite landfill. For the purposes of analysis, it was assumed that these wastes would be disposed of at an offsite location." It would be more conservative to assume that these wastes would be disposed of onsite.

307-12  
cont'd

307-4  
cont'd

- discernable difference in the potential impacts of the bounding accidents for the two pit production levels. Moreover, increasing the pit production rate from 20 pits per year to up to 80 would not require development of any new processes. The estimated human health impacts from postulated facility accidents, including earthquakes, are described in Chapter 5, Section 5.12, of the SWEIS.
- 307-10** Replacement of the Chemistry and Metallurgy Research Building with a new building at TA-55 was addressed in the *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, New Mexico* (DOE/EIS-0350) (DOE 2003c), published in November 2003. Chapter 4 of that EIS addressed the environmental impacts of co-locating Chemistry and Metallurgy Research activities at TA-55 with facilities already operating there. Volume II of the 1999 SWEIS addressed the alternatives for expanding low-level waste disposal capacity in a separate impacts analysis, and the impacts of operating Zone 4 in TA-54 were included in the main body of the 1999 SWEIS. In addition, the purpose of a SWEIS is to identify and assess the individual and cumulative impacts of ongoing and reasonably foreseeable actions at a DOE site, as required by DOE's NEPA implementing procedures. Thus, the impacts analyses in Chapter 5 of the current SWEIS present the cumulative effects of all ongoing and proposed LANL activities.
- 307-11** Efforts to consider LANL operational impacts with respect to "special pathways" were initiated in the 1990s through the LANL environmental cleanup project and the 1999 SWEIS. This special pathways analysis was performed again for the current SWEIS. The special pathways receptor was developed to represent Native Americans, Hispanics, and other residents whose traditional living habits and diets could cause greater exposure to environmental contaminants than those experienced by the hypothetical offsite resident. Foodstuffs and pathways of specific interest include ingestion of game animals, including consumption of some organ meats, nongame fish, native vegetation through use of Indian Tea (cota), surface water and incidental ingestion of soil and sediments in surface water and from swallowing inhaled dust, these pathways are in addition to the meat, milk, produce, water, and sediment consumption reflected in the "offsite resident" pathway assumption. These pathways are described in detail in Appendix C of the SWEIS.

Commentor No. 307 (cont'd): Governor James R. Mountain,  
Pueblo San Ildefonso

Based on the SWEIS analysis, it was determined that a person subsisting on such a diet would receive a larger dose than someone who subsisted on a less traditional diet, but that the increase in risk as a result of these special pathways is not considered significant. The annual dose to an individual who participated in all of the special pathways shown in Appendix C, Section C.1.4.2, of the current SWEIS would be between 4.5 and 10.7 millirem higher per year than the annual dose to the average offsite resident whose diet did not consist of game and locally grown produce. For comparison, the average resident of northern New Mexico receives a dose of approximately 400 millirem per year from natural background radiation sources. Therefore, the average annual dose to a person subsisting on all of the special pathways would increase by approximately 1.1 to 2.7 percent.

The environmental justice evaluation discussed in Chapter 5, Section 5.11, of the current SWEIS also considered the possible effects on the population residing within 50 miles (80 kilometers) of LANL from additive doses resulting from the grouping of various LANL facilities, particularly on individuals living closest to the highest dose facility. For example, the maximally exposed individual for the entire site was determined to be a hypothetical resident at the East Gate north-northeast of LANSCE at a distance of 0.5 miles (800 meters) when the dose from LANSCE was added to the dose from other LANL facilities (refer to Section 5.6, Table 5-17). An analysis also was done to determine the dose to a maximally exposed individual near TA-54 resulting from the waste facilities at TA-54 in combination with the doses from all other facilities that could contribute to the offsite dose. This analysis concluded that the estimated dose to a maximally exposed individual near TA-54 was smaller than the estimated dose to the maximally exposed individual living north of LANSCE. Similarly, the collective dose to the general population residing within 50 miles (80 kilometers) of TA-54 was smaller than the collective dose to the general population residing within 50 miles (80 kilometers) of LANSCE. For additional information on doses to low-income and minority populations, see the additions made to Section 5.11 of the SWEIS. Dose calculations were performed for the facilities shown in Table 5-16, and the results are presented in Section 5.6, Tables 5-17 and 5-18. As shown, the projected doses to the maximally exposed individual and the public from normal LANL operations were very low under all of the alternatives and would not be expected to present a

Commentor No. 307 (cont'd): Governor James R. Mountain,  
Pueblo San Ildefonso

significant risk to the population living nearby, regardless of their income level or whether they are a minority population.

- 307-12** In October 2006, NNSA issued a Notice of Intent (71 FR 61731) to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (DOE/EIS-0236-S4) to assess the environmental impacts of continued transformation of the nuclear weapons complex. In addition to this announcement, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). The Final SWEIS does not include a proposed modern pit facility at LANL; thus, the potential doses associated with this facility are no longer included in the cumulative impacts section in Chapter 5. In January 2008, NNSA issued the Draft *Complex Transformation SPEIS* (73 FR 2023); it includes alternatives in which LANL would be the site of a new consolidated plutonium center or a new consolidated nuclear production complex. The impacts from the Draft *Complex Transformation SPEIS* are included in Cumulative Impacts section of the Final SWEIS.

Commentor No. 308: Mauna W. Richardson

From: Mauna Richardson [mailto:mauna@newmexico.com]  
 Sent: Wednesday, September 20, 2006 1:29 PM  
 To: LANL\_SWEIS  
 Subject: increase of plutonium

Sirs:

Who is the enemy? Your neighbors? Why risk the health of our children by increasing the levels of plutonium? I am not a scientist, but I know that many people are being made ill by the levels of pollutants that we have to live with now. It does not make sense to increase any pollutants until we know how to cleanse the environment with what is present now.

For the sake of your neighbors, the environment, and yes, the generations to follow: Do NOT Increase the plutonium levels.

Sincerely,

Mauna W. Richardson  
 P O Box 667  
 La Madera, NM 87539

308-1

308-1

NNSA notes the commentor's opposition to increasing the levels of plutonium present at LANL. Chapter 5 of the SWEIS addresses the environmental impacts of LANL operations including impacts on air and water quality. As reported in the *2005 Annual Site Environmental Surveillance Report* (LANL 2006g), LANL operations are in compliance with the air and water regulations for protection of public health and the environment, and, based on the SWEIS analyses, would continue to be in compliance under all proposed alternatives including the Expanded Operations Alternative. As discussed in Chapter 2, Section 2.2.6, of the SWEIS there are areas of known or suspected contamination due to historical site operations at LANL. In 2005, the State of New Mexico, NNSA and the University of California, as the LANL management and operating contractor, entered into a Consent Order that is currently being implemented to address the investigation and remediation of legacy environmental contamination at LANL.

Commentor No. 309: Bob Kinsey

From: ROBERT KINSEY [mailto:kinsey\_65@msn.com]  
Sent: Wednesday, September 20, 2006 1:27 PM  
To: LANL\_SWEIS  
Subject: Comments for the record

Having had lived south and down wind of Rocky Flats for thirty- odd years, it is clear to me the DOE and all US Nuclear lab/production entities are incapable of handling nuclear materials in a way safe for the environment and human health. The addition of secrecy to the operation permits both carelessness and a demonic spirit that comes from inordinate power.

Specifically, I understand that the SWEIS approval will quadruple plutonium pit production, double the generation of radioactive bomb-making wastes, and more than double storage capacity of weapons-grade "special nuclear materials, primarily plutonium", to 7.3 tons. No one really knows what to do with the mega tons of plutonium and uranium waste we currently have. Nor do they know how to secure the collections of it around the world from people who are tempted to use it to level the power-playing field in terms of either dominance or resistance to dominance. Plutonium waste from production has shown up in depleted uranium ordinance that is fired on US battlefields. The US environment is already awash in bomb-grade plutonium pits that are not degrading and do not need replacement if ever they needed built in the first place. Our "national defense" budget is so out of control that DOE managers will find arguments that in order to save money we cannot afford manage the waste safely. Already cleanup levels are compromised in the interests of "fiscal restraint" and areas are declared "wildlife" preserves that have high level waste slightly below very erode-able surfaces. I am told traces of Plutonium escaped in the forest fires around Los Alamos and have appeared in the Rio Grande. So Right! We need to approve more of this folly. I don't think so!!!

Bob Kinsey  
XXX-XXX-XXXX  
www.thecoloradocoalition.org  
kinsey\_65@msn.com

"all human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood and sisterhood" Art. 1, Universal Declaration of Human Rights

309-1

309-1 NNSA notes the commentor's concern with regard to safe handling of nuclear materials. Chapter 4, Section 4.6, of the SWEIS presents detailed data on public and worker health related to cancer incidence rates, radiation dose, occupational injuries and illnesses, and LANL emergency management and response. In addition, the final LANL Public Health Assessment, issued on August 31, 2006 by the U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry, shows that, "...there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "...overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006). For more information related to this comment, refer to Section 2.6, Offsite Contamination, of this CRD.

309-2

309-2 NNSA notes the commentor's statements. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information about stockpile stewardship. Chapter 4 of the SWEIS, and annual environmental surveillance reports for LANL ([www.lanl.gov/environment/all/esr.shtml](http://www.lanl.gov/environment/all/esr.shtml)) provide information on the presence of contaminants in the environment around LANL.



Commentor No. 310: Penelope McMullen, SL,  
New Mexico Justice and Peace Coordinator, Loretto Community

From: Penny McMullen [mailto:pmsl@cnspl.com]  
Sent: Wednesday, September 20, 2006 1:08 PM  
To: LANL\_SWEIS  
Subject: draft SWEIS

Ms. Elizabeth Withers, EIS Document Manager, U.S. DOE/NNSA Los Alamos Site Office  
528 35th Street  
Los Alamos, New Mexico, 87544-2201.

Sept. 19, 2006

Dear Ms. Elizabeth Withers:

On behalf of the Loretto Community, I respectfully submit the following comments on the draft Site-Wide Environmental Impact Statement (dSWEIS) for Continued Operation of the Los Alamos National Laboratory (LANL).

The Loretto Community of nearly 600 members strongly opposes both the Expanded Operations Alternative and the misleading "No Action Alternative."

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The Vatican's statement to the United Nations delivered by Archbishop Renato Martino in 1997 declared that "Nuclear weapons are incompatible with the peace we seek for the 21st century.... They cannot be justified and deserve condemnation." In 1979 the Loretto Community committed to working for nuclear disarmament "as an urgent moral imperative" because of the harm nuclear production causes to workers and environment, even if never used.

Therefore, we especially oppose the proposal to produce up to 80 plutonium pits per year, quadrupling the current number allowed. The Department of Energy claims that new pits are necessary to replace aging pits. However, studies show that the pits improve with age and last for many decades, so the proposed increased production is unnecessary and a waste of taxpayer funds.

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The United States, along with 187 other nations, ratified the Non-Proliferation Treaty (NPT) in 1970, committing us to work toward total elimination of our nuclear arsenals. The dSWEIS "Preferred Alternative" of expanded operations violates that treaty obligation.

Increasing our own production of plutonium pits when it is unnecessary leads many Americans as well as governments around the world to conclude that the United States is really gearing up to produce more nuclear weapons in violation of the NPT. Continuing our nuclear production also encourages other nations to develop and

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NNSA notes the commentor's opposition to the SWEIS alternatives, especially the increased production of plutonium pits proposed in the Expanded Operations Alternative. NNSA has reviewed the pit lifetime studies and concluded that degradation of plutonium in the majority of nuclear weapons would not affect warhead reliability for a minimum of 85 years. The analysis in the LANL SWEIS, however, is still valid and provides a bounding scenario in which up to 80 pits per year could be produced. This potential production rate provides NNSA with flexibility in meeting its stockpile stewardship mission while accounting for changing geopolitical conditions. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

310-2

Operations at LANL that support NNSA's mission to ensure a safe and reliable nuclear stockpile do not violate the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation further reduces its overall stockpile size. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

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continue their own nuclear programs, thus promoting proliferation. The majority of citizens both in the U.S. and around the world support nuclear disarmament. Instead of adding to nuclear proliferation, we could lead the world in eliminating these weapons of mass destruction.

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In the draft SWEIS, DOE analyzes the cumulative impacts of the Expanded Operation Alternative, including as a potential future consequence the construction of a Modern Pit Facility (MPF) that would be capable of producing 450 pits per year at LANL. This is contrary to the will of the American people and Congress. Congress denied funding for a MPF after many citizens opposed that plan during the 2003 hearings.

**310-3**

Nuclear weapons have not been able to stop terrorism. Instead, they make our nuclear sites more susceptible to terrorism. Rather than making us safer, we are less safe because of them.

**310-4**

Nuclear weapons make us less safe in other ways, also. Every step of production, from mining to transportation, testing, producing and storing waste, causes harm to the workers and environment. Even if the weapons are never used, we are harming and sometimes killing ourselves in the name of defense!

**310-5**

LANL is located in a semi-desert region, yet the proposed expanded activities will increase water usage by LANL and the County of Los Alamos above the amount allotted to it from the regional aquifer. Also, DOE did not use the most current water quality standards when assessing impacts in this draft SWEIS. Residents of Los Alamos County obtain 100% of their drinking water from the regional aquifer below LANL, and contaminants have been found in the regional aquifer, including fast-moving perchlorate, a chlorine-based chemical that interferes with thyroid function. LANL discharges approximately 163 million gallons per year of industrial and sanitary effluent into the canyon systems which flow into the Rio Grande, from which several communities hope to divert water for drinking, including Santa Fe and Albuquerque. DOE is not monitoring 1,405 sites that have the potential to release contaminants into surface water from storms and snow melt.

**310-6**

Facilities that began operations prior to December 31, 1988, have been granted "grandfather" status allowing them to emit toxic air pollutants although newer facilities cannot -- LANL has many of these grandfathered facilities. DOE recommends increasing activities at the Los Alamos Neutron Science Center, which has the highest amount of radionuclide air emissions, with a long history of technical problems resulting in increased emissions. The citizens of northern New Mexico do not want any more radioactive emissions released into the air that we breathe or spread onto our organic gardens.

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**310-3** In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (DOE/EIS-0236-S4) to assess the environmental impacts of the continued transformation of the nuclear weapons complex (71 FR 61731). In addition to this announcement, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). Therefore, the Final LANL SWEIS does not include analysis of a modern pit facility. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, and Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

**310-4** NNSA notes the commentor's opinion regarding the environmental impacts associated with nuclear weapons even if they are never used. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information related to this comment.

**310-5** LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling of 542 million gallons (2,050 million liters) per year. Refer to Section 2.8, Water Use, of this CRD for more information on LANL's water use, available water rights, and water supply planning.

**310-6** The water quality standards in Chapter 4, Tables 4–7 and 4–9, were updated to reflect standards recently issued by the New Mexico Water Quality Control Commission. The new standards have not yet been approved by the EPA; however, they are used in the LANL 2005 Environmental Surveillance Report (LANL 2006g) and this SWEIS to evaluate water quality data. As Table 4–7 demonstrates, LANL surface water data was compared to a variety of legally applicable standards to identify contaminants and data trends that could indicate a need for corrective actions.

As described in Chapter 4, Section 4.3.2, past waste disposal practices at LANL have contaminated the shallow groundwater that, in turn, has the potential to contaminate portions of the regional aquifer under the Pajarito

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The Defense Nuclear Facilities Safety Board (DNFSB) has often reported that some LANL operations are chronically unsafe, and that many safety issues at LANL remain unresolved. LANL is not in compliance with DOE and DNSFB safety regulations and recommendations, and some LANL facilities are up to six years behind on preparing and submitting their safety documentation to DOE. Such lack of compliance poses an unacceptable risk to workers, the public and the environment. The dSWEIS should resolve all the safety issues raised by the DNSFB.

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LANL lies on three major fault lines. A 2006 seismic hazard study is due to be released this year and it was premature for DOE to issue the draft SWEIS without this information. Geological studies show that the most recent seismic incident occurred 2,000 years ago and there is a pattern of seismic activity every 2,000 years, suggesting that one is due at any time. The draft SWEIS has not incorporated this data into their hazard analysis. The dSWEIS should have waited to incorporate that report.

310-9

Increased plutonium pit production would nearly double the waste produced, yet cleanup plans in the dSWEIS are inadequate. LANL can't keep up with its current waste -- approximately 40,000 drums have been sitting above-ground in fabric tents for years awaiting shipment to the only existing depository for such waste, the Waste Isolation Pilot Plant (WIPP).

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DOE should make permanent disposal of existing waste a priority, rather than continue to generate more. If DOE were to implement the expansion plans plus needed cleanup of the major waste sites at LANL, they would generate so much radioactive waste that there would not be enough space both at LANL and at WIPP for the disposal of all this waste -- what do they plan to do with all this extra waste?

The "cap and cover" option is not acceptable for unlined waste dumps because contaminants can and have leaked to the aquifer. LANL documents conclude that cleaning up to residential or unrestricted use standards would be "prohibitively expensive." Long-term protection of future generations should be the measure for cleanup, not financial considerations. The funds for LANL's expansion should be diverted for comprehensive cleanup, and no more waste should be generated until all existing waste is safely disposed.

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In addition, the comment period for the dSWEIS has not been adequate. The comment period should have not started until all of the documents (about 700!) referenced in the dSWEIS have been made fully available for interested citizens to review. Expecting people to travel to reading rooms to study hundreds of documents is unreasonable and unjust.

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Plateau. Waste disposal in the past was conducted in a manner consistent with standards at that time. As standards have evolved, waste disposal practices have evolved with them. Future disposal of waste would be performed in compliance with currently applicable regulations.

As described in Appendix F, according to the statistical analysis performed for the SWEIS, perchlorate levels at most LANL locations are below EPA's No Observed Effect Level and the New Mexico screening level. Only Mortandad and Pueblo Canyons exceed the New Mexico limit, and only Mortandad Canyon exceeds EPA's No Observed Effect Level. The LANL annual environmental surveillance reports (available at [www.lanl.gov/environment/all/esr.shtml](http://www.lanl.gov/environment/all/esr.shtml)) should be consulted to obtain data about actual detection of contaminants in environmental media around LANL.

Effluents from LANL facilities are discharged in accordance with an NPDES permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, of the SWEIS, over the past 6 years, LANL has had a very good record of complying with permit conditions, which are set to protect health and safety. Under all alternatives, NNSA would continue to meet permit conditions designed to protect water resources at LANL.

NNSA does not agree with the commentor's statement that there are over 1,400 unmonitored discharge sites. As described in Chapter 4, Section 4.3.1.3, NNSA managed stormwater runoff from its solid waste management units under a Multisector General Permit Program, and then transitioned toward management under an individual NPDES industrial activity permit. Refer to the SWEIS for more detail.

In addition, NNSA operates a monitoring program (described in Chapter 4, Section 4.3.1.5) to detect contamination resulting from past and current practices. LANL staff evaluates and takes corrective action to mitigate such contamination in groundwater and surface waters in accordance with applicable regulations and agreements.

NNSA intends to continue safely managing waste and conducting environmental restoration activities at LANL as it carries out its missions. Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding groundwater and surface water contamination and groundwater monitoring.

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New Mexico Justice and Peace Coordinator, Loretto Community**

Finally, LANL's mission needs change to focus on research and development of real global human needs such as renewable energy, reversing global warming, and creating technologies that minimize impacts to the air, soil, water, and public and environmental health.

The SWEIS should consider the other alternatives suggested by citizens during the scoping process, in particular (1) the development of national clean energy independence and (2) the option of ceasing nuclear weapons work. The dSWEIS states that ceasing nuclear weapons work "is not a reasonable alternative" but we are convinced that it is the only reasonable alternative, and can be combined with the green alternative. Contrary to statements in the dSWEIS, ceasing nuclear weapons work would support nonproliferation efforts. As stated above, nuclear weapons do not stop terrorism and we would be more secure without them. DOE and LANL spokespersons frequently declare that they are only following the dictates of Congress, but the reality is that DOE and LANL first make the request to Congress before Congress "mandates."

It is time for the United States to utilize the great minds at LANL to develop avenues for seeking peace that do not use weapons of mass destruction. We could instead lead the world in cooperative efforts to ensure that everyone has sufficient food, housing, medical care, meaningful employment and renewable energy sources.

Thank you for your attention to these comments.

Sincerely,

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**310-7** All LANL operations, regardless of when they began, comply with applicable state (New Mexico Air Quality Control Act) and Federal (Clean Air Act, Toxic Substances Control Act) laws and regulations and have valid permits, as described in Chapter 6 of the SWEIS. The LANL contractor complies with its Clean Air Act, Title V, operating permit, including requirements for monitoring air pollutant emissions from sources at LANL and associated recordkeeping. Current air sampling programs at LANL include ambient nonradiological air monitoring, an ambient radiological air sampling network called AIRNET, and stack sampling for radionuclides, as described in Chapter 4, Sections 4.4.2.3 and 4.4.3.1. The LANL contractor evaluates the results from these programs and changes the sampling locations and constituents as appropriate. LANSCE operations historically have accounted for the majority of radionuclide air emissions at LANL. As discussed in Chapter 5, Section 5.6.1.1, if necessary, administrative controls have been established at LANSCE that regulate beam operations as emissions levels increase. These controls require operational changes to prevent the generation of excessive radioactive air emissions, so that the maximum dose to the maximally exposed offsite individual from air emissions would be 7.5 millirem or less per year to ensure compliance with the 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants) limit of 10 millirem per year.

**310-8** The Defense Nuclear Facilities Safety Board does not regulate or authorize operation of facilities at LANL. Its function, as mandated by the Congress, is to provide independent safety oversight of the NNSA nuclear weapons complex. The Defense Nuclear Facilities Safety Board reviews safety issues at NNSA nuclear weapons complex facilities, prepares reports detailing the conclusions of the reviews and submits the reports to NNSA. NNSA and LANL regularly review the Defense Nuclear Facilities Safety Board reports and respond with commitments to update and improve the safety basis documentation. The Los Alamos Site Office Safety Authorization Basis Team is responsible for developing and approving adequate controls to support safe operations at LANL. NNSA authorizes all LANL facility operations based on the acceptability of existing relevant safety documentation. Resolution of safety issues raised by the Defense Nuclear Facilities Safety Board is not within the scope of the SWEIS. For more information related to this comment, refer to Section 2.13, Recommendations of the Defense Nuclear Facilities Safety Board, of this CRD.

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New Mexico Justice and Peace Coordinator, Loretto Community*

**310-9** To the extent possible, the most recent technical documents were considered in the Final SWEIS analyses. Information currently under development, and thus, unavailable for use in the Final SWEIS, will be considered as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. An update to the seismic hazard analysis was completed in June 2007. Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

The new geological information in the 2007 seismic hazard analysis report has been interpreted as indicating that the seismic hazard at LANL is greater than previously understood. The relevance of the seismic hazard to facility accidents will undergo a rigorous and thoughtful evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

Following the NEPA process but prior to the design and operation of specific facilities, safety studies in the form of Hazard Assessment Documents and Safety Analysis Reports that include seismic concerns and take into account the most current seismic information would be prepared to address a comprehensive set of accident risks. The results of these safety studies would be incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

**310-10** Although a pollution prevention and waste minimization program has been instituted at LANL (see Chapter 4, Section 4.9, of the SWEIS), operation of LANL in support of NNSA's core missions will generate waste that NNSA intends to manage safely as it continues to address existing stored waste. Nearly all of the stored waste at LANL consists

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of legacy transuranic waste that is stored within aboveground domes in TA-54. Most of this waste was originally stored below grade, but was retrieved and placed in an aboveground, inspectable configuration as required by the New Mexico Environment Department. NNSA is working to prepare all stored and newly generated transuranic waste for shipment to WIPP. Shipments to WIPP have increased significantly over the past several years. Refer to Section 2.7, Waste Management, of this CRD for more information.

- 310-11** Determining funding priorities is not within the scope of the SWEIS, which evaluates the environmental impacts of the Proposed Action and alternatives. NNSA intends to conduct activities at LANL consistent with its national security mission while continuing safe management of the waste it generates along with environmental restoration activities. NNSA expects that solid wastes, hazardous wastes, and mixed low-level radioactive wastes would be disposed of in offsite disposal facilities, and that legacy and newly generated transuranic wastes would be disposed of at WIPP or its replacement facility. Disposal of low-level radioactive wastes may occur in onsite and offsite disposal facilities.

Appendix I of the SWEIS presents environmental analyses and options for conducting remediation activities at LANL that are primarily related to the Consent Order entered into in March 2005. Decisions about cleanup of contaminated sites that are subject to the Consent Order requirements will be made by the New Mexico Environment Department. To arrive at a remediation decision, several alternative remedies are considered, such as containment in place, treatment, or removal. Any selected remedy must protect human health and the environment and must attain specified cleanup standards, including those for groundwater and surface waters. If the site is to remain under DOE ownership, then cleanup standards commensurate with restricted type of land use may be used as long as offsite areas are protected. If the site is to be released for unrestricted public access, then it would need to meet appropriate cleanup standards. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

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New Mexico Justice and Peace Coordinator, Loretto Community*

- 310-12** NNSA originally established a 60-day comment period. In response to requests for additional time, the comment period was extended to 75 days. NNSA recognizes that, in light of the electronic capabilities now available, commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms located in Los Alamos, Santa Fe, and Albuquerque, New Mexico. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more discussion.
- 310-13** Chapter 3, Section 3.5, of the SWEIS discusses NNSA's decision not to analyze a "Greener Alternative" in the SWEIS. A "Greener Alternative" was analyzed in the 1999 SWEIS, but was not selected for implementation. NNSA does not believe, 7 years later, that a "Greener Alternative" is reasonable for future operation of LANL to meet its mission as directed by the Congress and the President, and has identified the Expanded Operations Alternative as its Preferred Alternative. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, however, research is conducted in areas promoted by the commentor. These research areas are part of current operations; as such, they are included in the SWEIS under the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Commentor No. 311: Perry Jasper

From: Perry Jasper [mailto:fotoman@copper.net]  
Sent: Wednesday, September 20, 2006 10:07 AM  
To: LANL\_SWEIS

Subject: Expanded Operations Alternative

Ms. Elizabeth Withers, EIS Document Manager Los Alamos Site Office National Nuclear Security Administration U.S. Department of Energy  
538 35th Street  
Los Alamos, New Mexico, 87544-2201

Dear Ms. Withers,

I oppose the preferred Expanded Operations Alternative suggested for future operations at Los Alamos National Laboratory (LANL) as proposed in the draft 2006 Site-Wide Environmental Impact Statement (SWEIS).

The proposed Expanded Operations will increase nuclear weapons design and research and therefore generate more waste and increase air emissions and discharges to surface and ground waters that flow to the Rio Grande.

I object to the fact that increased cleanup was only included in the Expanded Operations and not part of the No Action and Reduced Operations Alternatives. Compliance with the New Mexico Environment Department (NMED)/LANL Consent Order for cleanup at LANL by 2015 should not be made optional nor be tied the expansion of activities which threaten public health and the environment. Increased Consent Order cleanup should be included in all three alternatives.

When implementing cleanup, LANL must be required to do so to the fullest extent possible. One of the proposed cleanup plans consists of simply covering contaminated sites in such a way that it would be within health standards for people to work 40 hours a week in an industrial job on the site. This level of cleanup is not adequate for children at a day care facility on the formerly contaminated site, let alone a change in land use. In order to protect future drinking water supplies, all waste must be removed from the major material disposal areas (dumps), canyon cleanups and other NMED/LANL Consent Order actions as well as LANL's voluntary cleanup activities.

The Department of Energy (DOE) recommends that plutonium pit production increase from 20 to 80 pits per year. The draft SWEIS references a modern pit facility (MPF) 60 times. This facility would be capable of producing 450 plutonium pits per year, despite widespread opposition to the MPF by New Mexicans in 2004. This has dire local, national and international implications. The draft SWEIS

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**311-1** NNSA notes the commentor's opposition to the Expanded Operations Alternative and concerns about proliferation of nuclear weapons. The potential environmental, health, and safety impacts of the continued operation of LANL under the three proposed alternatives are analyzed in Chapter 5 of the SWEIS, including management of radioactive and chemical wastes, monitoring of air emissions, and treatment or monitoring of wastewater discharged through NPDES-permitted outfalls. The commentor is correct that the Expanded Operations Alternative would result in larger amounts of radioactive and chemical waste as well as increased air emissions and wastewater discharges but as demonstrated in the SWEIS, these increases can be safely managed. It should be noted that treated effluents do not normally flow directly into the Rio Grande, although surface waters may reach the river a few times a year during large precipitation events. Refer to Section 2.6, Offsite Contamination, of this CRD for more information.

**311-2** NNSA does not consider compliance with the Consent Order to be optional, and is not linking Consent Order compliance with decisions about pit production, proposed new projects or activities, increased operational levels, or waste generated from other LANL activities. Chapter 1, Section 1.3, of the SWEIS, defines the three alternatives and explains why activities to comply with the Consent Order are included only in the Expanded Operations Alternative. Chapter 1, Section 1.4, states that NNSA could choose to implement the alternatives either in whole or in part, and that NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**311-3** Although Appendix I of the SWEIS evaluates the environmental impacts associated with potential remedial action alternatives, decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order, and of DOE. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered such as containment in place, treatment, or removal. Any remedy selected for a site requiring environmental restoration must be protective of human health and the environment, and



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lacks an adequate discussion of how a MPF or increase pit production would not violate Article VI of the Nuclear Nonproliferation Treaty, which calls for complete disarmament of nuclear weapons. We are concerned that DOE is attempting to slip in a MPF at LANL without adequate analysis.

Therefore, the final SWEIS should be void of all references to a MPF at LANL.

LANL is not in compliance with DOE and Defense Nuclear Facilities Safety Board (DNFSB) safety regulations and recommendations. Some LANL facilities are up to six years behind on preparing and submitting their safety documentation to DOE. Such lack of compliance poses an unacceptable risk to workers, the public and the environment. LANL needs to be up-to-date and in full compliance with all DOE and DNFSB safety regulations and recommendations. Furthermore, many of the buildings at LANL are not in compliance with existing earthquake building codes, despite the fact that LANL is built upon at least three major fault lines. Existing facilities and new construction must be up to code before any operations are done in them.

Many of the documents referred to in the draft SWEIS are based on studies that have not been finalized. For instance, the draft SWEIS was released before either the risk assessment for LANL's low-level waste dump at Area G or the latest seismic hazard study were completed, both of which are due to be released in 2006. Further, the draft SWEIS relies on an incomplete and inaccurate draft Agency for Toxic Substances and Disease Registry report for health impacts analysis. It is impossible to accurately determine the environmental and health impacts for future operations at LANL based on incomplete data. It was premature for DOE to release the draft SWEIS without these essential reports being part of the analysis. The SWEIS must include a reanalysis based on the findings in the 2006 Area G risk assessment and seismic hazard study. The ATSDR report should not be used in any analysis regarding LANL activities.

LANL activities jeopardize both water quality and quantity for surface and ground water. New Mexicans rely on surface and groundwater for drinking and farming. LANL discharges approximately 163,000,000 gallons per year of industrial and sanitary effluent into the canyon systems. DOE did not use the most current water quality standards when assessing impacts in this draft SWEIS, nor did DOE use the most current data about the number of streams that are impaired on the Pajarito Plateau from LANL activities. Contaminants, such as perchlorate, hexavalent chromium and 1, 4-dioxane have already been found in the regional aquifer and test wells and yet DOE is not monitoring 1,405 sites that have the potential to release contaminants during storms and when the snow melts. The Expanded Operations will increase water usage by LANL above the amount allotted to it from the regional aquifer. DOE must analyze LANL's impacts against the latest water

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attain applicable cleanup standards including those for ground and surface waters and soil. If the site is to remain under DOE ownership, then cleanup standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted access by the public, then the site would need to meet cleanup standards for unrestricted release. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the New Mexico Environment Department in accordance with the cleanup and screening levels documented in Section VIII of the Consent Order. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**311-4** Reference to a modern pit facility in the Draft SWEIS was in the context of ensuring that reasonably foreseeable future actions were addressed in accordance with the Council on Environmental Quality NEPA regulations regarding cumulative impacts. The SWEIS alternatives addressing operational levels for the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative). In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (71 FR 61731). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). Therefore the Final SWEIS does not include a reference to a modern pit facility. In discharging its Stockpile Stewardship responsibilities, NNSA is not violating the Nuclear Nonproliferation Treaty. Refer to Sections 2.1, Opposition to Nuclear Weapons and Pit Production, 2.2, National Environmental Policy Act (NEPA) Process, and 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

**311-5** The Defense Nuclear Facilities Safety Board neither regulates nor authorizes operation of facilities at LANL. Its function, as mandated by the Congress, is to provide independent safety oversight of the NNSA

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quality standards and the current impaired stream information in the SWEIS. In order to ensure that water quality is protected now and in the future, DOE must adopt the Removal Option for all clean up activities.

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LANL would process 87,000 pounds of high explosives and up to 6,900 pounds of depleted uranium (DU) will be blown up in dynamic experiments annually. The 1979 LANL Final Environmental Impact Statement estimates that 220,000 pounds of depleted uranium were used in dynamic experiments during the history of LANL. From 1979 to present we do not know how much DU has been used in experiments and remains in the environment. DOE must monitor and implement comprehensive sampling programs at all open burning and open detonation sites and for all activities using high explosives and depleted uranium.

311-9

LANL must be required to reevaluate and broaden their air sampling programs. DOE should no longer hide under the grandfather clause, which allows for facilities existing before December 31, 1988 to emit toxic air pollutants without regulation. DOE recommends increasing activities at the Los Alamos Neutron Science Center, which has the highest amount of radionuclide air emissions and a long history of technical problems resulting in increased air emissions. DOE must institute a program to stop all toxic air pollutant emissions from LANL facilities and activities.

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In conclusion, the Expanded Operations Alternative will result in higher demands for electricity, water and natural gas, which will impact the environment. These impacts must be considered in the cumulative impacts of the Expanded Operations Alternative.

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In addition, Congress must change the mission of LANL to focus on research and development into renewable energy, such as solar, wind and biomass, and clean up technologies that support the environmental and public health. The SWEIS must include a fourth alternative that focuses on these activities.

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Sincerely,

Print Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

nuclear weapons complex. As in the case of all NNSA nuclear weapons complex sites, the Defense Nuclear Facilities Safety Board reviews safety issues and submits reports to DOE regarding the safety of nuclear weapons complex facilities. NNSA and the LANL contractor have reviewed Defense Nuclear Facilities Safety Board reports and responded with commitments to update and improve safety basis documentation. The Los Alamos Site Office Safety Authorization Basis Team assures the development and approval of adequate controls in support of safe operations at LANL. All LANL facility operations are based on authorization and approval by NNSA following NNSA's evaluation of the acceptability of existing relevant safety documentation. Reports and recommendations made by the Defense Nuclear Facilities Safety Board that are relevant to NEPA are taken into account in analyses in the SWEIS. Refer to Section 2.13, Recommendations of the Defense Nuclear Facilities Safety Board, of this CRD for more information.

Seismic characteristics of the LANL environment are described in Chapter 4, Section 4.2.2.3, of the SWEIS. Chapter 5, Section 5.12, presents the estimated human health impacts from postulated facility accidents, including earthquakes. Over the years, based on new seismic information or changed requirements, NNSA has evaluated the survivability of LANL buildings and structures and implemented mitigation measures in terms of structural upgrades, reduction of hazardous materials inventories, or replacement of the structures to reduce the potential for harm to the workforce and the public. Construction requirements are imposed for new structures in accordance with the site locations relative to known fault lines, and in accordance with the planned future use of the structure. For proposed new buildings, safety studies in the form of hazards assessment documents that take into account the most current seismic information are prepared to fully address a comprehensive set of accident risks. The results of these safety studies are incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

311-6 To the extent possible, the most recent technical documents, including an update to the seismic hazard analysis, completed in June 2007 (LANL 2007a), are considered in the Final SWEIS analyses. Information under development that is not available for use in the Final SWEIS, such as the updated Area G performance assessment, will be considered

Commentor No. 311 (cont'd): Perry Jasper

as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

- 311-7** The SWEIS makes use of current, accepted, and well-documented scientific models and data that have been, and continue to be widely used to analyze environmental impacts for the purpose of compliance with NEPA. The analysis methods used are essentially the same as those used in preparation of several DOE Environmental Impact Statements that have recently been published in final form or have been reviewed, in draft, by the public. In general, the data, models, assumptions, and other information used in the SWEIS are drawn from published sources and have been subjected to scientific peer review. Chapter 7 of the SWEIS and each of its appendices lists the documented sources of information and models used in the analyses. The SWEIS presents an independent assessment of public health impacts from contaminants in the LANL environment. The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry Public Health Assessment in any specific way for its conclusions. The Agency for Toxic Substances and Disease Registry is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting public health assessments at each site on the EPA National Priorities List. It is thus appropriate for the SWEIS to acknowledge the conclusions of the LANL Public Health Assessment because it is a relevant Federal agency study. The Agency for Toxic Substances and Disease Registry Public Health Assessment for LANL was prepared with public oversight and review. The Public Health Assessment was finalized and published on August 31, 2006 (ATSDR 2006). The EPA provided comments on the draft Public Health Assessment that were addressed by the Agency for Toxic Substances and Disease Registry in the

Commentor No. 311 (cont'd): Perry Jasper

final document. Appendix I to the final LANL Public Health Assessment lists the comments on the draft that were received from members of the public and other Federal agencies and describes how those comments were addressed in the final document.

- 311-8** Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, of the SWEIS, over the past 6 years, LANL has a very good record of complying with permit conditions, which are set to protect health and safety. Under all alternatives, LANL operations would continue to meet permit conditions designed to protect water resources at LANL. In addition, LANL staff conducts a monitoring program (described in Chapter 4, Section 4.3.1.5) to detect contamination that has resulted from past and current practices. In accordance with applicable regulations and agreements, LANL staff evaluate and take corrective action for occurrences of contamination in groundwater and surface waters at LANL.

The water quality standards in Chapter 4, Tables 4-7 and 4-9, have been updated to reflect standards recently issued by the New Mexico Water Quality Control Commission. The new standards have not yet been approved by the U.S. Environmental Protection Agency; nevertheless, they are used in the 2005 Environmental Surveillance Report and the SWEIS in evaluating water quality data. As Table 4-7 demonstrates, LANL surface water data are compared to a variety of standards that legally apply, in order to identify contaminants and data trends that could indicate the need for corrective actions.

In Section 4.3.2, it is stated that chromium concentrations between 375 and 404 parts per billion were detected in two wells in Mortandad Canyon. LANL staff will be conducting further drilling and sampling activities to characterize contamination at LANL as stated in the Interim Measures Work Plan for Chromium Contamination in Groundwater. Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding chromium contamination in the groundwater. NNSA acknowledges that detection of dioxane was reported to the New Mexico Environment Department in July 2006, 1 year after the sample was collected from a well in Mortandad Canyon. The dioxane contamination

Commentor No. 311 (cont'd): Perry Jasper

level is between 20 parts per billion and 56 parts per billion, which is below the 61 parts per billion EPA risk-based cleanup level established through the Consent Order. As described in Appendix F, statistical analysis shows that perchlorate concentrations at most LANL locations are below the EPA No Observed Effect Level (NOEL) and New Mexico's screening level. Only Mortandad and Pueblo Canyons exceed the New Mexico limit and only Mortandad Canyon exceeds EPA's NOEL.

NNSA does not agree with the commentor's statement that there are over 1,400 unmonitored discharge sites. As described in Chapter 4, Section 4.3.1.3, of the SWEIS, NNSA had managed stormwater runoff from its solid waste management units under a Multisector General Permit Program, and then transitioned towards management under an individual NPDES industrial activity permit.

DOE and Los Alamos County have combined water rights of 1,806 million gallons (6,836 million liters) per year, of which 542 million gallons (2,050 million liters) per year are allotted to DOE. In recent years, the largest amount of water used by DOE and the County was 1,515 million gallons (5,735 million liters) in 2000, when the Cerro Grande Fire occurred. As shown in Chapter 5, Table 5-36, and discussed in Section 5.8.2.3, LANL water usage has been and is expected to remain below its 542 million gallons (2,050 million liters) per year allotment.

Decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order, and of DOE. The intent of the SWEIS is not to prejudice these decisions but to provide environmental impact information to be used for the decision-making process, and for the benefit of the reader regarding potential remediation action options. Several alternative remedies may be considered for a contaminated site, including containment in place, treatment, removal, or other remedies. Any remedy selected for a site requiring environmental restoration must be protective of human health and the environment, and attain applicable cleanup standards considering the designated future use of the site. Decisions about cleanup of sites subject to the Consent Order will be made by the New Mexico Environment Department considering applicable groundwater and surface water quality standards. As indicated in Chapter 1, Section 1.4, of the

Commentor No. 311 (cont'd): Perry Jasper

SWEIS, NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**311-9** Environmental remediation of sites used for dynamic experiments at LANL (firing sites) is being addressed, primarily in accordance with DOE's authority under the Atomic Energy Act, and with the requirements of the March 2005 Consent Order. Since 1989, when over 2,100 potential release sites, including firing sites, were identified at LANL, because of progress in remediation and consolidation of sites, only 829 potential release sites remained at the end of 2005. Therefore, the levels of depleted uranium and high explosives that may remain in the vicinity of the firing sites is being reduced. Additional information is in Section 2.2.6 and Appendix I of the SWEIS, and in Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD.

Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information on how LANL staff ensures the safety of high explosives testing and the use of depleted uranium as well as LANL's monitoring program.

**311-10** All LANL operations, regardless of when they began, comply with the applicable state (New Mexico Air Quality Control Act) and Federal (Clean Air Act, Toxic Substances Control Act) laws and regulations and have valid permits as described in Chapter 6 of the SWEIS. The LANL contractor complies with its Clean Air Act, Title V operating permit which includes requirements for monitoring air pollutant emissions from sources at LANL and recordkeeping for these sources. Current air sampling programs at LANL include ambient non-radiological air monitoring, an ambient radiological air sampling network called AIRNET, and stack sampling for radionuclides, as described in Chapter 4, Sections 4.4.2.3 and 4.4.3.1, of the SWEIS. The LANL contractor evaluates the results from these programs and makes changes in the sampling locations and constituents as appropriate. LANSCE does have the highest amount of radionuclide air emissions at the site. As discussed in Chapter 5, Section 5.6.1.1, operational controls at LANSCE would be imposed

Commentor No. 311 (cont'd): Perry Jasper

to limit the dose to the maximally exposed offsite individual from air emissions to 7.5 millirem per year thus ensuring compliance with the 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants) limit of 10 millirem per year.

- 311-11** The cumulative impacts of the Expanded Operations Alternative for electricity, water, and natural gas demands were evaluated and are discussed in Chapter 5, Section 5.13. Although not anticipated, future expansion of the LANL infrastructure to supply additional electricity, water, or natural gas, would be preceded by appropriate environmental documentation. Changes made to the offsite infrastructure to meet LANL demands would be required to meet applicable state and federal environmental regulations.
- 311-12** NNSA notes the commentor's statement that the Congress must change LANL's mission. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

**Commentor No. 312: Sheri Kotowski**

Sheri Kotowski  
PO Box 291  
Dixon, NM 87527

September 17, 2006

Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office  
National Nuclear Security Administration  
U.S. Department of Energy  
538 35<sup>th</sup> Street  
Los Alamos, NM 87544-2201

RE: Comments on the Draft Site Wide Environmental Impact Statement for Los Alamos National Laboratory.

Dear Ms Withers,

This package contains my comment on the Draft Site Wide Environmental Impact Statement for Los Alamos National Laboratory (draft SWEIS, LANL), June 2006. I have reduced the draft SWEIS to ashes, just as the United States Government reduced the City of Nagasaki, Japan to ashes on August 9, 1945 with a single plutonium pit. 75,000 humans were vaporized in an instant and the City consumed by a radioactive fireball. The poison of man-made radiation devastated countless lives in many forms, throughout generations.

The draft SWEIS does not contain the Environmental Impact of detonating a single plutonium pit at Los Alamos National Laboratory (LANL). This impact must be included in the final document. I live 32 miles downwind from Los Alamos National Laboratory and in burning this document I am demonstrating the impacts of a plutonium pit detonation at LANL. Given the amount of radioactive material and waste currently stored on-site and what is proposed in this document with Expanded Operations, I am confident stating that in the event of a detonation of just one of those pits, the SWEIS document, if located in my home, would be in the form I'm sending to you. The difference being, the only toxic material enclosed in this package is the content of SWEIS and the ludicrous idea that making more bombs can be justified by publishing a document that takes three hours to burn.

As I watched the smoke rise, I attached my prayers sending them to heaven in the Buddhist tradition. I challenge the Laboratory to raise the Phoenix out of the ashes of Nagasaki, out of the draft SWEIS and put forth a beneficial alternative. This alternative must address the global issue of warming and climate change and be initiated with the same fervor as the Manhattan Project in 1943. I request a true Green Alternative, which

|| 312-1

**312-1** Chapter 3, Section 3.5, of the SWEIS provides a discussion of NNSA's consideration of, and decision to not analyze a Greener Alternative in the SWEIS. A Greener Alternative was analyzed in the 1999 SWEIS but was not selected for implementation. NNSA does not believe, 7 years later, that a Greener Alternative is reasonable for the future operation of LANL to meet its mission as directed by the Congress and the President, and has identified the Expanded Operations Alternative as its Preferred Alternative. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.



**Commentor No. 312 (cont'd): Sheri Kotowski**

would focus on a non-nuclear and sustainable future, clean water, air and soil, that will unite us for the common good of all.

Thank you for your consideration.

Sincerely,

Sheri Kotowski

PS: This comment letter is being resubmitted with Attachment Documentation named "RE. returned dSWEIS comments.doc" electronically to [lanl\\_sweis@doeal.gov](mailto:lanl_sweis@doeal.gov) as well as sent by USPS to the above address.

|| **312-1  
cont'd**

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Commentor No. 312 (cont'd): Sheri Kotowski

Sheri Kotowski  
PO Box 291  
Dixon, NM 87527

October 5, 2006

Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office  
National Nuclear Security Administration  
U.S. Department of Energy  
538 35<sup>th</sup> Street  
Los Alamos, NM 87544-2201

RE: Attachment Documentation of returned comments on the Draft Site Wide  
Environmental Impact Statement at Los Alamos National Laboratory.

Dear Ms Withers,

On September 18, 2006 comments from myself, Sheri Kotowski were posted by certified mail to the above address from Santa Fe, New Mexico. As a portion of my comments the package contained the remains from burning the document to ashes. The package was clearly labeled for its' content, "the ashes of this document" so there would be no surprise when the package was opened. My comments have been made with complete honesty and sincerity.

On September 30<sup>th</sup> I paid return postage for this package, which was refused with no explanation. In my own honesty and naivety I failed to comprehend the extent of the Department of Energy's fear and mistrust. In my comment letter you will read the statement declaring that the only thing toxic in the ashes of the SWEIS is it's content.

I telephoned and left messages on both Monday October 2<sup>nd</sup>, 2006 and Wednesday October 4<sup>th</sup>, 2006. You Elizabeth Withers returned my telephone call on Thursday October 5<sup>th</sup>, 2006. It was mutually agreed that my comments would be accepted by email with this Attachment, also to be documented as part of my original comments.

It will clearly be noted with a comment, that the ashes were "Refused" by the Los Alamos Site Office and the National Nuclear Security Administration.

Thank you,

Sheri Kotowski

*S Kotowski 10/5/06*

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Commentor No. 313: Paulette Frankl

From: Paulette Frankl [mailto:pauletteart@mindspring.com]  
Sent: Wednesday, September 20, 2006 10:50 AM  
To: LANL\_SWEIS  
Subject: Plutonium increase comment

Date: Wed, 20 Sep 2006 09:30:47 -0700  
To: Los Alamos National Lab LANL <lanl\_sweis@doeal.gov>  
Subject: Plutonium increase comment

To Whom it may concern:

I vehemently object to LANL's plans to increase plutonium production because:

1/ Bombing the world to pieces will not bomb the world to peace! Stop it now! Bombs are not the solution. Use those intelligent minds to make the world more functional, efficient, more affordable. What GREAT things you could be doing with that intelligence and funding! Let NM and LANL lead the way to a more constructive -- not destructive -- world. Someone's got to do it. Why not the greatest minds on earth combined with a higher conscience leading the way for peace. IMAGINE! Instead of the greatest

313-1

minds on earth sold out for the greatest destruction on earth for the price of another big pay check!

2/ LANL has proven itself unaccountable and irresponsible regarding its toxic waste disposal, resulting in high levels of radiation in the ground water, water table and even the Rio Grande. The canyons are polluted with LANL's waste. This is unconscionable!!!! Stop NOW!! Clean up the last mess you made, instead of making matters even worse. There's plenty of places for jobs in the clean up and restoration department. And when you restore this area to a condition that's safe for life, you can begin on other nuclear sites around the country.

313-2

3/ The need for excessive consumption of water to make this increased plutonium project function is far and above what drought prone NM has to offer. I realize that LANL's interest is only in bombs, not in people or life in general or the environment, but this area has a WATER problem. (Not to mention the wind and fault line factor.) There's not enough water for people, farms and animals as it is, let alone for bigger bombs that no one wants and that are polluting this precious region to the degree that the produce sold at the Farmer's Market is no longer safe for consumption. HOW DARE LANL DO SUCH A THING! Pull your minds out of your pay check and put it into your conscience! Wake up to what is being perpetrated at LANL. Come to your senses! More bigger, lethal bombs is NOT man's evolution at its finest hour.

313-3

313-1 NNSA notes the commentor's objection to increasing plutonium production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

313-2 Past operation of LANL was conducted in a manner consistent with contemporary standards. As standards have evolved, operational practices including waste disposal and discharge of effluents have also evolved. DOE intends to conduct activities at LANL consistent with its national security mission while continuing to safely manage the waste it generates and continuing environmental restoration.

Chapter 2, Section 2.2.6, of the SWEIS describes the progress DOE has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Appendix I of the SWEIS presents options and environmental analyses for conducting future remediation activities at LANL primarily related to the Compliance Order on Consent that was entered into on March 1, 2005. The scope of the Consent Order includes soil, groundwater, and surface water on mesas and in canyons that may have been contaminated from past LANL activities. Appendix I also summarizes several technologies for cleanup of soil, water, and air and references additional information about existing and emerging cleanup technologies. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Criteria for cleanup of sites subject to the Consent Order are documented in Section VIII of the Consent Order and include standards for soil, surface water, and groundwater as well as standards for screening for ecological risks.

313-3 NNSA notes the commentor's concerns regarding the possibility of increasing pit production, the amount of water needed, and environmental pollution. As stated in Chapter 5, Section 5.8.2.3, of the SWEIS, increased pit production at TA-55 under the Expanded Operations Alternative would entail a relatively minor increase in LANL infrastructure requirements, including water, because existing Plutonium Facility Complex operations currently constitute a relatively small percentage of LANL's total demands. LANL's projected water demands under the Expanded

Commentor No. 313 (cont'd): Paulette Frankl

I have lots more to say, but I'm of the impression that no one reads these comments anyway because you just don't care. Like drone soldiers in the military you are all programmed: don't think, don't ask, don't care. Just do what you're told to do. So these statements are good for starters.

313-4

Paulette Frankl/Santa Fe

Operations Alternative would remain within LANL's water use target ceiling of 542 million gallons (2,052 million liters) per year. Refer to Section 2.8, Water Use, of this CRD for more information on LANL's water use, available water rights, and water supply planning. Further, NNSA is committed to conducting operations in compliance with worker, public, and environmental protection standards and requirements. As addressed in Chapter 4, Section 4.9, and Chapter 5, Section 5.9, all wastes generated at LANL are managed protectively until disposed of in regulated facilities. Programs for compliance with air and quality standards are discussed in Chapter 4, Sections 4.4 and 4.3, respectively; while analyses of possible impacts on air and water quality are addressed in Chapter 5, Sections 5.4 and 5.3, respectively. Chapter 2, Section 2.2.6 describes the progress DOE has made in conducting the environmental restoration program at LANL.

313-4 NNSA reviewed and considered all public comments received on the Draft LANL SWEIS. Responses to public comments are in this section of this CRD. Changes to the Draft LANL SWEIS that were made are summarized in Section 1.4 of this CRD.

**Commentor No. 314: Jodi Dart, Program Director,  
Alliance for Nuclear Accountability**

**From:** Jodi Dart [mailto:jdartana@earthlink.net]  
**Sent:** Wednesday, September 20, 2006 9:50 AM  
**To:** LANL\_SWEIS  
**Subject:** COMMENTS on the SWEIS for LANL

September 20, 2006

Ms. Elizabeth Withers  
 National Nuclear Security Administration  
 Los Alamos Site Office  
 Office of Environmental Stewardship  
 528 35th Street  
 Los Alamos, New Mexico 87544

Dear Ms. Withers:

The Alliance for Nuclear Accountability (ANA) submits the following comments to the National Nuclear Security Administration (NNSA) regarding the Site-Wide Environmental Impact Statement (SWEIS) for Expanded Operations at the Los Alamos National Laboratory (LANL) in New Mexico. ANA is a nationwide network of thirty-three organizations working in the shadow of the nuclear weapons complex to address weapons, cleanup, and health issues. We are writing to request that NNSA consider the following comments on the LANL SWEIS.

ANA opposes the preferred Expanded Operations Alternative suggested for future operations at Los Alamos National Laboratory as proposed in the draft 2006 Site-Wide Environmental Impact Statement. The proposed Expanded Operations will increase nuclear weapons design and research activity, which will result in increased hazardous waste, emissions of dangerous radionuclides into the air, and pollution to ground and surface waters. Expanded Operations at LANL, including increased plutonium pit production, is a waste of taxpayer dollars, undermines nonproliferation treaties, and is hazardous to human health and the environment.

**INCREASED PIT PRODUCTION IS A WASTE OF TAXPAYER DOLLARS**

Pit production at LANL is currently estimated to cost 2.7 billion (for current production of 20 pits per year) by 2011. This does not include costs for decontamination and cleanup, which would likely be significant. Moreover, at a time when federal deficits are increasing, these resources would be better spent elsewhere. For over nine years, the U.S. nuclear stockpile continues to be certified as safe and reliable without the addition of significant numbers of new pits. The DOE's own documents state

**314-1** NNSA notes the commentor's opposition to the Expanded Operations Alternative. The various sections of Chapter 5 of the SWEIS analyze the environmental impacts of the Expanded Operations Alternative, including management of radioactive and chemical waste, monitoring of air emissions, and treatment or monitoring of wastewater discharged through NPDES-permitted outfalls. The commentor is correct that the Expanded Operations Alternative would result in larger amounts of radioactive and chemical waste, as well as increased air emissions and wastewater discharges; but as demonstrated in the SWEIS, these increases can be safely managed. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**314-2** Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for a discussion of the plutonium pit lifetime studies. The analysis of a production rate of up to 80 pits per year in the LANL SWEIS is still valid, despite the conclusion that degradation of plutonium in the majority of nuclear weapons would not affect performance for a minimum of 85 years, because it provides a bounding scenario and the operational flexibility to meet national security needs.

**314-3** NNSA notes the commentor's concerns regarding pit production and operations at the former Rocky Flats Plant. LANL operations are not comparable to operations at the Rocky Flats Plant because LANL employs newer facilities and technology, a much lower level of pit production, improvements in controlled operational and management practices, and additional independent oversight. Refer to Section 2.12, Comparison to Rocky Flats Plant, of this CRD for more information.

**314-4** As described in Chapter 4, Section 4.3.2, past waste disposal practices at LANL have contaminated the shallow groundwater that, in turn, has the potential to contaminate portions of the regional aquifer under the Pajarito Plateau. Waste disposal was conducted in the past in a manner consistent with the standards at that time. As standards have evolved, waste disposal practices evolved with them. Future disposal of waste would be performed in compliance with currently applicable regulations.

**314-1**

**314-2**

**Commentor No. 314 (cont'd): Jodi Dart, Program Director,  
Alliance for Nuclear Accountability**

that "measurements to date have not shown any significant degradation of pits over approximately 40 years\*." Despite NNSA's previous claim that the U.S. could lose half its nuclear stockpile overnight due to potential aging effects, the agency now admits that age-induced effects impacting safety, reliability, and performance have never been observed in pits up to 42 years old. Excluding warheads scheduled for retirement, the average age of pits in the deployed stockpile is 23 years.

**314-2  
cont'd**

**PIT PRODUCTION IS HAZARDOUS TO HEALTH AND ENVIRONMENT**

Because the manufacture of plutonium pits produces extremely hazardous and difficult to contain wastes, it is a great risk to health and the environment. The NNSA should carefully examine the risks to the workers who build and then work in the plant, the risks to the environment and communities around the site and those downwind and downstream. Plutonium pit production is inherently dangerous to workers. If inhaled, infinitesimal specks of plutonium dust can cause lung cancer. Moreover, it is known that plutonium can self-combust and in fact, NNSA has claimed that "the potential for fire initiation cannot be totally eliminated." However, the plutonium pit facility at LANL has operated for eight years without updated, approved safety protocols and workers have been repeatedly contaminated.

**314-3**

DOE has constantly struggled with cleanup obligations, including cleanup of the former pit production site at Rocky Flats. The Rocky Flats Plant had a horrible environmental record, replete with accidents that only by luck did not severely contaminate Denver. Given the massive contamination at Rocky Flats from past pit production, the SWEIS should discuss the environmental and health impacts at Rocky Flats and other plutonium fabrication sites around the world as the baseline. There is current evidence of ground water contamination at Los Alamos with more expected in the years and decades to come.

**314-4**

**INCREASED PIT PRODUCTION UNDERMINES NONPROLIFERATION**

The Department of Energy plans to increase plutonium pit production at Los Alamos. ANA does not support these modifications to the current operations of LANL. The plan to increase pit production provides clear evidence that the U.S. intends to retain the ability to produce and maintain a large scale nuclear arsenal, in violation of its commitment to disarm under Article VI of the Nuclear Non-Proliferation Treaty. Increased pit production and other U.S. nuclear weapons programs could prompt a global arms race, the cost of which could be incalculable.

**314-5**

Also, included in the draft SWEIS, the Department of Energy made sixty references to a Modern Pit Facility, which would have the capability of producing 450 plutonium pits annually. The members of ANA are worried that DOE has deceptive plans to move forward with a Modern Pit Facility at LANL without first completing an

**314-6**

In addition, NNSA operates a monitoring program (described in Chapter 4, Section 4.3.1.5) to detect contamination resulting from past practices. LANL staff evaluates and takes corrective action to mitigate such contamination in groundwater and surface waters, in accordance with applicable regulations and agreements.

NNSA intends to continue safely managing waste and conducting environmental restoration activities at LANL as it carries out its missions. Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding groundwater and surface water contamination and groundwater monitoring. Refer also to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information regarding environmental remediation.

**314-5** NNSA notes the commentor's opposition to increasing pit production. The United States is not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Pit production, which ensures a safe and reliable nuclear stockpile, does not violate treaty commitments. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**314-6** Reference to a modern pit facility in the Draft LANL SWEIS was in the context of ensuring that the cumulative impacts of reasonably foreseeable future actions were addressed in accordance with the Council on Environmental Quality NEPA regulations. The LANL SWEIS alternatives address operational levels for the next 5 years and limit the level of pit production to up to 80 pits per year (under the Expanded Operations Alternative). In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (DOE/EIS-0236-S4) to assess the environmental impacts of the continued transformation of the nuclear weapons complex (71 FR 61731). In addition to this announcement, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). Therefore, the Final LANL SWEIS does not include a modern pit facility in the cumulative analyses presented in Chapter 5, Section 5.13. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, and Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

**Commentor No. 314 (cont'd): Jodi Dart, Program Director,  
Alliance for Nuclear Accountability**

Environmental Impact Statement and analysis. We urge that the final SWEIS not include any reference to a Modern Pit Facility at LANL.

|| 314-6  
cont'd

Thank you in advance for your consideration of these comments. Please enter them into the official record.

Sincerely,

Jodi Dart  
Program Director  
Alliance for Nuclear Accountability

\*Source: 2003 DOE Draft Environmental Impact Statement for the proposed Modern Pit Facility

Jodi Dart  
Alliance for Nuclear Accountability  
322 4th Street, NE  
Washington, DC 20002  
Phone: XXX-XXX-XXXX  
Fax: XXX-XXX-XXXX  
E-Mail: jdartana@earthlink.net

*Comment side of this page intentionally left blank.*

*Commentor No. 315: Erich Kuerschner*

**From:** Erich Kuerschner [mailto:erichwwk@laplaza.org]  
**Sent:** Saturday, September 30, 2006 11:36 PM  
**To:** LANL\_SWEIS  
**Cc:** senator\_bingaman@bingamen.senate.gov; Steven Clemons; Greg Mello  
**Subject:** LANL Draft SWEIS

Dear Ms Elizabeth Withers, and Interested Parties:

Please Accept my comments re the LANL Draft SWEIS. I look forward to seeing the concerns addressed in the final EIS, and hope they help to avoid a repeat of unintended consequences as experienced in the Iraq War. There is much more at stake in the area of resource allocation than the issues of an experienced nuclear weapons work force and personal income.

Respectfully, Erich  
Erich Kuerschner erichwwk@laplaza.org  
Public Policy Economist PO Box 2221, Taos, NM 87571  
voice: XXX.XXX-XXXX cell: XXX.XXX-XXXX  
[http://laplaza.org/~erichwwk/erich\\_page.htm](http://laplaza.org/~erichwwk/erich_page.htm)

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**Commentor No. 315 (cont'd): Erich Kuerschner**

Comments by Erich Kuerschner,

HCR 74, Box 24614, El Prado New Mexico 87529  
Cell: XXX.XXX.XXXX erichwkw@laplaza.org

Retired public choice economist: property rights, feasibility public finance, benefit-cost analysis, non-market evaluation, EIS

at Santa Fe Community College, Santa Fe, New Mexico, Thursday, August 10, 2006

Re: LANL Draft SWEISS for Continued Operation of LANL -

Thank you for this opportunity, which I trust will not be the last one to comment in public, and thanks to all who contributed to this EIS. I am a bit embarrassed by the generality of my comments, but hope you will understand. Today was only my second opportunity to view the LANL SWEISS update for the 1999 EIS, as I explained in Los Alamos on Tuesday. This EIS is too important to not give it appropriate attention. A mistake here could have enormous REAL cost to Americans, current and future.

Recently we all heard Gen Pace and Gen Abizhiad, after a long pause and careful selection of words, state that that insurgency in Iraq is at an all-time high (unexpected??), and we "could/may" move toward a civil war.

Today John Arquilla, Professor at the Naval Postgraduate School, appeared on c-span 2. When asked about whether or not Iraq is experiencing a civil war, he answered "of course. A civil war is when people within a country fight each other. End of story."

He also claimed the "shock and awe" is productive only against nation states. In today's GWOT, weapons with large collateral damage are useless. He also wrote in the San Francisco Chronicle, "The long war is the wrong war. Sooner or later in a long war, terrorists WILL get WMD". We are spending \$1.25 billion a day on the military, and that much/ week in Iraq. (I assert economists claim these pecuniary costs account for only half of the ACTUAL economic loss, measuring costs and benefits on an accrual, rather than a cash basis.)

Dr. Arquilla recommends in his July 16 article, that military spending should be cut 10%/ year to make us stronger. These wars will be fought and won by men, information, and good will, NOT big and expensive hardware, and that these excessive expenditures are weakening National Security, a point shared by many other military experts. There is considerable belief in the military that our existing stockpile, and perhaps nuclear weapons in general, are obsolete in modern or guerilla/terrorist warfare against small horizontal network cells. And of course to use these is a violation of International Law and Treaties, as these weapons are essentially advanced Auschitzes (albeit very unselective) concentration, extermination, and cremation camps. Any person advocating such a use belongs in Jail, not in charge of resource allocation decisions. In fact, the largest unstudied economic and environmental consequence of the preferred alternative is a consequence of breaking the 1970 Nuclear Non-Proliferation Treaty. Just as the original regime change in Iraq was alleged to have minor costs (being mostly paid for out of oil revenues- please email me if you wish administrative documentation of this fact), in fact by not understanding the economic concept of unintended consequences, we have costs overruns by a factor of several hundred. The same I suspect will be true here. My misunderstanding economic concepts and relationships, the preferred alternative of building a new pit facility will likely have negative economic consequences even more destructive to our national economy. While I have little hope of this being understood by anyone on the current study group, I would at least like to be on the

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**Commentor No. 315 (cont'd): Erich Kuerschner**

record as having said “I told you do”, especially in regards to neighbors, family, and professional colleagues.

My understanding of the LANL SWEIS is that LANL is mandated to reevaluate their ongoing operations in terms of Cost/Benefit, to justify and be held accountable for its operation, and to update operations to reflect current conditions (especially current prices for substitutes, complements, and current valuations of costs and benefits). The hard numbers generated here for BOTH market and non-market inputs and outputs, with the assumptions and non-market evaluations and methodology made explicit are then to be used to analyze and quantify the Costs/Benefits from alternative operations within certain reasonable ranges. The fact that the PIT production increase is not a self-standing EIS implies to me that there is previous EIS’s addressing that issue, but I have been unable to find the documentation. As best as I can tell, in terms of Air Quality, Water Resources, etc. a serious effort has been made (but I am not really qualified to say much here, beyond methodology).

However, I am frankly shocked to find no evidence of such scientific effort to do an economic evaluation of this project. I do likely have an earlier and deeper exposure to the intent of the original NEPA than perhaps anyone on the study team, having worked with the Skidmore, Owings, and Merrill Environmental Study Group (Under Howard McGee), the group I believe did the first EIS (Baltimore Beltway under DOD) in 1972. I worked on the second EIS (I-80N through Southeast Portland, Oregon – the Mt. Hood Freeway), which I believe caused NEPA to conclude that without studying broad substitutes to the “preferred class of solutions”, one could easily adopt the preferred solution, that , when compared to broader alternatives, would reveal that the preferred choice , was in fact, a greatly inferior choice. It became clear that the use of “needs” was often the culprit, and one needed to talk in terms of supply and demand, cost/benefit, and QUANTIFY ones choices. The “no build” (as we called it) became a *mandatory* option, as it was agreed that this option merely meant that one was *seriously* looking for the OPTIMUM solution, and not merely comparing the preferred option to some other options within a LIMITED field. One needs to explore REAL alternatives to a perceived “need”. Speaking in terms of “needs” closes the discussion, and rather than helping find the best solution, it actually PROHIBITS the solution from even being explored.

In our case, DOD wanted us to stick with some asphalt/concrete engineering ROW/ construction to alleviate what was perceived to be a sub optimal configuration in moving vehicular traffic from the east side through to West Portland, across the Willamette River (i.e., don’t redefine the problem, or look at solutions outside of our suggestions)

Once we realized what that would do to neighborhoods, the CBD, and especially when we realized what the Bridge/ River Crossing solution would have to look like, regardless of any designated route/ configuration, it became clear to us that this would be an atrocious choice- rather than improving things, it was quite possibly be even worse than even doing nothing. Everyone agreed we should define the problem broader (e.g. was the final product REALLY to move cars/trucks, or was a large part really to move ideas, and bring residences/commercial activity, and manufacturing closer together? After much haggling with EPA and DOD, they agreed, and the “no build” was born. Thank god that DOD and the Federal Highway Department was enlightened enough to admit past mistakes, change the process, and avert an irrevocable planning disaster for Portland. While I am not current on changes to NEPA, I would hope and assume that any changes to NEPA of which I am not aware would improve, and not retard our ability to be accountable and manage our mission and mandates.

We REALLY need to do this here. Looking only at PIT production, I can see no benefit for “extra” PITS (we have sufficient for existing nuclear weapons stockpile until 2038). The planned new facility is projected to have a life span of –I believe- 25-30 years. So even for the life of the

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The purpose of this SWEIS is to evaluate impacts on the environment from the continued operation of LANL; cost and contractual issues are not part of the scope of the SWEIS. NNSA, however, may perform cost analyses separate from the development of this SWEIS to help make decisions about future stockpile stewardship activities or specific projects. As described in Chapter 1, Section 1.4 of the SWEIS, cost estimate information, schedule, safeguards and security concerns and programmatic considerations of impacts are all considered in addition to the environmental impact information in the selection of the Preferred Alternative.

Results of the plutonium pit lifetime studies are addressed in Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD. Although the studies show that degradation of plutonium in the majority of nuclear weapons would not impact weapon reliability for a minimum of 85 years, the analyses in this SWEIS are still valid. The SWEIS analyses provide a bounding impact of annually producing up to 80 pits, which is the same level of production analyzed in the 1999 SWEIS. NNSA can decide to operate at a lower production rate, but this analysis provides NNSA flexibility in meeting its stockpile stewardship mission based on changing geopolitical conditions. As stated in Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD, the Reliable Replacement Warhead is not considered a new weapon and its production, if authorized by the Congress, would not violate the terms of any international treaties of which the United States is a signatory.

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BUILDING, it is likely that seems NO BENEFIT is being derived from expanding PIT production. The building may even be obsolete before any perceived benefits are accrued. There are rumors that the PITS are for DIFFERENT Warhead configurations, but if so it seems that would be in violation of US law, US Treaties with other nations, and International Law. And if I somehow miss the benefits, I suggest the fault is at least partially in the report, which does not make these benefits obvious.

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An article by Nobelist Friedrich Hayek, "the Use of Information in Society", clearly states the two centuries old conclusion that economics is about optimal decision making – i.e. optimal allocation of resources (tangible or not). As Hayek explains: "If we possess all the relevant information, if we can start from a given system of preferences, and if we command complete knowledge of available means, the problem is one of pure logic. That is, the answer to the question of what is the best use of resources is implicit in our assumptions. The conditions which the solution of this optimum problem must satisfy have been fully worked out, and can be best stated in mathematical form: put at their briefest, they are that the marginal rate of substitution between any two commodities or factors must be the same in all their different uses." The American Economic Review, September, 1945 pp518-530 (The article actually improves on this, but I do not have time to expand here).

Those wishing a fuller analysis (to include risk, uncertainty game theory, etc) are referred to Paul Samuelson's Foundations of Economic Analysis, (also quite old), or more modern advanced micro-economic texts and manuals. Much of the practical applications and analysis was in fact developed by the military, Input and Output analysis, Game Theory, Bayesian Algebra, and Pure Cost/Benefit being some of these tools. My father, a career civilian employee for the USA and USAF in the area of internal and external missile guidance, participated in NIE's in the area of Missile and Nuclear Threat at RAND while a USAF employee, and used this methodology in his development of NIE's.

So. Where in the EIS are costs defined, and the REASONABLE ALTERNATIVE to PIT production-the responsibility to work towards a REDUCTION in nuclear warfare discussed (Also a MANDATED MISSION of LANL) much less quantified and compared? THIS is the CRITICAL area in which we need to leave opinions and beliefs at home, and use the best minds to develop accurate information and scenarios. To do less would be irresponsible to ALL US Citizens. How is it possible to choose a "preferred" alternative w/o going through this exercise? Is that not what the ultimate purpose of and EIS in general, and THIS LANL SWEIS in general actually are.

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I don't need to remind DOE and the preparers of this EIS, that failure to frame national security correctly is what results in the ultimate demise of many Great powers, Germany, USSR, and North Korea being the obvious examples. To be haphazard here, and not use our BEST ECONOMISTS as part of the process, to inventory the "reasonable alternatives to national security, develop proper production functions and benefit functions and to quantify the marginal costs and benefits of each. We owe it to our present and future citizens to do the best we can to ensure that we get the "most Bang for Each Buck/\$ - no pun intended. We can only do this by comparing marginal costs and benefits of the appropriate economic and social relationships.

To argue against doing this is to reveal ignorance of planning and resource allocation, and the fine work being done in this field at our many excellent universities, think tanks (such as RAND), and military academies (especially the Naval Postgraduate School). The consequences of a bad decision here would dwarf the negative consequences of the War in Iraq and Lebanon (both initiated by the US) and Katrina. Keeping blinders on and not admitting mistakes would EXPLAIN previous bad choices, a small consolation for not only "throwing good money after bad", but also put the USA on a potentially fatal course. And unlike the DOD case cited, in THIS

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case the alternative suggested (nuclear arms REDUCTION) is not even outside the LANL mandate, but is an EXPLICIT MISSION MANDATE. So I beg you, please do your homework and give us the marginal tradeoff between weapons REDUCTION as well as weapons Increase.

To NOT do so, in light of the nearly 100% public preference for the alternative, and the MANDATE for pursuing this alternative, would be worse criminal negligence – it would be treasonous to the American People.

Notes:

1. Please lets do this SWEIS right. Documents were not made available in Taos and Espanola until after the first hearing in on Tues, August 8. Thus this comments is superficial and only loosely related to the actual LANL SWEIS. When the USAF was advised of a similar problem in their proposed "bomber training route" EIS, they extended the comment period appropriately in Taos. A Sept 20 deadline helps some, but most helpful and important is the time allotted for citizens to review the EIS before the comment period. There was no opportunity to ask questions of consultants except before and after the comment period. Please consider a few additional meetings, and one in Taos were there are many interested and qualified commenters, provided they DO have 30 days between the availability of the SWEIS in Taos, and a comment period where we have informal access for at least an hour before, and an hour after, the actual comment period. Thank you!

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2. Apologies for minimal references. I'll do the best I can to cite relevant pages in the document that pertain to my concerns that the MAJOR socio-economic concerns were ignored. I have been told that there were qualified economists working on this 4-volume document identified by name and expertise in an Appendix, and I will try to find them, and discuss concerns directly. Frankly I am delighted that Mr. Owens, the project manager has a degree in Resource Management and should share my concerns, and can only hope my concern that this is only a B.S. is offset by experience. Jeffrey Rikhoff, has a Masters In Regional Planning and Economic Development, as well as 18 years experience. However, the fact that Jennifer Smith Has only 1 years experience (and that in non-relevant endeavors) may explain the superficialness of the alternatives section for which she appears to be responsible. I will look again, but I am dismayed that there was no doctoral level expertise apparent to address socio-economic concerns as I have outline. John Eichner seems responsible for Chapter 5, Socioeconomics. In Reading Sect 5.8.1 Socioeconomics carefully, I am concerned with the level of his socio-economic understanding and experience, as experience suggests to me he either has an engineering concept of ala US Corp of Engineers, or was prohibited from doing a meaningful analyses. To see the core of an EIS dismissed in eleven (11) sentences, in one half page is an insult to both the economics profession, and present and future citizens. Table 5-30 appears the extent of the effort to quantify "expected socioeconomic changes". Unfortunately, these changes are the least significant.

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3. Socio-economics is purported to be addressed in Sect 4.8.1. Again, it seems the author sees socio-economic changes as working through income, rather than through product produced as I suspect even the average citizen sees "socio-economic impacts as occurring. (In fact, to the nation these "apparent" impacts disappear, as in a market economy any regional changes can be expected to be totally offset by national changes in the opposite direction for all but changes in output or product produced. I have not been able to identify who has responsibility for Sect 4.8.1. It pains me to say this, but I would not pass even a freshman microeconomics student for submitting such a cursory response as exists in Pages 1-1 to 1-6, and Sect 4.8.1 (Pages 4-115 to 4-120 and Sect 5.8.1 (page 5-111).

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NNSA notes the commentor's request to be able to ask questions of consultants and to have additional meetings. Whereas it is impractical to have all of the analysts involved in the preparation of the SWEIS available at each public hearing, LANL staff knowledgeable about each of the proposed projects and selected topics (pit production and groundwater resources) were available for a half hour before the hearings, during breaks, and as time allowed, after the hearings. Beyond holding three public hearings, other means of providing comment on the Draft SWEIS were available. See additional discussion in Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD.

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Chapter 5, Section 5.8.1, of the SWEIS has been modified to include additional information on the projected socioeconomic impacts for each of the proposed alternatives. Chapter 4, Section 4.8.1 has been modified to include updated information on the regional economy.

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Hopefully I will soon find more adequate work, and the problem is merely one of indexing or proper inclusion in the Table Of Contents (the section in Part 1 on needs was found later, though not included in the Table of Contents? Why?) But if not the reason that Iraq is a failure ( and turning out almost exactly as I predicted publicly), is obvious. Lets not make the entire GWOT such a FIASCO. We have the talent in the military, and in private and public organizations. Let's not do more "Team B" or what has been called "voodoo economics". We may fool ourselves and smooth the way to enacted our "preferred or predetermined" alternative. Unfortunately, there are serious consequences to doing this and REALITY will ultimately come into play, making fabricated science painfully costly. An error here is not only what "sinks ships", but what "sinks nations and empires". Please use our best talent.

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Commentor No. 316: Governor J. Michael Chavarria,  
Santa Clara Indian Pueblo

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**INDIAN PUEBLO**

ESPANOLA, NEW MEXICO  
87532

OFFICE OF GOVERNOR

September 28, 2006

Ms. Elizabeth Withers  
EIS Document Manager  
U.S. Department of Energy - National Nuclear Security Administration  
Los Alamos Site Office  
528 35<sup>th</sup> Street  
Los Alamos, NM 87544 - 2201

Re: **Santa Clara Pueblo's Comments on the Draft Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory, Los Alamos, New Mexico**

Dear Ms. Withers:

Santa Clara Pueblo submits the following comments on the draft Site-Wide Environmental Impact Statement ("SWEIS") regarding the next five years of operations at the Los Alamos National Laboratory ("LANL"). In accordance with your letter to me dated September 19, 2006, we trust these comments still are considered timely.

Although the draft SWEIS states that the agency proposing the actions discussed therein is the National Nuclear Safety Administration ("NNSA"), because that agency is part of the U.S. Department of Energy ("DOE") for which Santa Clara Pueblo enjoys a formal government-to-government relationship, the comments here reference DOE rather than any agencies that work under the umbrella of the DOE. The comments, of course, apply in full force to the NNSA as well.

Santa Clara Pueblo appreciates the enormity of the task of describing the potential scenarios for the next five years of operations for LANL. Santa Clara Pueblo also appreciates the efforts to date by the DOE to improve its government-to-government relationship with the Pueblo. However, Santa Clara Pueblo has significant concerns about both the process used for, and the substance of, the draft SWEIS. Some of these concerns can only be alleviated through the issuance of a revised draft SWEIS. Other concerns need to be specifically addressed through mitigation measures for Santa Clara Pueblo outlined as part of a record of decision for any final SWEIS.

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NNSA does not believe that a new Draft SWEIS is required. NNSA intends to prepare a Mitigation Action Plan for this SWEIS. Any mitigation measures, monitoring or other conditions adopted as part of NNSA's decision will be summarized in the Record of Decision.

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Since Santa Clara is barely even referred to by name in the draft SWEIS's almost 2,000 pages, the Pueblo's comments first begin with a brief background description of Santa Clara Pueblo. Then, we include a discussion about the draft SWEIS' lack of compliance with various laws, policies, and executive orders, followed by a discussion of impacts to Santa Clara. We conclude with a discussion of remedies to address the impacts to Santa Clara Pueblo.

**I. Overview regarding Santa Clara Pueblo**

The modern-day boundaries of Kha' Po Oweengeh, or Santa Clara Pueblo, includes over 53,000 acres of land. This acreage figure includes some of our traditional lands that we have fought to regain but does not encompass all of our aboriginal territory. The Pajarito Plateau contains many areas of importance to our people. While we strive at Santa Clara Pueblo to be both proactive and innovative in our approach to working with others, at our core, the people of Santa Clara Pueblo are deeply rooted to our traditions.

Because of the importance of our traditions, in many respects our lifestyles are similar to what our ancestors enjoyed. We maintain cultural practices that pre-date the Manhattan Project by centuries and that will continue in perpetuity. To assist in understanding impacts to the Pueblo, we highlight a few such practices here. Santa Clarans grow crops with natives seeds passed down for generations and dry many traditional foods outside for later use in the colder months. We collect and utilize numerous wild plants and herbs for medicinal and other cultural purposes. When we harvest elk or deer, we fully utilize these gifts. Not only the meat is consumed. We also consume the bone marrow, the organs, and the blood. The clays and sands of the region are used by our world-famous artists and craftspeople. The pigments that are applied to the pottery made by Santa Clarans come from the soils too and are often applied using brushes made of natural materials. It is not uncommon for our artists to lick the brushes to rewet them while in the process of creating their pottery. In addition, the water we consume from surface sources and springs for our traditional practices comes directly from those sources and is not filtered.

The importance of protecting and maintaining our traditional practices cause us to look carefully at the draft SWEIS for any potential impacts to the air, soils, and water upon which we and the plants and animals depend. Those impacts are described throughout these comments. We believe all three alternatives described in the draft SWEIS impact Santa Clara Pueblo but we are especially concerned with the impacts associated with the expanded operations alternative.

As you review the remainder of these comments, please bear in mind that prior to the Manhattan Project, the Pajarito Plateau was pristine. The people of Santa Clara Pueblo are deeply connected to this area. It is because of the Pueblo's connection to the natural world that we submit these comments to ensure procedures for describing impacts are followed to the fullest. The Pueblo hopes that these comments will promote better understanding between the DOE and Santa Clara

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Pueblo regarding impacts to the Pueblo so that we are able to work together to prevent or alleviate impacts to an environment upon which the cultural survival of Santa Clara Pueblo depends.

**II. The draft SWEIS does not comport with the mandates of the National Environmental Policy Act, 42 U.S.C. §§ 4321-4370(d), and its implementing regulations ("NEPA")**

**A. NEPA procedures were not properly followed to ensure that the public was fully informed.**

**(i) The scoping process was incomplete.**

The purpose of the NEPA scoping process is to determine the range of issues to be addressed in the NEPA analysis and to identify the significant issues related to the proposed action. 40 C.F.R. §§ 1501.7 and 1508.25. Draft environmental impact statements are to be prepared "in accordance with the scope decided upon in the scoping process." *Id.* at § 1502.9(a). In January 2005, the DOE sought scoping comments for a supplement to the SWEIS that was issued in 1999. The Notice of Intent for that supplemental SWEIS did not include any discussion of increasing the production of plutonium pits beyond currently authorized levels. *See* 70 Fed. Reg. 807 (Jan. 5, 2005). Subsequently, the DOE decided to prepare a new SWEIS instead of supplementing the 1999 version. *See* draft SWEIS at 1-2. However, no additional scoping opportunities were provided to the public even though the current draft SWEIS discusses operations, including the increased production of plutonium pits, that were not identified in the original proposed action that was scoped in 2005.

While Santa Clara Pueblo commends the DOE for preparing an entirely new SWEIS rather than supplementing the outdated 1999 version, the failure to conduct additional scoping for the draft SWEIS is improper. By failing to issue a revised Notice of Intent and by failing to conduct additional scoping regarding the actual range of issues to be included in the proposal, the public was denied an opportunity to identify significant issues related to the proposal. As will be evidenced below, this resulted in an analysis that did not fully comport with the DOE's responsibilities for protecting tribal trust resources.

**(ii) Background materials were not made readily available to the public.**

The Council on Environmental Quality ("CEQ") has issued regulations and other guidance materials interpreting NEPA. CEQ regulations state that NEPA "is our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). Those regulations also state that "NEPA procedures must ensure that environmental information is available to public officials and

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**316-2** NNSA prepared the SWEIS in accordance with Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and DOE implementing procedures (10 CFR Part 1021). NNSA did originally announce its intent to prepare a supplement to the 1999 LANL SWEIS, which included all operations at LANL as well as newly proposed projects as part of an expanded operations alternative, and held a scoping meeting in January 2005. Consistent with some of the comments received during the scoping period, NNSA decided to prepare a new SWEIS instead of the originally planned supplement. NNSA believes that the scoping comments apply equally to a supplement to the 1999 SWEIS or to a new SWEIS. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

NNSA has addressed its responsibilities related to protecting tribal trust resources. Chapter 4 addresses cultural resources present at LANL, including traditional cultural properties, and Chapter 5 and Appendices G, H, I, and J discuss impacts to these resources for the specific actions proposed under each of the SWEIS alternatives.

**316-3** At the beginning of the comment period, NNSA made the references available in three DOE Public Reading Rooms located in Los Alamos, Santa Fe, and Albuquerque. As with other elements of this public comment period, this was consistent with past practices for other LANL NEPA documents. The referenced Data Call Materials were among the references available in the reading rooms. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information about the public review and comment process.



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citizens before decisions are made and before actions are taken." *Id.* at § 1500.1(b). While CEQ regulations also instruct that environmental impact statements should be as concise as possible and avoid excess paperwork, *see id.* at §§ 1500.4 and 1502.2 c), it is still vitally important that background information regarding an environmental impact statement be readily available to the public for review. This requirement was not met for the draft SWEIS.

The draft SWEIS and the appendices contain lists of background documents used as the basis for the draft SWEIS. Some of the references are simply, and somewhat mysteriously, referred to as "Data Call Materials." It is Santa Clara Pueblo's understanding that these materials were only available in reading rooms in Santa Fe and Albuquerque. None of the reference materials could be accessed through the DOE's on-line version of the draft SWEIS. As discussed below, this is also an environmental justice issue.

- B. The range of alternatives considered in the draft SWEIS was inadequate and the manner in which the alternatives were described confused and skewed the impact analysis.

CEQ regulations detail the environmental review process that must be followed in the preparation of an environmental impact statement. The regulations generally follow federal court decisions indicating that, to be adequate, an environmental impact statement requires a "full and fair discussion of significant environmental impacts." 40 C.F.R. §1502.1. CEQ regulations refer to the discussion of alternatives as the "heart" of any environmental impact statement. *Id.* at §1502.14. While, generally, the alternatives discussed in an environmental impact statement should reasonably relate to the purpose of the federal action, the analysis of the actual impacts resulting from the alternatives will be influenced by an agency's choice of the range of alternatives it considers. NEPA's environmental "full disclosure" mandate cannot be met, however, if an agency is too restrictive in the range of alternatives it considers.

There is no magic formula regarding the range of alternatives necessary for an environmental impact statement. The range should be reasonable. What is reasonable depends upon "the nature of the proposal and the facts in each case." Council on Environmental Quality, *Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations* (Mar. 16, 1981) at §1(b). Based upon the facts here, the draft SWEIS has an inadequate range of alternatives and the alternatives, as currently formulated, skews the analysis of environmental impacts.

There are two separate but related issues that need to be remedied. The expanded operations alternative should be broken out into two separate alternatives – one that analyzes the more controversial aspects of new contemplated operations (increased plutonium production and increased waste production and storage) and another that addresses all the sorts of activities solely related to refurbishment and upgrades to modernize buildings to ensure continuation of

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**316-4** NNSA has not separated the Expanded Operations Alternative into two distinct alternatives as recommended by the commentor. Chapter 5 and the sections of Chapter 3 and the Summary that summarize impacts clearly identify the impacts of specific projects evaluated under the Expanded Operations Alternative by resource area. Furthermore, each of the projects proposed under the Expanded Operations Alternative is evaluated in a project-specific analysis in an appendix, where details related to each of these projects may be reviewed. In addition, each of the project-specific analyses is summarized in Chapter 3, Section 3.6 and Summary, Section S.9. The SWEIS has been revised, however, to clearly distinguish impacts related to increased pit production and environmental restoration activities for those resource areas where there is a discernable difference in impacts. The SWEIS also notes in numerous places that NNSA intends to

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existing activities. In addition, all of the alternatives for the SWEIS, not just the expanded operations alternative, must include as an assumption clean-up that is already mandatory for LANL pursuant to the March 2005 "Compliance Order on Consent" between the New Mexico Environment Department ("NMED") and DOE/NNSA and its then-current operator, the University of California ("NMED Consent Order"). The NMED Consent Order "requires a site-wide investigation and cleanup to be conducted at LANL pursuant to stipulated procedures and schedules." Draft SWEIS at 2-9. It is a mandatory part of how LANL pursues its next five years of operations regardless of the alternative ultimately chosen as the preferred alternative in the SWEIS.

The expanded operations alternative in the draft SWEIS has too much loaded into it for the public to be able to ascertain which impacts relate to which portions of the activities described in that alternative. The expanded operations alternative includes "relocation of existing operations, reinvestment and refurbishment of existing facilities, and new operations or levels of operations." Draft SWEIS at 5-55. It is described in the draft SWEIS as the alternative that "would operate LANL at the highest levels of activity currently foreseeable, including full implementation of the mission assignments." *Id.* at iii. Even though the draft SWEIS indicates that not every activity described in the expanded operations alternative will necessarily be adopted by DOE, it is still difficult for the public to parse out impacts associated with the myriad activities for the expanded operations alternative discussed in the draft SWEIS.

It is also unclear why new plutonium pit production levels are even included in the draft SWEIS since the document states that decisions about LANL's future are contingent upon a "new Complex strategy direction" that is separate from the SWEIS process. *Id.* at 1-22. The draft SWEIS also indicates that there is a separate NEPA process still occurring with respect to the potential to build a Modern Pit Facility at LANL for plutonium pit production. *See id.* at 1-16 and 1-32. Even though this Modern Pit Facility is supposedly not part of the draft SWEIS, it is referenced many times throughout the document and it is extremely difficult for the layman reviewing this voluminous document to ascertain which portions of the infrastructure activities discussed in the expanded operations alternative relate specifically to the proposed increase of plutonium pits from 20 to 80 and which infrastructure activities would be necessary only to pave the way for the often-cited Modern Pit Facility.

In addition, although compliance with the NMED Consent Order is necessary regardless of the alternative ultimately chosen by DOE, and the draft SWEIS admits as much (*see, e.g.* draft SWEIS at 1-24), the potential impacts of clean-up activities related to the NMED Consent Order were only included in the expanded operations alternative. *See id.* at 1-12. This is improper. This, combined with the overly broad number of activities included in the expanded operations alternative, skews the analysis regarding the impacts of each alternative. Because the expanded operations alternative combines activities such as replacing aging office buildings that were not

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implement actions necessary to comply with the Consent Order regardless of decisions it makes on other actions analyzed in the SWEIS.

**316-5** NNSA does not consider compliance with the Consent Order to be optional, and is not linking Consent Order compliance with decisions about pit production; proposed new projects or activities; increased operational levels; or waste generated from other LANL activities. Chapter 1, Section 1.3, of the SWEIS defines the three alternatives and explains why activities to comply with the Consent Order are included only in the Expanded Operations Alternative. Section 1.4 states that NNSA could choose to implement the alternatives either in whole or in part, and that NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

Impacts resulting from activities related to implementing the Consent Order are evaluated in Chapter 5 and Appendix I, and summarized in Chapter 3, Table 3-19 and the Summary. The SWEIS has been revised to distinguish potential impacts associated with Consent Order implementation from other potential impacts of the Expanded Operations Alternative.

**316-6** Reference to a modern pit facility in the Draft LANL SWEIS was in the context of ensuring that reasonably foreseeable future actions were addressed in accordance with the Council on Environmental Quality, NEPA regulations regarding cumulative impacts. The LANL SWEIS alternatives addressing operational levels for the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative). In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (DOE/EIS-0236-S4) (71 FR 61731). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously

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built up to current safety codes with all of the activities necessary to increase plutonium pit production along with the only analysis of mandatory remediation activities for the contaminated sites at LANL, it sometimes produces the absurd result wherein the alternative that includes increasing plutonium triggers and increasing waste generation and storage is described as being more beneficial for the environment than the "no action" alternative. This appears to be the case especially with respect to discussion of soil contamination impacts from legacy waste and discussion of impacts to the quality of both surface and ground water. . See, e.g., *id.* at 5-36 (surface water impacts), 5-24 (legacy waste soil contamination), and 5-41 (groundwater impacts). Because clean-up of such legacy waste is part of the NMED Consent Order mandates, that clean-up must be completed regardless of which SWEIS alternative DOE pursues. However, because that clean-up is only discussed in the expanded operations alternative, the draft SWEIS indicates that expanded operations produces the cleaner results for the water and soil. This is misleading.

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As is stated in the draft SWEIS, the "alternatives provide the basis for analysis of potential impacts" in the SWEIS. *Id.* at 3-1. That is precisely why the breakout of alternatives needs to be remedied. Breaking out the expanded operations alternative into two separate alternatives and ensuring analysis of the NMED Consent Order impacts is not tied to any one alternative in the SWEIS would still be consistent with the purpose and need for the SWEIS and would remedy these NEPA violations.

**III. The draft SWEIS does not comport with the environmental justice Executive Order or with the DOE's own Indian policies**

- A. CEQ guidance on environmental justice was only partially cited and even the parts cited were not followed for the impact analysis in the draft SWEIS.

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 59 Fed. Reg. 7629 (Feb. 11, 1994), provides that "[e]ach Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The Executive Order makes clear that the provisions apply fully to Native Americans. In 1997, CEQ issued a guidance document regarding environmental justice that "interprets NEPA as implemented through the CEQ regulations in light of Executive Order 12898." Council on Environmental Quality, *Environmental Justice: Guidance Under the National Environmental Policy Act* (Dec. 10, 1997), <[ceq.eh.doe.gov/nepa/regs/ej/justice.pdf](http://ceq.eh.doe.gov/nepa/regs/ej/justice.pdf)> ("CEQ Environmental Justice Guidance") at 21. The draft SWEIS only selectively refers to the CEQ Environmental Justice Guidance but then does not appear to analyze environmental justice impacts to Santa Clara Pueblo in accordance with the few provisions it selectively cites.

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- (i) *CEQ Environmental Justice Guidance includes three factors each for analyzing disproportionately high and adverse human health impacts and disproportionately high and adverse environmental impacts.*

The CEQ Environmental Justice Guidance states that when determining whether environmental effects are disproportionately high and adverse, agencies are to consider three factors:

- (a) Whether there is or will be an impact on the natural or physical environmental that significantly (as employed by NEPA) and adversely affects a[n] . . . Indian tribe. Such effects may include ecological, cultural, human health, economic, or social impacts on . . . Indian tribes when those impacts are related to impacts on the natural or physical environment; and
- (b) Whether environmental effects are significant (as employed by NEPA) and are or may be having an adverse impact on . . . Indian tribes that appreciably exceeds or is likely to appreciably exceed those on the general population or other appropriate comparison group; and
- (c) Whether the environmental effects occur or would occur in a[n] . . . Indian tribe affected by cumulative or multiple adverse exposures from environmental hazards.

CEQ Environmental Justice Guidance at 26-27.

Similarly, the CEQ Environmental Justice Guidance breaks out the analysis of whether human health effects are disproportionately high and adverse into three separate parts: (1) whether health effects, in terms of risks and rates, exceed generally accepted norms; (2) whether the risk or rate of hazard exposure appreciably exceeds that of the general population; and (3) whether health effects occur due to cumulative or multiple adverse exposures from environmental hazards. *See id.* at 26.

The draft SWEIS only cites some of these factors in Chapter 4 (*see* draft SWEIS at 4-150) and then does not appear to follow most of the factors in its analysis in Chapter 5. As a result, the environmental justice analysis is incomplete.

- (ii) *The draft SWEIS does not analyze environmental justice impacts to Santa Clara Pueblo in accordance with the factors set forth in the CEQ Environmental Justice Guidance.*

The environmental justice analysis in the draft SWEIS states that “DOE expects few high and

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planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). Therefore, the Final LANL SWEIS does not include reference to a modern pit facility.

**316-7** The statement “NNSA expects few high and adverse impacts from the continued operation of LANL under any of the alternatives, and, to the extent that any impacts may be high and adverse...” has been changed as follows to more accurately reflect the findings of the impacts analysis. “NNSA expects no high and adverse impacts from the continued operation of LANL under any of the alternatives.”

Additional analysis of the population dose under the possible alternatives was conducted to determine the dose that would be received by different populations surrounding LANL including minorities, low-income, Hispanic, and American Indian populations. This analysis confirmed that the white (non-Hispanic) population would receive the highest collective dose and average individual dose under all alternatives. Additional information has been introduced in Section 5.11 of this SWEIS.

The SWEIS does project higher radiation doses for individuals subsisting on the special pathways evaluated compared to doses for the general public. For an individual who participated in all three scenarios under the specific receptors analysis shown in Appendix C, Section C.1.4.2, the annual dose would be between 4.5 and 10.7 millirem higher per year compared to DOE’s standard of a maximum dose of 100 millirem per year to an offsite individual from all sources; this corresponds to an annual increased probability of inducing a fatal cancer from approximately one in 370,000 to 1 in 156,000. By comparison, the average resident of northern New Mexico receives a dose of approximately 400 millirem per year from natural background radiation sources. Therefore, for an individual subsisting on all three scenarios under the specific receptors analysis, the average annual dose would increase by about 1.1 to 2.7 percent due to these special pathways.

Most of the radiological risk to persons living in the vicinity of LANL is due to existing contamination and natural sources of radiation as discussed in Appendix C, Section C.1.1.3. The largest radiation contributors for persons living near Los Alamos include cosmic radiation; external

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adverse impacts from the continued operation of LANL under any of the alternatives, and, to the extent impacts may be high and adverse, DOE expects the impacts to affect all populations in the area equally." Draft SWEIS at 5-156. To back up this disturbing statement, the draft SWEIS goes on to explain that a study was completed for the 1999 SWEIS where assumptions were made about special pathways "that took into account the levels of contaminants in native vegetation (pinon nuts and indian tea [Cota]), crops, soils and sediments, surface water, fish, and game animals on or near LANL." *Id.* at 5-157. Based upon this and more recent monitoring results, the draft SWEIS states that the overall risk rate for cancers for a traditional user of these "special pathways" is not high, and that previous radiological releases from LANL, not current operations, are the likely culprit of any radionuclide concentrations found. Therefore, the DOE concludes, "special pathways" receptor populations (*i.e.* the tribes) would not be expected to suffer any disproportionately high and adverse human health impacts. *See id.*

The environmental justice analysis in the draft SWEIS thus appears to focus solely on only one of the three factors needed to analyze whether human health effects are disproportionately high and adverse. The analysis appears centered upon conclusions that the health effects, in terms of risks and rates, do not exceed generally accepted norms. The draft SWEIS reaches this conclusion even though the document only summarizes recent state and county data regarding cancer incidence and mortalities without citing or comparing that data to any Pueblo-specific statistics. *See id.* at 4-95.

There are additional reasons why even the conclusions for this one very limited portion of the required environmental justice analysis is of concern to Santa Clara Pueblo. As discussed more fully below in section III B, Santa Clara Pueblo leadership was not consulted about the assumptions used to determine "special pathways." We believe the assumptions were not necessarily complete enough to fully analyze the effects on Santa Clara. In addition, we have concerns about the reliability of statements in the draft SWEIS regarding analysis of human health effects of LANL operations on the general populace (to which the specific effects on Santa Clara are being compared). For instance, the draft SWEIS cites an April 2005 report of the Agency for Toxic Substances and Disease Registry ("ATSDR") for its conclusion that cancer rates in the Los Alamos area are not higher than other communities. *See id.* at 4-94. Yet, upon further investigation, it appears that the ATSDR study relied upon in the draft SWEIS was never finalized, and, in fact, was criticized by the Environmental Protection Agency. *See* Letter from Cheryl Overstreet, Toxicologist, EPA, to Aaron Borrelli, ATSDR (July 27, 2005)(on file with the Pueblo).

Importantly, the CEQ Environmental Justice Guidance states that the analysis must go farther than just comparing health risk rates for Santa Clara to those rates generally accepted as being risky. The CEQ guidance instructs that the analysis should also answer these questions: Are the impacts to the tribe significant? Do the risks/exposure rate exceed those of the general

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terrestrial radiation from natural uranium, thorium, and potassium in the soil; and internal radiation (radiation from radioactive materials retained in the body, with the biggest contributor being radon gas). Chapter 5, Section 5.6.1, has been expanded to include additional information on radiation doses that could be received by those individuals subsisting off locally grown plants and vegetables and wildlife. In addition, Section 5.11 has been revised to provide more information regarding the environmental justice analysis completed in support of the LANL SWEIS.

**316-8** The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry Public Health Assessment of LANL in any specific way for its conclusions. It is appropriate, however, for the SWEIS to acknowledge the conclusions of the LANL Public Health Assessment because it is a relevant Federal agency study. The Agency for Toxic Substances and Disease Registry is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting public health assessments at each site on the EPA National Priorities List. The Public Health Assessment was finalized and published on August 31, 2006; the reference in the SWEIS has been updated. Appendix I to the final Public Health Assessment lists the comments on the draft that were received from members of the public and other Federal agencies and describes how those comments were addressed in the final document. The Public Health Assessment states that Agency for Toxic Substances and Disease Registry conducted its evaluations in accordance with guidance provided in the Public Health Assessment Guidance Manual, which is available to the public at [www.atsdr.cdc.gov/HAC/PHAManual/index.html](http://www.atsdr.cdc.gov/HAC/PHAManual/index.html).

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mainstream population? Is the tribe affected by cumulative or multiple adverse exposures to environmental hazards? See CEQ Environmental Justice Guidance at 26. This required discussion was not included in the environmental justice analysis in the draft SWEIS.

It appears from what can be ascertained of the technical discussion in Appendix C that, indeed, the radionuclide exposure rates for the more traditional "special pathways" user of natural resources and wildlife does, in fact, exceed that of the general population. It appears that the radionuclide exposure estimated would be more than twice as high for the "special pathways" user than for the general populace living offsite of LANL. See draft SWEIS at C-39 (offsite resident estimated to receive dose of 2.7 millirem per year compared to "special pathways" receptor dose of 4.5 millirem per year). Even with our concerns about the limited assumptions used for the "special pathways," this result clearly reveals an impact. CEQ Environmental Justice Guidance instructs that, to be included in the environmental justice analysis, the impact must be "significant" in accordance with NEPA. NEPA regulations defining "significantly" instruct that significance can refer to the intensity of an impact which can include the degree to which the possible effects on the quality of the human environment are likely to be highly controversial and the degree to which possible effects on the human environment are uncertain. See 40 C.F.R. at §1508.27. The draft SWEIS is clear that some of the effects of contaminant migration are still unknown and are being monitored and studied. See, e.g., draft SWEIS at 5-190. Consequently, even though the assumptions used in the analysis of "special pathways" were too limited and underestimated potential impacts, even with those limited assumptions the study completed in Appendix C shows a significant impact to Santa Clara that should be acknowledged in the draft SWEIS in accordance with the CEQ Environmental Justice Guidance. This did not occur.

Unfortunately, the majority of the environmental justice analysis in the draft SWEIS is simply incomplete. The draft SWEIS does not appear to take into account any of the three factors regarding discussion of disproportionate impacts to the environment found in the CEQ Environmental Justice Guidance. Additional environmental impacts that should have been more specifically analyzed for Santa Clara Pueblo as part of the environmental justice review are discussed in section III.C below.

The draft SWEIS also does not include any analysis of cumulative or multiple adverse exposures to environmental hazards in contravention of the CEQ Environmental Justice Guidance. This matter is of particular concern to Santa Clara Pueblo since the draft SWEIS admits that most of the risk of toxicity and carcinogenicity attributable to those using "special pathways" is due to "existing levels of contamination" resulting in part from past practices of LANL. Draft SWEIS at 5-92; see also *id.* at 5-157. Santa Clara's traditional practices have not changed through the generations and will not change despite LANL operations. The extent of bio-accumulation over multiple generations at the Pueblo due to past, present, and future contemplated LANL activities

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thus is of particular concern to us. This is an issue that should be analyzed in accordance with Executive Order 12898 but the methods and scope of the analysis needs to be determined through government-to-government consultation with the Pueblo in accordance with DOE's specific agreements with the Pueblo and DOE's own Indian policies.

- B. DOE failed to consult with Santa Clara Pueblo regarding its assumptions about "special pathways" for the draft SWEIS environmental justice analysis.

The DOE in its *American Indian and Alaska Native Tribal Government Policy*, DOE Order 1230.2 ("DOE Indian Policy") states that "[t]he DOE will seek to determine the impacts of Departmental-proposed legislation upon Indian nations, in extensive consultation and collaboration with tribes." DOE Indian Policy at § 1. That same policy indicates that "interacting with tribal governments with regard to the impact of Departmental programs" in order "to protect American Indian . . . traditional and cultural lifeways, natural resources, . . . and other federally recognized and reserved rights" is part of DOE's trust responsibility. *Id.* at Definitions (see definition of "Trust Responsibility"). In the *Accord between the Pueblo of Santa Clara, a Federally-Recognized Indian Tribe and the Department of Energy* (Dec. 15, 1992)("1992 Accord"), the DOE agreed that the DOE would "consult with the Pueblo to assure that tribal rights, responsibilities, and concerns are addressed prior to the DOE taking actions, making decisions, or implementing programs that may affect the Pueblo."

Various interactions with staff at Santa Clara Pueblo notwithstanding, government-to-government consultation did not occur with Santa Clara Pueblo regarding the assumptions DOE used for its draft SWEIS to describe "special pathways." This is unfortunate since the draft SWEIS states that "special pathways" users are "[a]ssumed to have traditional Native American or Hispanic lifestyles and diet" and since the "special pathways" analysis appears to be the cornerstone of the DOE's environmental justice analysis. Draft SWEIS at C-29 (table C-21); see also *id.* at 5-156 through 5-157.

While it appears that some of the "exposure pathway components" assessed for the "special pathways" user do correspond to some practices at Santa Clara Pueblo, the assumptions about consumption patterns and pathway components do not include many animal and plant products that are used by Pueblo members in the areas near LANL. In addition, because the "special pathways" analysis appears focused only on radioactive contaminants, the full scope of concerns for Santa Clara Pueblo was not addressed in the analysis. For instance, the evaluation of human health impacts in Appendix C of the draft SWEIS states that:

[c]ontaminants known to have been released to the environment from site operations include nitrates and perchlorate, as well as various high explosives and organics. These materials are present in groundwater and surface water on or near

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**316-9** The Los Alamos Site Office Manager and the NNSA SWEIS Document Manager met with the Pueblo representative several times during the preparation of the SWEIS. Discussions included various issues addressed in the SWEIS. Text has been added to Chapter 6, Section 6.5 of the SWEIS, to update the description of Tribal Consultations.

The special pathway components that were included in the calculation of exposures to contaminants in the environment were comparable to those analyzed in the *1999 SWEIS*. Those pathway components had been selected after discussions with Pueblo members and consideration of a range of other possible exposure circumstances. The current SWEIS dose and risk calculations, presented in Appendix C, assumed consumption of game animals, including consumption of some nongame fish, native vegetation (pinyon nuts and Indian tea [cota]), surface water, and incidental ingestion of soil and sediments in surface water and from swallowing inhaled dust. These pathways are in addition to the meat, milk, produce, water and sediment consumption reflected in the "offsite resident" pathway assumption. These products have been monitored regularly by the LANL environmental surveillance program. Except for purslane (in 2005), no data were found for other wild plants and animal products identified as being important to the Pueblo's traditional practices.

If foodstuffs or other exposure pathways important to the Pueblos are not being monitored, the Pueblos should identify the specific foods and practices to DOE so their concerns can be addressed by the LANL environmental surveillance program and future analyses. Information needed to adequately consider the exposure potential would include the specific natural materials (plants or animal parts used), where the materials are obtained, how they are used (eaten raw, smoked, stewed, dried), the amounts used, the number or fraction of Pueblo people who use them, and the approximate frequency of use (daily, weekly, monthly).

There are many possible routes by which people may be exposed to contaminants in their environment. Certain individuals may consume foods or engage in activities that are specific to their culture on a regular (daily or weekly) basis, and most members of the population may occasionally consume those foods and engage in those activities. On average, however, all people in a population will consume a predictable quantity of water and basic foodstuffs every year. For that reason, it

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LANL, and therefore represent a potential direct impact on the health of the current population from past LANL operations.

*Id.* at C-41.

These sorts of contaminants do not appear to have been included, however, as part of the analysis of how those using "special pathways" may be affected.

Thus, the analysis for environmental justice concerns in the draft SWEIS as it relates to Santa Clara Pueblo's interaction with the natural world appears woefully inadequate. This, we believe, is due in part to the fact that the Pueblo was not consulted by the DOE at the leadership government-to-government level regarding the Pueblo's views about how interrelated cultural factors may amplify the natural and physical environmental effects of the proposed agency action for Santa Clara.

- C. Additional impacts to Santa Clara Pueblo for activities discussed in the draft SWEIS for which government-to-government consultation with DOE did not occur.

In the 1992 Accord, DOE agreed that it "will consult with the Pueblo about the potential impacts of proposed actions on the Pueblo and its cultural, religious, and environmental resources and will avoid unnecessary interference with traditional practices." In this section, Santa Clara Pueblo highlights some concerns in addition to those previously discussed herein that also were not addressed in the environmental justice section of the draft SWEIS.

- (i) *Air quality impacts*

Increased emissions as they relate specifically to Santa Clara Pueblo, were not analyzed in the draft SWEIS. Santa Clara Pueblo is downwind of LANL. Monitoring at the Pueblo shows that the prevailing winds come from the southwest and that there is an indication of contaminant transport from LANL to the Pueblo via particulate. Thus it appears radionuclide emissions from LANL can disperse over Pueblo lands and must be closely monitored. The draft SWEIS states that the Los Alamos Neutron Science Center or LANSCE, which is used to produce neutrons and other subatomic materials, accounts for more than 90% of all radionuclide air emissions from LANL. See draft SWEIS at 3-59. Consequently increases in LANSCE activities resulting from refurbishment planned under the expanded operations alternative has the potential to increase such emissions specifically to Santa Clara Pueblo.

Emissions can also result from engine exhaust due to increased traffic on State Road 30. It appears that all three alternatives discussed in the draft SWEIS result in increased traffic, but that

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is widely accepted within the scientific and regulatory community that ingestion of water and foodstuffs is, in general, the most significant route of exposure to contaminants in the terrestrial environment. To estimate that exposure to individuals subsisting on a special pathways diet, the SWEIS analysis assumes that all foodstuffs are locally grown and that drinking water comes from local wells. Furthermore, additional exposure to these individuals is assumed to occur through: a) occasional ingestion of surface water, soil and sediment from more contaminated LANL locations; and b) occasional consumption of certain wild foods that have higher levels of contaminants than most locally-grown meats and vegetables. As an added measure of conservatism, only positive (greater than zero) environmental sample results were used to estimate the 95 percent upper confidence level contaminant concentration values from which ingestion pathway exposures were calculated. By using only the positive values, the exposure estimates presented in the SWEIS are likely to be significantly larger than the actual exposures received by the great majority of Pueblo members.

Nonradioactive contaminants are addressed in the SWEIS analysis as it applies to Pueblo members. As detailed in Appendix C of the SWEIS, the ingestion pathway analysis includes three sets of exposure components: the Offsite Resident set, the Recreational User set, and the Special Pathways set. All three sets of pathway components apply to Pueblo members. Therefore, the cancer risk or health hazard to a Pueblo member is the sum of the risk or hazard index values from all three sets of exposure components, insofar as they apply to that individual. The cancer risks and hazard indices associated with intake by an Offsite Resident of nitrate, perchlorate, high explosives, and organics in groundwater and sediment are presented in Appendix C, Tables C-42 and C-45, of the SWEIS. The cancer risks and hazard indices associated with intake by a Recreational User of nitrate, perchlorate, high explosives, and organics in surface water and sediment are presented in Tables C-43 and C-44 of the SWEIS. The cancer risks and hazard indices to the Special Pathways Receptor from the ingestion as nonradioactive contaminants in fish are presented in Table C-50.

**316-10** Emissions as they relate directly to the Santa Clara Pueblo were not specifically addressed in the SWEIS. The SWEIS addresses emissions for each of the alternatives and the potential health effects related to these emissions. Current air sampling programs at LANL include



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the expanded operations alternative would cause the greatest increase in traffic. *See id.* at 5-199. State Road 30 passes directly through the middle of the Pueblo, separating two major Pueblo housing areas. Santa Clara Pueblo already has letters on file from NNSA Manager Edwin Wilmot and LANL Director Robert Kuckuck confirming that much of the current vehicular traffic utilizing State Road 30 is generated by LANL employees living in the Española Valley and commuting to and from LANL. This is not only a safety concern for the Pueblo but raises concerns regarding air pollution as it affects all of the traditional practices that we described in the introduction to these comments.

Emissions, be they radionuclide or simply engine exhaust, settle on the soils and, as evidenced by the soil erosion after the Cerro Grande fire, infect surface water runoff, all of which cause impacts to our traditional practices. As discussed above, the full spectrum of those practices and potential pathways do not appear to have been included in the "special pathways" analysis, thus underestimating impacts to Santa Clara.

(ii) *Surface water quality impacts*

Toxic contaminants from LANL operations have already been found in surface waters near LANL. *See, e.g., draft SWEIS* at 4-39. Storm water runoff contributing to surface water pollution is a large concern especially because of the topsoil erosion resulting from the Cerro Grande fire. *Id.* at 4-56. Although surface flows in the canyons by LANL empty in the Rio Grande below Santa Clara, surface water contamination does impact Santa Clara because of the Pueblo's cultural practices. Wildlife that consume those surface flows are used by Pueblo members as part of our own traditions. The whole animal is utilized in Pueblo traditions far more than in the general population (and far more than was recognized in the "special pathways" analysis) making contamination effects more serious for Santa Clara. Many more herbs and plants that depend upon those surface flows are collected and utilized by Pueblo members than were taken into account in the "special pathways" analysis. In addition, contamination of surface supplies for neighboring downstream Pueblos also affects Santa Clara because of the Pueblo tradition of attending feasts of, and consuming traditional foods grown by, the other Pueblos.

The CEQ Environmental Justice Guidance instructs that "[a]gencies should recognize that the question of whether agency action raises environmental justice issues is highly sensitive to the history or circumstances of a particular community or population . . . ." CEQ Environmental Justice Guidance at 8. That same guidance indicates that agencies should take into account "the nature and degree of impact on the physical and social structure of the community." *Id.* at 9. These sorts of impacts to surface water quality are difficult to describe in a technical model, but as described here, very much relate to the social fabric of all of the Pueblo people including Santa Clara.

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**316-11**

ambient nonradiological air monitoring, an ambient radiological air sampling network called AIRNET, and stack sampling for radionuclides, as described in Chapter 4, Sections 4.4.2.3 and 4.4.3.1, of the SWEIS. The Clean Air Act, Title V, operating permit includes requirements for monitoring emissions from sources at LANL and recordkeeping concerning those sources. Although toxic and radioactive air emissions can potentially have detrimental impacts, the past emission levels analyzed and those projected for LANL would not be expected to cause unacceptable impacts on human health or the environment, as shown in Chapter 4, Sections 4.6.1.3, 5.4.1.1, and Chapter 5, Section 5.6.2.

Text has been added to the Summary and Chapter 5, Section 5.4.1.3, discussing the potential increase in emissions from increases in commuter traffic to LANL. Increased employment under the Expanded Operations Alternative could result in increases in LANL commuter vehicle emissions from additional employee vehicles commuting from Santa Fe and Rio Arriba County and other locations. Employment levels and commuter traffic levels (see Chapter 5, Section 5.10) are not projected to increase under the No Action and Reduced Operations Alternatives based on the activities analyzed in the SWEIS. Although the cumulative impacts analysis in the Draft SWEIS considered employment from a modern pit facility, those numbers have been removed because NNSA has announced cancellation of the previous proposal to build a modern pit facility. (See the response to Comment no. 316-5 above.) The increase in employee vehicles and the state-projected increase in other vehicles resulting from the increase in LANL employment would be expected to result in increases in vehicle emissions along NM 30 and other routes used to access the site. An analysis of operations and construction traffic indicates that there would be a five percent increase in traffic levels on NM 30 from increased employment at LANL during the 5-year time period (2007 through 2011) under the Expanded Operations Alternative. During this same time period, there would be a projected increase of six percent on NM 502 from operations and construction traffic and shipments from LANL. Similar increases in accidents (see Chapter 4, Section 4.10.2 for existing accident rates by county) and air pollutant emissions along these routes would be expected. Appendix C of the SWEIS examines the potential health impacts to persons whose traditional living habits and diets could cause greater exposures to environmental contaminants

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(iii) *Ground water quality impacts*

As the draft SWEIS admits, toxic contaminants resulting from LANL activities, such as tritium and perchlorate, have already reached the deep regional aquifer. See draft SWEIS at 4-63 through 4-64. Just a few weeks ago, the NMED issued a rather large civil penalty against LANL for violating the NMED Consent Order by failing to report for many months the discovery of toxic hexavalent chromium contamination in one of the groundwater monitoring wells at LANL. See John Arnold, *Lab Faces \$795K Fine for Delayed Chromium Report*, ALBUQUERQUE JOURNAL NORTH (Sept. 16, 2006) at <[http://www.abqjournal.com/north/493500north\\_news\\_09-16-06.htm](http://www.abqjournal.com/north/493500north_news_09-16-06.htm)>. The regional aquifer underlying LANL is also the source of supply of drinking water for Santa Clara Pueblo. Thus, deep groundwater contamination, regardless of the speed in which it may occur, ultimately impacts Santa Clara Pueblo.

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Santa Clara Pueblo has learned that on September 20, 2005, the DOE Inspector General, in reviewing 32 existing LANL wells that could be used for monitoring the regional aquifer as part of the NMED Consent Order, stated that the manner in which existing LANL monitoring wells were constructed masked detection of radionuclide contamination and could "compromise the reliability of groundwater contamination data." U.S. Department of Energy Office of Inspector General, *Inspection Report: Characterization Wells at Los Alamos National Laboratory* (DOE/IG-0703) (Sept. 2005) at 4. Until this problem is completely remedied, the extent of potential groundwater contamination cannot be known. Groundwater must therefore be accurately and carefully monitored at Santa Clara Pueblo for any contaminants from LANL.

(iv) *Water quantity impacts*

The draft SWEIS states that the expanded operations alternative, if fully implemented, could exceed LANL's water rights. See draft SWEIS at 3-77. This is extremely disturbing considering that the draft SWEIS also contains a statement indicating that DOE has an agreement with Los Alamos County that allows LANL to withdraw "an equivalent of about 5,541 acre-feet . . . per year . . ." as well as to purchase some of the County's allocation of 1,200 acre-feet per year of San Juan-Chama Project water. *Id.* at 4-128. If, in fact, LANL truly has access to over 6,000 acre-feet of water per year for use solely at LANL, then LANL already has access to an enormous quantity of water. We question the accuracy of the statement in the draft SWEIS. Regardless, LANL as a junior water user must live within its means. To contemplate growth that exceeds LANL's water budget is simply irresponsible and of great concern to Santa Clara Pueblo.

316-13

In any event, the draft SWEIS downplays this potential impact by stating that Los Alamos County, the current operator of the Los Alamos Water Supply System from which LANL now gets its water, is trying to secure use of additional water through converting its San Juan-Chama Project allocation contract into a permanent contract. See *id.* at 4-128. In fact, Los Alamos

than would be experienced by the hypothetical offsite resident whose diet would not consist of home-grown foods. Please refer to the response to Comment no. 316-8 for a discussion of how sediments and soils were analyzed to develop the dose to the Special Pathways receptor.

**316-11** It is well documented that the Cerro Grande fire increased the surface water flows and migration of contaminants off the site. However, the effect on human exposure from those contaminants through the ingestion pathway appears, thus far, to be minimal. The radionuclide concentrations in foodstuff samples from the post-Cerro Grande fire period are not notably different from the results reported before the fire. As noted in Appendix C, Section C.1, the calculated radiation doses for 12 of the 17 ingestion pathway components (including fish and elk) actually decreased slightly from the values reported in the 1999 SWEIS due to the lower average radionuclide concentrations in 2001-2005 environmental media samples. Please see the response to Comment no. 316-8 for a discussion of the products used in the Special Pathways receptor analysis.

The ingestion pathway analysis made use of several conservative assumptions to ensure that the impacts of environmental contaminants were not underestimated. The 95 percent upper confidence level contaminant concentration values used to calculate ingestion pathway exposures were developed using only positive (greater than zero) environmental sample results. By using only the positive values, the exposure estimates presented in the SWEIS are significantly higher than the actual exposures likely to be received by most Pueblo members. In addition, the assumed intake of food, water, soil and sediment represent exposures to a person who lives full-time in a location with the highest soil and sediment contamination and eats only foods with the highest calculated concentrations of each contaminant. As shown in Appendix C, no adverse health impacts are expected even using these unrealistically high hypothetical exposure assumptions. An occasional visitor to such a maximum exposure location or a person who consumes those particular foods only on special occasions would necessarily have a lower contaminant intake and health risk than the hypothetical person represented by the analysis.

**316-12** NNSA operates a monitoring program (described in Section 4.3.1.5) to detect contamination that has resulted from past practices. LANL staff

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County's contract allocation for 1,200 afy of San Juan-Chama Project water became permanent as of September 20, 2006. See Russell Max Simon, *Area's Water Future is Flush*, ALBUQUERQUE JOURNAL NORTH (Sept. 20, 2006) at <[http://www.abqjournal.com/north/494268north\\_news.09-20-06.htm](http://www.abqjournal.com/north/494268north_news.09-20-06.htm)> The draft SWEIS indicates that this additional water from the San Juan-Chama Project contract would alleviate concerns about LANL exceeding its current water budget.

However, there are additional impacts associated with use of the San Juan-Chama Project water allocation which are not addressed in the draft SWEIS. At this juncture, regardless of the permanent nature of the contract for those water rights, it seems speculative for the draft SWEIS to state that the San Juan-Chama Project water may actually be piped up into the canyon from the Rio Grande for use at LANL. See draft SWEIS at 4-128. Initial feasibility studies notwithstanding, the costs of construction may be prohibitive regardless of technical feasibility. More likely, the San Juan-Chama Project water rights would be used in the Los Alamos area by increasing groundwater pumping in the existing Los Alamos wellfield in the deep regional aquifer while releasing the actual San Juan-Chama Project water from Heron reservoir to alleviate the effects of the increased groundwater pumping on the surface flows of the Rio Grande. The current Los Alamos County water production system which supplies water now to all of the County and LANL consists of 14 deep wells connected to distribution lines, pump stations, and storage tanks. *Id.* at 4-127. This more likely possibility of utilizing existing infrastructure was not discussed in the draft SWEIS.

Such increased pumping of the regional aquifer by LANL in order to utilize the additional San Juan-Chama Project rights through the existing Los Alamos County wellfield will result in cumulative effects over time on Santa Clara's own utilization of the groundwater of the regional aquifer for its own drinking water source. Such impacts would not necessarily be alleviated by releases of San Juan-Chama Project water into the Rio Grande because releases into the Rio Grande would not necessarily address LANL groundwater pumping impacts on regional groundwater supplies underlying Santa Clara Creek (which is Pueblo's most pristine source for future drinking water supplies). In addition, monitoring would be needed to ensure that the increased pumping does not adversely affect any surface flows within Santa Clara Pueblo lands, including surface flows of Santa Clara Creek. This is necessary to protect the Pueblo's senior surface water rights from the effects of pumping by LANL, a junior user.

(v) *Waste generation, storage, and removal impacts*

The increase in waste generation at LANL resulting from expanded operations, including the additional plutonium pit production, is a critical issue for the Pueblo. The expanded operations alternative appears to increase both onsite and offsite storage issues. Santa Clara Pueblo is already concerned about how Area G, LANL's radioactive waste dump, is managed. Area G

316-13  
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316-14

evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters, in accordance with applicable regulations and agreements. Refer to Section 2.5, Water Resources, of this CRD for a discussion of contaminant detection and monitoring wells.

**316-13** LANL does not have access to over 6,000 acre-feet of water per year for its sole use. On the contrary, Chapter 4, Section 4.8.2.3, of the SWEIS explains that NNSA completed the transfer of ownership and operation of the Los Alamos County water production system to Los Alamos County on September 5, 2001. NNSA also transferred 70 percent of its water rights (3,879 acre-feet or 1,264 million gallons [4,785 million liters] annually) for LANL to Los Alamos County at that time and leases the remaining 30 percent to the County. LANL is now a County water customer, and NNSA is billed and pays for the water it uses in accordance with a water service contract. While this contract does not specify a supply limit to LANL, the water rights owned by NNSA and leased to Los Alamos County (that is 1,662 acre-feet or 542 million gallons [2,050 million liters] per year) is a good target ceiling under which LANL should remain for the purposes of gauging water use management efforts.

NNSA has updated its utility demand projections as presented in the SWEIS. As discussed in Chapter 5, Section 5.8.2.3, under the Expanded Operations Alternative, LANL operational demands combined with the larger and growing demands of other Los Alamos County users could require up to 97 percent (rather than 101 percent projected in the Draft SWEIS) of the currently available water rights. Even so, LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling of 542 million gallons (2,052 million liters) per year.

NNSA continues to work with Los Alamos County in implementing measures to conserve water and in planning for future water demands. NNSA has attempted to document current water supply conditions while characterizing planning efforts and proposals related to the future availability of water as they are currently known. Accordingly, Chapter 4, Section 4.8.2.3, of the SWEIS has been revised to explain that the conversion of the Bureau of Reclamation water contracts into permanent repayment contracts was completed in September 2006 and that this development was necessary in order to enable Los Alamos

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already has thousands of drums of waste stored in fabric tents awaiting transport to the Waste Isolation Pilot Plant ("WIPP") while lower level radioactive waste continues to be disposed of in unlined shallow pits. Santa Clara is thus distressed to learn that the expanded operations alternative would cause the most significant increase in low level radioactive waste generation and also would result in transuranic waste levels that exceed the quantities that WIPP is allowed to take. See draft SWEIS at 5-196 and 5-197. Until DOE can get a better handle on cleaning up legacy waste, it is irresponsible to agree to undertake additional activities that generate additional waste, especially if that waste has no known disposal path.

**316-14  
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Waste remediation creates a "catch-22" situation for Santa Clara Pueblo. Capping and leaving such wastes at LANL is already causing problems as evidenced by LANL contaminants found in surface and ground waters nearby. However, the "removal option" also raises safety concerns for the Pueblo since transport off the hill implicates having such waste traveling through Santa Clara Pueblo lands. Both processes impact the Pueblo and those impacts can and must be mitigated as DOE contemplates future operations under any scenario.

**316-15**

(vi) *Safety impacts*

There a number of way in which safety issues are implicated by LANL activities, some of which have not been fully analyzed in the draft SWEIS.

The draft SWEIS admits that DOE has not yet completed all of the necessary calculations regarding probable seismic hazards. The draft SWEIS indicates that a "comprehensive review and reanalysis of seismic hazard" is planned but will not be completed until the end of 2006. Draft SWEIS at 4-25. It is thus premature to assess important safety impacts associated with seismic hazards since the study is not yet complete.

**316-16**

As mentioned above, there also are a number of safety issues associated with waste storage at LANL and waste transport away from LANL. As recently as September 13, 2006, area newspapers reported that fines were issued for multiple safety violations at LANL including "two separate 2005 contamination events." See John Arnold, *UC Fined for LANL Safety Violation*, ALBUQUERQUE JOURNAL NORTH (Sept. 13, 2006) at <[http://www.abqjournal.com/north/492148\\_north\\_news09-13-06.htm](http://www.abqjournal.com/north/492148_north_news09-13-06.htm)>. Moreover, in the discussion of health concerns associated with on-site waste storage, the draft SWEIS indicates that a fire in waste storage domes at Area G, which under the expanded operations alternatives could double the amount of waste stored, presents one of the greatest public health risks associated with LANL operations. See draft SWEIS at S-53. Of course, this is a safety issue too.

**316-17**

The other major safety issue looming large is the risk of terrorist acts against LANL, especially in the event that LANL expands its development of plutonium triggers.

**316-18**

County to move forward with efforts to access San Juan-Chama project water, consistent with statements by Los Alamos County officials. This contract conversion was evaluated and approved under an environmental assessment and Finding of No Significant Impact (FONSI) issued by the U.S Bureau of Reclamation in May 2006. Further, Chapter 4, Section 4.8.2.3 of the Final SWEIS summarizes the options that the County is considering for physical diversion of San Juan-Chama project water, including possible direct use by LANL, as documented in the County's Long-Range Water Supply Plan, completed in August 2006.

Any detailed treatment of the merits, associated impacts, and costs of the options under consideration by Los Alamos County to directly access and use San Juan-Chama project water is speculative at this time and are outside the scope of the SWEIS. Appropriate environmental impact documentation would be prepared by Los Alamos County in order to analyze the options carried forward to access San Juan-Chama project water. Chapter 5, Section 5.8.2.1 of the SWEIS notes that the earliest that San Juan-Chama project water might be available is 2010. Any environmental impacts identified through the course of impacts analysis performed by Los Alamos County would be considered in subsequent National Environmental Policy Act (NEPA) compliance documentation prepared by NNSA. Although circumstances could arise which might necessitate that San Juan-Chama water rights be used to offset groundwater pumping rather than physical diversion of San Juan-Chama water, which is evaluated in the County's Long-Range Water Supply Plan, this too is speculative at this time. Any such offset scenario would be subject to the approval of the Office of the State Engineer to ensure that senior water rights are fulfilled. NNSA understands that proposed expansion of LANL and its future operations will be bound by the availability of water, just as the growth of the greater Los Alamos area will be. Refer to Section 2.8, Water Use, of this CRD for more information on LANL's water use, available water rights, and water supply planning.

**316-14** Large amounts of low-level radioactive waste and transuranic waste would be generated if the Expanded Operations Alternative were fully implemented. The estimated waste volumes are conservatively estimated to bound potential impacts. As the commentor notes, NNSA states in Chapter 5, Section 5.13, that offsite disposal of low-level radioactive waste could be required, and that transuranic waste volumes could exceed the

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While at first glance, these issues may not appear to implicate Santa Clara Pueblo, in fact all of these sorts of potential safety failures directly affect the Pueblo. That is because Santa Clara Pueblo would be amongst the first responders for any safety failures that lead to evacuations of LANL.

(vii) *Other impacts to traditional practices and cultural resources*

While Santa Clara Pueblo appreciates the efforts made by the DOE to work with Santa Clara Pueblo through the foundational processes set forth in the 1992 Accord, and while we believe that we have made good progress together on the trails management program and on addressing concerns regarding Rendija Canyon, we must emphasize the need for the DOE and the new managers of LANL to continue to work with the Pueblo to protect cultural resources as cultural resource issues may be implicated by every aspect of LANL operations going forward. Also, we urge the DOE to never assume that Santa Clara Pueblo is fine with any contemplated activity unless direct and proper communications about cultural resources have occurred. As a result of the Cerro Grande fire, many more cultural sites have been exposed. Given that so many more sites have been exposed, and since the range of activities covered in the draft SWEIS, even for just the "no action" alternative, is enormous, it is virtually impossible for the Pueblo at this juncture to identify all such potential areas with cultural properties that may be impacted by LANL activities.

We are concerned, however, when we read statements in the draft SWEIS such as the following:

Most actions associated with implementing the Security-Driven Transportation Modifications Project would have little or no impact on cultural resources since no known cultural sites are located within any of the areas to be disturbed.

Draft SWEIS at 5-107.

Although the same paragraph goes on to state that proper LANL procedures will be followed if previously unknown cultural resources are identified, Santa Clara Pueblo still has concerns about when and how the identification process will take place.

This issue is of central importance to Santa Clara Pueblo since cultural resources do not just preserve our traditions, they are our traditions and are necessary to our practices. It is important to remember that traditional cultural properties need not be characterized by some physical evidence of human activity and thus can be overlooked by those who are not privy to knowledge about our practices.

Therefore, it is imperative that a more complete process for consultation be established in

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amounts identified for LANL as referenced in the *WIPP Disposal Phase Final Supplemental EIS* (DOE/EIS-0026-S2) (DOE 1997b). However, much of the transuranic and low-level radioactive waste projected for the Expanded Operations Alternative is attributable to remediation actions; the actual amount generated will depend on future regulatory decisions by the New Mexico Environment Department, and may be substantially smaller than projected. NNSA will factor these potential impacts into its decisions regarding the implementation of options identified in the Expanded Operations Alternative. Refer to Section 2.7, Waste Management, of this CRD for more information.

**316-15** Some contamination of ground and surface waters has occurred due to past LANL operations. As discussed in Chapter 2, Section 2.2.6, NNSA is conducting an environmental restoration program to address the remaining potential release sites at LANL including material disposal areas, firing sites, outfalls, and others. With respect to material disposal areas, the SWEIS addresses two broad options for remediation: capping in place and removal. Capping would enhance the current configuration of the material disposal areas, providing greater environmental protection over the long term. Removal would completely remove the waste. As suggested by the commentor, each option would have environmental impacts as well as benefits (see Appendix I). For example, Appendix I, Section I.5.10, addresses possible impacts from transporting wastes from environmental restoration to offsite treatment and disposal facilities. Transuranic waste would not be transported through the Santa Clara Pueblo, and low-level radioactive waste would be transported through the Santa Clara Pueblo only if a decision is made to dispose of the waste in a commercial facility. These and other considerations would need to be weighed by NNSA and the State of New Mexico when making environmental remediation decisions consistent with established regulatory processes. Mitigation measures for impacts identified in the SWEIS are addressed in Chapter 5, Section 5.14, of the SWEIS.

**316-16** An update to the seismic hazard analysis was completed in June 2007. Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the

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accordance with the foundation set forth in our 1992 Accord prior to a final SWEIS and record of decision thereto in order to ensure proper communication occurs before any land disturbance for any activity contemplated in any of the alternatives discussed in the draft SWEIS. Given recent changes in management of LANL, it is important to revisit these issues and to ensure that DOE and the Pueblo are on the same page regarding all aspects of this process. The process should include how Santa Clara Pueblo will be given access to classified areas affected by activities discussed in the draft SWEIS. There are members of the Santa Clara Pueblo who already have the proper clearances for classified areas.

As is recognized in the 1992 Accord, cultural sensitivity goes beyond identification and protection of cultural resources. Traditional practices also can be affected by LANL activities. Santa Clara Pueblo has already gone on record objecting to the practice of conducting explosives testing during ceremonial dances at the Pueblo. This impact, which of course goes beyond just a "noise" impact, was not addressed in the draft SWEIS.

- D. The draft SWEIS does not meet Executive Order 12898's standard to provide an understandable analysis that is readily accessible to the public.

To the extent that DOE reviewers of these comments conclude that Santa Clara did not fully synthesize or accurately portray the environmental justice or other analyses in the draft SWEIS or failed to fully parse out analysis of potential impacts, such conclusions only underscore our point here. The document is very long with key issues discussed in multiple places and contains language in parts of the document that is extremely difficult for the public to comprehend. Executive Order 12898 requires that "[e]ach Federal agency shall work to ensure that public documents . . . relating to human health or the environment are concise, understandable, and readily accessible to the public." Executive Order 12898 at § 5-5c).

The draft SWEIS fails to meet these standards for understandability and community access. As mentioned in section II.A(ii) above, all of the underlying materials were not made readily available on the DOE/LANL website for review. It is difficult to believe that all of the underlying background documents could not be linked on a DOE website when DOE is, through the draft SWEIS, claiming that its preferred alternative is to expand its production of key components for nuclear weapons. In other words, if DOE wants the public to believe it can handle the complexities of nuclear physics, at a minimum DOE should be able to ensure that public documents relating to the health of the surrounding communities are made readily accessible on the internet.

In addition, especially when the analysis relates to environmental justice issues, DOE needs to ensure that the underlying documents are available and the analysis is understandable in order to meet the requirements of Executive Order 12898. There are portions of Appendix C, upon which

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significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

The new geological information in the 2007 seismic hazard analysis report has been interpreted as indicating that the seismic hazard at LANL is greater than previously understood. The relevance of the seismic hazard to facility accidents will undergo a rigorous and thoughtful evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

Following the NEPA process but prior to the design and operation of specific facilities, safety studies in the form of Hazard Assessment Documents and Safety Analysis Reports that include seismic concerns and take into account the most current seismic information would be prepared to address a comprehensive set of accident risks. The results of these safety studies would be incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

**316-17** Impacts associated with waste transportation and potential wildfires affecting the transuranic waste management domes are presented in Chapter 5, Sections 5.10 and 5.12, of the SWEIS, respectively. In a cleanup scenario with the maximum amount of transportation involved, all transportation over a 10-year period would be expected to result in less than 1 latent cancer fatality in the population and 3 traffic fatalities. NNSA recognizes that a wildfire accident affecting the transuranic waste management domes is one of the largest risks associated with operations. Efforts are underway to reduce the amount of transuranic waste in the domes by shipping it to WIPP for disposal. As noted in Chapter 3, Section 3.6, in 2000, the Cerro Grande Fire burned to within 0.75 miles (1.2 kilometers) of the domes, but none were burned. Since that time, fuel reduction has been conducted by removing vegetation surrounding TA-54 and combustible materials in the domes, further reducing the likelihood of wildfire affecting the domes.

**316-18** NNSA notes the commentor's statement that the threat of terrorism is increased by an expansion of pit production. There is no reason to believe that a change in the level of pit production would make LANL more or less likely to be the target of terrorists. DOE gives high priority

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DOE bases most of its conclusions regarding environmental justice concerns, which are incomprehensible to anyone not familiar with the technical model used for that study. It is difficult, for Santa Clara Pueblo to ascertain the underlying assumptions in the following description:

Radionuclides emitted to the air and subsequently ingested through food crops is one pathway of exposure used by CAP-88. CAP-88 uses average agricultural productivity data for New Mexico based on the address of LANL when determining the agricultural data. The EPA Food Source Scenario used in CAP-88 was the rural setting.

Draft SWEIS at C-14.

How can Santa Clara Pueblo determine, through the description quoted above, what was, in fact, modeled for ingestion of food crops? Santa Clara has no access to this technical model or the underlying documentation for it. Yet, an understanding of that very issue appears essential to understanding the assumptions made about environmental impacts of the proposed action on Santa Clara Pueblo. This is simply one example which underscores the point that the level of technical discussion in the draft SWEIS relating to environmental justice issues combined with the lack of access to underlying documentation has hindered the ability for the Pueblo to fully assess such impacts and develop specific comments regarding the substance of various underlying assumptions used in the analysis. This contradicts the content and intent of Executive Order 12898.

**IV. A revised draft SWEIS must be circulated in order to comply with NEPA**

CEQ regulations regarding NEPA provide that environmental impact statements "shall be supported by evidence that the agency has made the necessary environmental analyses." 40 C.F.R. §1502.1. NEPA also requires that agencies prepare a draft environmental impact statement with the same general thoroughness as it will its final impact statement:

Draft environmental impact statements shall be prepared in accordance with the scope decided upon in the scoping process . . . The draft statement must fulfill and satisfy to the fullest extent possible the requirements established for final statements in [NEPA]. If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion . . .

40 C.F.R. §1502.9(a).

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to the safety and security of all of its facilities. Security and potential acts of terrorism are integral considerations in the designs and operating procedures for new and existing DOE facilities. Chapter 4, Section 4.6, has been revised to include additional discussion of the measures taken to protect assets at LANL from terrorist activities. As discussed in Chapter 5, Section 5.12.6, the impacts of terrorist action have been considered in a separate, classified appendix to the SWEIS.

- 316-19** NNSA notes the Pueblo's potential involvement in the event of a situation that would lead to evacuations at LANL. As noted in Chapter 4, Section 4.6.4, LANL staff maintains an Emergency Operations Center to respond to virtually any type of emergency. Through the communications and response apparatus established for the operation of the Center, NNSA and the LANL contractor would coordinate response actions to any emergencies, including any necessary evacuation.
- 316-20** NNSA does not agree that the existing process for consultation need be revised before issuance of a Final SWEIS and Record of Decision. In 2006, NNSA signed a restatement of the accords with the Santa Clara Pueblo that recognizes the Pueblo as a sovereign entity that can interact with the Los Alamos Site Office on a government-to-government basis. The Los Alamos Site Office has also signed the LANL Pueblo Cooperative Agreements which provide a procedural framework for consultation, as well as committing to provide information and input in long-term planning and decisionmaking. In addition, the LANL contractor has prepared A Plan for the Management of the Cultural Heritage at Los Alamos National Laboratory, New Mexico in which specific aspects of the consultation process are spelled out. NNSA is committed to continuing to interface with the Pueblo in accordance with these agreements and plan. When a project is proposed at LANL, archaeological records are searched to determine if any cultural resource sites are known to exist at the project area. If archaeological records do not exist for the project area, LANL personnel conduct the necessary surveys prior to any work taking place. If it is determined that traditional cultural properties are present, consultations called for under the appropriate accord and management plan will be undertaken. In addition, as required by Section 106 of the National Historic Preservation Act, DOE consults with state or Tribal historic preservation officers, or both, if a proposed action has the potential to affect a historic property.

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As these comments illustrate, the current draft SWEIS did not follow all of the NEPA requirements or the requirements for environmental justice review. The result is a document that precludes meaningful analysis. Thus, DOE must recirculate a revised draft SWEIS fixing these defects (especially with respect to environmental justice after consultation with the Pueblo leadership) and allow the Pueblo another opportunity to review and comment.

**V. Mitigation of impacts to Santa Clara Pueblo must be addressed**

Either through the issuance of a revised draft SWEIS or the finalization of the current draft SWEIS and for any record of decision related to the SWEIS, mitigation of impacts to Santa Clara Pueblo must be addressed and mitigation measures identified through direct government-to-government consultation with Santa Clara Pueblo. Such consultation should occur before any final SWEIS is issued.

Mitigation measures as defined in the CEQ regulations for NEPA include avoiding or minimizing environmental impacts, rectifying the impact by repairing, restoring, or rehabilitating the affected environment, reducing or eliminating the impact over time through preservation or maintenance, or compensating for the impact by providing substitute resources. 40 C.F.R. § 1508.20 (a)-(e).

DOE Indian Policy clarifies that the DOE will first try to avoid impacts to tribal trust resources but, if that is not possible, the Department will work with the affected tribe regarding corrective measures:

The DOE will be diligent in fulfilling its federal trust obligations to American Indian . . . governments in policy implementation and program management activities. The DOE will pursue actions that uphold . . . federally recognized and reserved rights of the Indian nations and peoples. The Department . . . will, to the extent of its authority, protect and promote these . . . trust resources and resource interests, and related concerns in these areas.

When internal policies, regulations, and statutes, or other barriers prohibit or hinder the DOE trust protection actions . . . the Secretary will direct the agency to seek corrective protection measures, and tribal government program inclusion.

\*\*\*\*\*

As appropriate, the DOE will provide delivery of technical and financial assistance related to DOE-initiated regulatory policy . . . The DOE will continue to conduct a dialogue with Indian nations for long and short term decision-making

316-22

316-23

**316-21** NNSA does not agree that the SWEIS fails to meet the provisions of Executive Order 12898. NNSA recognizes that in light of electronic capabilities now available, commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in the general vicinity of LANL. Those reading rooms are located in Los Alamos, Santa Fe, and Albuquerque. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional information.

With regard to noise there would be a 20 percent reduction in explosives testing under the Reduced Operations Alternative while under the Expanded Operations Alternative there would be no change from current levels (see SWEIS Section 3.1.3.7, Table 3-9). The Los Alamos Site Office will consider measures that better coordinate the scheduling of explosives testing in order to resolve any adverse effects of noise on traditional practices such as ceremonial dances at the Santa Clara Pueblo.

With respect to information specific to understanding assumptions used in the calculation of potential doses to offsite populations, Appendix C of the SWEIS was revised to include additional information to assist the reader in understanding the assumptions used in running the CAP88 model for the SWEIS. The Clean Air Act Assessment Package-1988 (CAP88) Model was developed by the EPA and is widely used for dose calculations throughout the government. Additional information regarding this model is available from the EPA at [www.epa.gov/radiation/assessment/CAP88/index.html](http://www.epa.gov/radiation/assessment/CAP88/index.html).

**316-22** NNSA disagrees with the commentor's assertion that deficiencies in the NEPA process and environmental justice review preclude meaningful analysis of the SWEIS. NNSA prepared the SWEIS in accordance with Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and DOE implementing procedures (10 CFR Part 1021). In implementing the NEPA process, NNSA provided reasonable opportunities for public input into preparation of the LANL SWEIS. For example, NNSA extended the comment period for responding to the Draft SWEIS by 15 days, and provided a number of other ways to comment on the



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when DOE actions impact Indian nations.

DOE Indian Policy at §§ I and III.

The CEQ Environmental Justice Guidance clarifies that the identification of a disproportionately high and adverse human health or environmental effect on an Indian tribe does not preclude a proposed agency action from going forward. Instead, it should "heighten agency attention to alternatives . . . , mitigation strategies, monitoring needs, and preferences expressed by the affected community or population." CEQ Environmental Justice Guidance at 10.

Also with respect to compliance with Executive Order 12898, on the same day the order was issued, President Clinton issued a separate memorandum regarding the executive order "to underscore certain provisions of existing law that can help ensure that all communities and persons across this Nation live in a safe and healthful environment." See *Memorandum for the President to the Heads of Departments and Agencies*, Comprehensive Presidential Documents No. 279 (Feb. 11, 1994) <[http://www.epa.gov/fedfac/documents/executive\\_order\\_12898.htm](http://www.epa.gov/fedfac/documents/executive_order_12898.htm)>. The President's memorandum accompanying Executive Order 12898 included the specific directive that mitigation measures identified as part of an environmental impact statement or record of decision should, whenever feasible, address significant and adverse environmental effects of proposed federal actions on Indian tribes and that those potential effects and mitigation measures should be identified by the federal agency in consultation with the affected tribe. See *id.*

As our comments illustrate, the LANL activities outlined in the draft SWEIS, including but not limited to those discussed in the expanded operations alternative, have significant and adverse environmental effects on Santa Clara Pueblo. Some of those adverse environmental impacts are disproportionately high when viewed in light of the CEQ Environmental Justice Guidance criteria.

The draft SWEIS describes various types of potential mitigation measures, including continued implementation of the 1992 Accord with Santa Clara Pueblo, but then states that the description of various mitigation measures "does not constitute a commitment to undertake any of these measures. Any such commitments would be reflected in the ROD [Record of Decision] following this SWEIS, with a more detailed description and implementation plan in a Mitigation Action Plan following the ROD." Draft SWEIS at 5-204.

In accordance with DOE Indian Policy, the Executive Order 12898 Presidential directives, and the CEQ Environmental Justice Guidance, Santa Clara Pueblo seeks and expects direct government-to-government consultation regarding mitigation measures to address impacts to the Pueblo. While we appreciate the reference to the 1992 Accord, referencing this protocol does not

**316-23  
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Draft SWEIS for persons unable to attend public hearings. As addressed in the response to Comment no. 316-20, consistent with existing practice, NNSA made the Draft SWEIS and reference material available for public review in DOE reading rooms in the general vicinity of LANL. The length of the SWEIS is consistent with its scope, while an effort has been made to present technical information in an understandable way. Thus, a revised Draft SWEIS is not required. Refer to Sections 2.2, National Environmental Policy Act (NEPA) Process, and 2.11, Environmental Justice, of the CRD for more information.

NNSA appreciates the input of the Santa Clara Pueblo for its involvement in the SWEIS preparation process and for the government-to-government relationship enjoyed by NNSA and the Pueblo. Pueblo issues and concerns were considered in the process of developing the SWEIS analysis; however, the NEPA process, and in particular the SWEIS preparation effort, is not necessarily the appropriate venue for addressing all Pueblo issues and concerns. NNSA pledges to continue to work through the government-to-government relationship process to address Pueblo issues and concerns.

**316-23** The Final LANL SWEIS projects no disproportionately high and adverse impacts to any low-income or minority groups, including the people of Santa Clara Pueblo. NNSA does intend to implement mitigation measures to reduce the potential for impacts to the environment and the public near LANL. Any mitigation measures, monitoring or other conditions adapted as part of NNSA's decision will be summarized in the Record of Decision. Mitigation measures for LANL operations will be detailed in the LANL SWEIS Mitigation Action Plan. The Mitigation Action Plan is a "living document" that may be changed as the need to do so is identified and is a legally binding commitment by NNSA. The Mitigation Action Plan is a separate document from the Record of Decision, however. Under DOE Order 1230.2, "American Indian Tribal Government Policy," as amended by DOE Notice 144.1, NNSA recognizes the government-to-government consultation process, and it is hoped that through this consultation process a mutually satisfactory relationship can be reached between the needs of the Pueblo of Santa Clara and NNSA's need for operating LANL to meet its Congressionally assigned mission requirements.

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complete DOE's mitigation duties. It is important to understand that public notices or requests for information sent to the Santa Clara Governor's office, as well as the distribution of lengthy pre-draft review documents or discussions with staff at the Pueblo, do not constitute government-to-government consultation. Government-to-government consultation involves direct discussions between the leadership of both governments which should occur early in the process in order to establish a common understanding about the framework for how to move forward with the details. This did not occur in developing the draft SWEIS but should occur prior to issuance of a revised draft SWEIS and the finalization of either the current, or a revised, draft SWEIS. Listed below are mitigation measures related to Santa Clara Pueblo for inclusion in a mitigation plan as part of the record of decision. This is not meant to be an all-inclusive list but is intended to assist the DOE in preparing for consultation with the Tribal Council. Mitigation of impacts to Santa Clara Pueblo should be mutually agreed to by both governments for the record of decision. Such mitigation measures should include:

1. Ensuring procedures are established with the Pueblo regarding any assumptions related to or about the Pueblo to be used in any on-going or future studies about public health that may relate to fulfillment of Executive Order 12898 and the CEQ Environmental Justice Guidance.
2. Establishing, or updating as appropriate, communication protocols between Santa Clara Pueblo and the DOE clarifying, among other things, different levels of communication (i.e., briefings versus meetings versus government-to-government consultation) and appropriate processes to ensure proper communication.
3. Rehabilitating existing LANL regional aquifer monitoring wells that were improperly completed (as indicated by the DOE Inspector General Report) and replacing those improperly completed wells that cannot be rehabilitated.
4. Ensuring Santa Clara Pueblo has the proper resources to establish a regional aquifer monitoring well or wells at a strategic location or locations at Santa Clara Pueblo to monitor the effect of increased groundwater pumping by LANL. Should monitoring reveal impacts to the surface or ground water resources of the Pueblo, additional mitigation measures would be necessary.
5. Increasing controls to ensure all monitoring wells are installed and operated properly.
6. With the 1992 Accord as the foundation, establishing more detailed procedures regarding access by the Pueblo to LANL property (including classified areas) prior to any land disturbance activities to ensure traditional cultural properties are protected and regarding procedures to ensure that traditional ceremonies at the Pueblo are not disturbed by LANL

316-23  
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activities.


- 7. Ensuring Santa Clara Pueblo has the proper resources to increase sampling and monitoring of air emissions at the Pueblo.
- 8. Establishing an updated cooperative agreement between DOE and Santa Clara Pueblo regarding evacuation of LANL due to contamination or other safety reasons.
- 9. Ensuring Santa Clara Pueblo has the proper resources (including protective equipment and transportation vehicles) and training to address any emergency or evacuation issues resulting from operations, be they continued operations or expanded operations, at LANL.

316-23  
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Santa Clara Pueblo looks forward to working directly with the DOE to resolve the concerns expressed in these comments prior to the finalization of the SWEIS.

Thank you for considering these comments.

Sincerely,



J. Michael Chavarria  
Governor

- cc: Members of the Santa Clara Tribal Council  
Joseph M. Chavarria  
Jessica Aberly  
Secretary James Rispoli  
Ambassador Linton Brooks  
CEQ Chairman James Connaughton  
Senator Pete V. Domenici  
Senator Jeff Bingaman  
Representative Tom Udall  
Representative Heather Wilson  
Governor Bill Richardson  
NMED Secretary Ron Curry

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**Commentor No. 317: Joni Arends, Executive Director,**  
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September 29, 2006

BY HAND DELIVERY

Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office  
National Nuclear Security Administration  
U. S. Department of Energy  
528 35<sup>th</sup> Street  
Los Alamos, NM 87544-2201

Re: Where Do the Children Play?  
Comments by Concerned Citizens for Nuclear Safety and the Embudo Valley  
Environmental Monitoring Group about the draft Site-Wide Environmental  
Impact Statement for Continued Operation of Los Alamos National Laboratory,  
DOE/EIS-0380D

Dear Ms. Withers:

Concerned Citizens for Nuclear Safety (CCNS) is a non-governmental organization that formed in 1988 to give a voice to citizen concerns about the transportation of nuclear waste from Los Alamos National Laboratory (LANL) to the Waste Isolation Pilot Plant (WIPP) through Santa Fe, New Mexico. Since the Cerro Grande Fire in May 2000, which burned over 7,700 acres of LANL property, CCNS has focused on the transport of radioactive, hazards and toxic contaminants from LANL to the Rio Grande, a future drinking water supply for Santa Fe and Albuquerque.

Embudo Valley Environmental Monitoring Group (EVEMG) is a non-governmental organization that formed in 2003 to address community concerns about the risks generated by the Cerro Grande Fire. As downwind neighbors to LANL, EVEMG focuses on air emissions generated by LANL activities and their relationship to public and environmental health and safety. EVEMG conducts independent citizen based air monitoring, soil and produce sampling throughout the Embudo watershed, which is the wind shed of LANL. We work to increase awareness of LANL's weapons research

**317-1**

**317-1** Comments noted. Responses to these comments are encompassed by the responses to the more detailed comments on the following pages.

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Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

and development, and to effect positive change as an out come of that greater awareness.

CCNS and EVEMG make the following general and specific comments about the draft Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory (draft LANL SWEIS). DOE and the National Nuclear Security Administration (NNSA) have provided the public with a very limited time to review and provide comments about the draft LANL SWEIS. In our review, we found the draft LANL SWEIS to be misleading, inadequate, incomplete and technically indefensible.

Throughout the draft LANL SWEIS, DOE/NNSA consistently uses misleading information and technically indefensible data as a basis for analysis and relies on documents which have not been finalized to make conclusions in support of the Expanded Operations Alternative. DOE/NNSA has acted in an arbitrary and capricious manner by utilizing draft documents or not waiting to release a draft LANL SWEIS until such time as pending documents were available for public review and comment. We believe that the National Environmental Policy Act (NEPA) requires DOE/NNSA to withdraw the draft LANL SWEIS until such documents are available for public review and comment. Only after DOE/NNSA releases response to public comment on these documents, may a new draft LANL SWEIS be released for public comment.

Below is a summary of our justifications for the demand that DOE/NNSA withdraw the draft LANL SWEIS. We provide comments that discuss problematic chapters and sections in greater detail, describe errors we have found and include our suggestions. CCNS and EVEMG demand that our comments and concerns be incorporated into a new draft LANL SWEIS.

CCNS and EVEMG submit Exhibits to the text, as well as links to documents, within our comments. Exhibit 6 contains two multimedia CDs that express our convictions and concerns about the LANL mission. It is an official part of our comments and requires an in-kind response from DOE/NNSA.

Many people contributed technical and non-technical analysis for the comments submitted by CCNS and EVEMG. The contributors are the following:

Joni Arends, CCNS  
Matt Bishop, Western Environmental Law Center  
Sadaf Cameron, CCNS  
Patricia A. D'Andrea, Rio Grande/Rio Bravo Project  
Robert H. Gilkeson, Registered Geologist  
Don Hancock, Southwest Research and Information Center  
John Hoffmann, CCNS  
Sheri Kotowski, EVEMG

317-2

317-2

NNSA notes the commentor's concerns about the review and comment period, the SWEIS references, and other aspects of the NEPA process. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for general information about these issues. Responses to specific comments are provided below.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

Leah McLeroy, CCNS Supporter  
Kalliroy Matsakis, CCNS  
George Rice, Independent Ground Water Hydrologist

These comments are being submitted as an addendum to our comments submitted on September 20, 2006. We understand that they will be considered to the same extent as if they were submitted on September 20, 2006. Please see Exhibit 7, your email to CCNS on September 20, 2006.

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Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

**General CCNS and EVEMG Comments**

Throughout the draft LANL SWEIS, DOE/NNSA consistently uses misleading, incomplete and inaccurate information and technically indefensible data as a basis for analysis and relied on documents which have not been finalized to make conclusions in support of the Expanded Operations Alternative, the Preferred Alternative. For these reasons, we demand that the current draft LANL SWEIS be withdrawn. DOE/NNSA must finalize draft reports, provide accurate information/data collection and a conduct a subsequent reanalysis of data, which must all be released to the public for comment and review. NNSA/DOE must provide responses to comments to the public. Only then may a new draft LANL SWEIS be released for public review and comment under NEPA. Below is a summary of our justifications for our demand.

**Air Emissions:**

- DOE/NNSA proposes to process 87,000 pounds of high explosives and up to 6,900 pounds of depleted uranium (DU) for dynamic experiments and studies annually in open air burning and explosions without proper, adequate and technically defensible monitoring.
- Further, the 1979 LANL Final Environmental Impact Statement estimates that 220,000 pounds of depleted uranium were used in dynamic experiments during the history of LANL. From 1979 to present we do not know how much DU and high explosives have been used in experiments and remains in the environment.
- DOE/NNSA is hiding under the "grandfather clause," which allows for facilities existing before December 31, 1988 to emit toxic air pollutants without regulation. Many of these radioactive, toxic and hazardous air pollutants do not have any standards protective of human health and the environment.
- DOE/NNSA continues to use evaporation as a waste disposal method for tritium. DOE/NNSA must develop alternative, energy efficient technologies to handle tritium wastes other than a method which involuntarily exposes living beings.
- DOE/NNSA must evaluate increased air emissions due to increased power demand and car use by commuters.
- DOE/NNSA is not providing the best care for Bandelier National Monument, a Class 1 area under the Clean Air Act.

**Waste:**

- The draft LANL SWEIS does not make use of the transuranic waste numbers provided in the most recent regulatory document for the Waste Isolation Pilot

317-3

317-4

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**317-3** A general response to the concerns expressed in this paragraph is provided in Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD. NNSA notes the commentor's demand that the current draft LANL SWEIS be withdrawn, but NNSA does not believe this action is necessary. Specific responses to the bulleted justifications following this paragraph are provided below.

**317-4** Current air sampling programs at LANL include ambient nonradiological air monitoring, an ambient radiological air sampling network called AIRNET, and stack sampling for radionuclides, as described in Chapter 4, Sections 4.4.2.3 and 4.4.3.1. The Clean Air Act, Title V, operating permit includes requirements for monitoring emissions from sources at LANL and keeping records concerning those sources. Although toxic and radioactive air emissions can potentially have detrimental impacts, past and projected LANL emissions levels would not be expected to cause unacceptable impacts on human health or the environment, as shown in Section 4.6.1.3 and Chapter 5, Sections 5.4.1.1 and 5.6.2. NNSA revised Chapter 6, Section 6.4, to reflect that the open burning permits were withdrawn and associated activities ceased. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information on high explosives and depleted uranium activities.

**317-5** Environmental remediation of sites used for dynamic experiments at LANL firing sites is being addressed, primarily in accordance with DOE's authority under the Atomic Energy Act, and with the requirements of the March 2005 Consent Order. Since 1989, when over 2,100 potential release sites, including firing sites, were identified at LANL, because of progress in remediation and consolidation of geographically proximate sites, only 829 potential release sites remained at the end of 2005. Therefore, the levels of depleted uranium and high explosives that may remain in the vicinity of the firing sites is being reduced. Additional information is in Section 2.2.6 and Appendix I of the SWEIS, and in Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD. Also refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information about how LANL staff ensures the safety of high explosive testing and depleted uranium use, as well as LANL's monitoring program. Monitoring of the environment in and around LANL generally includes air, water, soil, and foodstuffs, and

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Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

Plant (WIPP). Therefore, DOE/NNSA overestimates the amount of transuranic waste that may be shipped to WIPP.

- The draft LANL SWEIS omits that there is no disposal path for the majority of the transuranic waste which would be generated by the Expanded Operations Alternative. p. 5-197

**317-10  
cont'd**

**Ground and Surface Water:**

- Data is Not Representative: LANL's own Well Screen Analysis Report (WSAR) reports describe the samples as being not representative.
- The Draft LANL SWEIS reveals the emerging presence of the radionuclide contaminants neptunium-237, plutonium-239, plutonium-240, and strontium-90 in the regional groundwater resource.
- The data tables in the draft LANL SWEIS document the presence of neptunium-237 in the drinking water of Los Alamos County at levels above the Environmental Protection Agency (EPA) Drinking Water Standard (DWS).
- The water quality data in the draft LANL SWEIS show that groundwater produced from "other springs" is contaminated with strontium-90 at a level more than 13 times greater than the EPA DWS.
- Hexavalent chromium contamination is present in the regional aquifer at concentrations greater than four times than the EPA DWS.
- The draft LANL SWEIS does not make use of the most recent regulatory surface water standards or list of impaired streams.

**317-11**

**317-12**

**317-13**

**Environmental Justice:**

- The incorrect definition of "low income" was used in the Environmental Justice analysis.
- No scoping was done within the effected communities regarding the impacts to sacred sites or land use. Furthermore, the scoping done following the signing of the New Mexico Environmental Justice Executive Order 2005-56 was not used or referenced.
- Environmental Justice was omitted from the cumulative impact analysis of Chapter 5, section 5.13.
- The public comment hearings were scheduled during the Pueblo feast days.
- Tribes who use the area for ritual practices were not included in the draft LANL SWEIS analysis.

**317-14**

**317-15**

**317-16**

**317-17**

**317-18**

**Cumulative Impacts:**

- Not all communities within the limited 50-mile radius were contacted regarding the cumulative impact analysis. Furthermore, it appears that once contacted, no follow up was done.
- DOE/NNSA provided no justification for the 50-mile radius analysis. Given that LANL and Sandia National Laboratories are located within 60 miles of each other, DOE/NNSA must provide a technically defensible analysis of what other nuclear sites are not included in the draft LANL SWEIS analysis.

**317-19**

**317-20**

monitoring results are reported in annual environmental surveillance reports.

**317-6** All LANL operations, regardless of when they began, comply with applicable state (New Mexico Air Quality Control Act) and Federal (Clean Air Act, Toxic Substances Control Act) laws and regulations and have valid permits, as described in Chapter 6 of the SWEIS. The LANL contractor evaluates the results from the air sampling programs (described in response to Comment no. 317-4) and makes changes in the sampling locations and constituents as appropriate. The Los Alamos Neutron Science Center (LANSCE) generates the highest amount of radionuclide air emissions at the site. As discussed in Chapter 5, Section 5.6, of the SWEIS, if necessary, operational controls are implemented at LANSCE to limit the air emissions dose to the maximally exposed offsite individual to 7.5 millirem per year to ensure compliance with the 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants) limit of 10 millirem per year.

NNSA is not aware of "radioactive, toxic and hazardous air pollutants [that] do not have any standards protective of human health" referenced to in the comment that require monitoring. Estimated toxic air pollutant emissions from the use of chemicals are generally below the levels for which a permit for a new source is required under the New Mexico permit regulations for toxic air pollutant emissions (NMAC 20.2.72.400-502). Although toxic, hazardous, and radioactive air pollutant emissions can potentially have detrimental impacts, past and projected LANL emissions levels would not be expected to cause unacceptable impacts on human health or the environment (see Chapter 5, Sections 5.4.1, 5.4.2, 5.6.1, and 5.6.2). LANL reviews plans for new and modified projects, activities, and operations to identify all applicable air quality requirements, including the need to revise the operating permit application, to apply for construction permits, or to submit notifications to the New Mexico Environment Department. A list of chemicals purchased for LANL operations in 2005 that could be emitted to the air was added to Appendix B of the SWEIS. A table of emission limitations in the current operating permit was added to Chapter 4, Section 4.4.2.1 (Table 4-18).

**317-7** Evaporation was developed as a method to dispose of tritium while meeting the goals of LANL's zero liquid discharge program. This method



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- Repeated references are made to a "modern pit facility" within the cumulative impacts analysis. DOE/NNSA must make no reference to this facility without proper analysis and upfront statement of intention as a primary discriminator on the Cover Sheet

317-21

**LANL's Area of Influence:** DOE/NNSA has limited the impacted area to a 50-mile radius around LANL in an arbitrary and capricious manner.

- We know from the smoke plume resulting from the Cerro Grande Fire that the area of influence extends beyond a 50-mile radius. There is no technically defensible scientific explanation for this choice and it appears to be only a convenient round number.
- If the impacted area were increased to a 60-mile radius around LANL, then Albuquerque, which has a population of nearly half a million, would be included in the area of influence.
- Considering the close proximity of LANL and Sandia National Laboratories, the 50-mile radius does not account for the individual and cumulative impacts of these facilities. The designation must be increased in order to analyze the impacts of the programmatic effects of both national laboratories and other nuclear facilities, including uranium mines.
- Technically defensible scientific analysis must be done to define the area of influence of the two national laboratories in New Mexico.

317-22

**Documents Still Not Available or Finalized:**

- **Draft Agency for Toxic Substances and Disease Registry Public Health Assessment.** The draft LANL SWEIS relies on conclusions made in the draft Agency for Toxic Substances and Disease Registry (ATSDR) Public Health Assessment which was released for public comment last summer. In comments about the draft assessment, the EPA stated, "ATSDR may have been overly conservative in their risk assessment approach and makes a blanket statement that there is no problem. ATSDR should redo their risk assessment to reduce conservatism and not assume that there is no risk." Exhibit 17.1.
- **Safety Analysis for Area G** has not been completed. The last analysis was completed in 1997, almost a decade ago. Given that one of the greatest accident scenarios in the draft LANL SWEIS involves waste at Area G, the Safety Analysis must be released for public comment and review prior to DOE/NNSA releasing a new draft LANL SWEIS.
- **The Report in Preparation by the LANL Seismic Hazards Geology Team.** The draft LANL SWEIS states that the seismic hazard report will be released in the fall 2006. In the 1999 SWEIS, DOE predicted 45,000 years between seismic events. However, based on new fieldwork, the draft LANL SWEIS states that this number has been reduced to 2,000 years between events. The draft LANL SWEIS must be withdrawn until this report is released to the public for review and comment before a new draft LANL SWEIS is prepared and released to the public for review under NEPA.

317-23

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317-25

uses energy-efficient solar power to evaporate tritium. The amount of tritium discharged to the evaporation basin at TA-53 in 2006 constituted about 1 percent of the annual tritium emission from TA-21, which is nearer the public than TA-53. It should be noted that tritium releases at LANL make up a very small part of the projected dose to the public and are well within EPA limits, as shown in Chapter 4, Table 4-22, of the SWEIS.

- 317-8** The SWEIS discusses the electricity demand for the various alternatives in Chapter 5, Section 5.8.2. Most of the demand would be met by a number of hydroelectric-, coal-, and natural gas-powered generators throughout the western United States, as discussed in Chapter 4, Section 4.8.2.1, of the SWEIS. Part of this demand could be met by the TA-3 Co-Generation Complex. The air quality impacts of operating this complex are considered in the bounding analysis discussed in Section 5.4.1.1.

NNSA revised Section S.9.1 of the Summary and Chapter 5, Section 5.4.1.3, to discuss the potential for increased emissions due to increased commuter traffic to LANL. An employment increase of 2.2 percent per year under the Expanded Operations Alternative could result in similar increases in LANL commuter-specific vehicle emissions from additional employee vehicles commuting from Santa Fe and Rio Arriba County and other locations. The actual change in overall traffic emissions would be much less than 2.2 percent because LANL-specific traffic is only a portion of the overall regional traffic volume.

- 317-9** LANL is not subject to the Prevention of Significant Deterioration permitting regulations, which put special limitations on impacts to Class I areas, because emissions from the LANL sources are limited to less than the applicability thresholds of those regulations. The alternatives evaluated in the LANL SWEIS do not include construction of a modern pit facility. Additionally, in October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement - Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (DOE/EIS-0236-S4) (71 FR 61731). This Notice of Intent also announced cancellation of NNSA's previous proposal to build a modern pit facility, for which a draft supplemental EIS was issued in June 2003 (67 FR 59577). Discussions regarding evaluation of LANL in the

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Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

**Legitimate "No Action Alternative":**

- CCNS and EVEMG request that a legitimate "No Action Alternative" be included in the reanalysis of the draft LANL SWEIS. Such an alternative would seriously consider ceasing active nuclear weapons operations at LANL and begin cleanup of the 63-year toxic legacy.
- CCNS and EVEMG ask for the inclusion of a "Greener Alternative," which focuses on sustainable operations and environmentally just practices at LANL. We were among many groups who requested these alternatives during the scoping session.
- CCNS and EVEMG object to the statement that the "NNSA is not evaluating a similar alternative in this [2006] SWEIS because, as stated in the 1999 SWEIS...a Greener Alternative would not support the nuclear weapons mission assigned to LANL." It is revealing that DOE/NNSA and LANL emphasize nuclear weapons manufacturing over protecting the environment. CCNS and EVEMG believe that DOE/NNSA must seriously consider a mission for LANL that focuses on life-affirming research and the development for renewable non-nuclear energy, such as solar, wind and biomass, and clean-up technologies that support environmental and public health. Please see Exhibit 12.
- Global warming and climate change issues are of paramount importance and must be addressed with the same critical fervor as developing nuclear weapons from 1943 to 1945.

317-26

**Nuclear Non Proliferation Treaty (NPT):**

- Article 6(c) of the NPT states "[T]he determined pursuit by the nuclear-weapon States of systematic and progressive efforts to reduce nuclear weapons globally, with the ultimate goals of eliminating those weapons, and by all States of general and complete disarmament under strict and effective international control." The Expanded Operations Alternative, the Preferred Alternative, presented in the draft LANL SWEIS calling for increased plutonium pit production violates the spirit of the NPT. DOE/NNSA must outline in the new draft LANL SWEIS exactly how a proposal to increase plutonium pit production for refurbishment of our nuclear stockpile honors our commitment under the NPT and is in accord with international efforts for disarmament.

317-27

*Complex Transformation SPEIS* are included in Chapter 1 of the Final SWEIS. The potential impacts of locating a new consolidated plutonium center or consolidated nuclear production center at LANL will be evaluated in the *Complex Transformation SPEIS*.

- 317-10** The estimates of operational transuranic waste generation in the SWEIS reflect the projections in the 1999 SWEIS, which were increased as necessary in this SWEIS based on actual generation rates and recent waste generation forecasts. Most of the transuranic waste projected under the Expanded Operations Alternative would come from the assumed removal of transuranic waste disposed of before 1970 from LANL material disposal areas that are subject to the Consent Order. Generation of this waste is uncertain and will depend on future regulatory decisions by the New Mexico Environment Department. The original WIPP baseline inventory estimated 741,608 cubic feet (21,000 cubic meters) of contact-handled transuranic waste originating from LANL (see the *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement* [DOE/EIS-0026-S2] [DOE 1997b]). These estimates are updated periodically using more current projections. The WIPP disposal capacity is expected to be sufficient for disposal of all retrievably stored transuranic waste, including LANL's current inventory of legacy waste and all newly generated transuranic waste from the DOE complex over the next few decades. As discussed in Chapter 5, Section 5.9.3, no credit was taken for LANL waste volume reduction techniques such as sorting, and it is assumed that all of the transuranic waste at LANL could be disposed of at WIPP. However, there may not be sufficient space at WIPP for disposal of all pre-1970 waste buried across the DOE complex. Because future decisions about disposal of transuranic waste will be based on the needs of the entire DOE complex, it is not possible to be definitive about the disposition of waste from environmental remediation that may or may not be generated. Any transuranic waste generated at LANL without a disposal pathway would be safely stored until disposal capacity is available. The text in Section 5.9, Waste Management, was revised consistent with the above discussion. Refer to Section 2.7, Waste Management, and Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
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**Cover Sheet**

p. iii. **Cover Sheet.** DOE/NNSA lists the primary discriminators between the alternatives. The list, however, does not include two primary discriminators, which are increased nuclear bomb production from 20 to 80 plutonium pits per year and construction and operation of a modern pit facility (MPF), capable of producing 450 plutonium pits per year. If DOE/NNSA does not remove all reference to a MPF, please include these two primary discriminators in the list in the new draft LANL SWEIS. CCNS, EVEMG and the City of Santa Fe object to expanded plutonium pit production, see Exhibit 10.

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**317-11** Groundwater monitoring has been performed at numerous locations within and around LANL for many decades. The information presented in the SWEIS relies on the best data available, primarily data from the types of wells and screens that have high-quality results. Some of the groundwater data, particularly those associated with certain multi-screen Hydrogeologic Workplan characterization wells constructed after 1999, are being reassessed due to potential residual drilling fluid effects. The drilling fluid effects are quantitatively assessed in the referenced Well-Screen Analysis Report. For those well screens that have been impacted by residual drilling fluids, LANL staff has initiated a program to better evaluate the wells and to rehabilitate the wells that may be producing suspect groundwater monitoring results. As well quality issues are clarified and resolved, the set of groundwater data will increase in size and improve in quality to support ongoing monitoring, investigations, and decisionmaking. Refer to Section 2.5, Water Resources, of this CRD for additional information.

**317-12** Neptunium, plutonium-239, plutonium-240, and strontium-90 have not been found in the regional aquifer. As discussed in Section 2.5, Water Resources, of this CRD, it is important to distinguish between detection of contaminants in groundwater and the values used for analyses in the SWEIS. Neptunium-237 is not present in any samples from the Los Alamos County water supply wells. Plutonium-239, plutonium-240, and strontium-90 were detected in samples from these wells taken on only one or two of the numerous dates and were not repeated by follow-up sampling, indicating an error by the analytical laboratory which is typical for a small percentage of samples. This conclusion was confirmed by reanalysis of numerous samples and contradictory results from field and laboratory duplicate samples. Some contaminants, however, are present onsite at levels above applicable standards and guidelines. Elevated levels are investigated to confirm the validity of the results, determine the source and extent of the contamination, and evaluate needed control and cleanup technologies.

Hexavalent chromium has been found in the regional aquifer, but not in water supply wells. LANL staff has prepared an *Interim Measures Work Plan for Chromium Contamination in Groundwater* (LANL 2006a). The activities to be carried out under this plan will be summarized in an investigation report that will provide the basis for follow-on work. For

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**Chapter 1. Introduction and Purpose and Need for Agency Action**

p. 1-5. **LANL Support of NNSA Missions.** CCNS and EVEMG object to plans for the consolidation of the nuclear weapons complex at LANL. In this section, DOE/NNSA examines the impacts from proposed actions from 2007 through 2011 while indicating that “uncertainty remains about the future work NNSA will assign to LANL to support NNSA missions.” pp. 1-5, 1-11. CCNS and EVEMG are concerned that beginning new construction projects at LANL, at huge taxpayer expense, without the latest probabilistic seismic hazard calculation for LANL is absurd. As reported on p. 4-25, the LANL Seismic Hazards Geology Team will complete its seismic report and the re-calculation of the probabilistic seismic hazard in the fourth quarter of 2006. The draft LANL SWEIS must be withdrawn until such time as the draft seismic report and re-calculation are released for public review and comment. DOE/NNSA must respond to all comments before the document is finalized. Only then may DOE/NNSA use the re-calculation for analysis in the new draft LANL SWEIS.

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CCNS and EVEMG note that LANL performs “advanced and nuclear materials research and development.” p.1-5. Such research and development creates radioactive, hazardous and toxic materials that have no regulatory standards for air emissions, discharges to surface and ground water, nor waste treatment, storage and disposal. The draft LANL SWEIS compares LANL emissions, discharges and waste activities to known standards. Those materials, which do not have standards, are not monitored. Further, EPA is generally more than a decade behind in developing regulations for materials that are used in everyday life, let alone research and development activities. DOE/NNSA must include a calculation for the impacts on human health and the environment from these research and development materials and activities in the reanalysis for a new draft LANL SWEIS. This calculation must be included in the new cumulative impact analysis.

317-29

p. 1-6. **LANL Support of NNSA Missions.** The draft LANL SWEIS states “nuclear weapons pit production work takes place at LANL on a limited scale.” p. 1-6. The new draft LANL SWEIS must define “limited scale.” Since the shutdown of Rocky Flats in 1989, it is known that LANL is the only location within the DOE/NNSA complex where nuclear weapons pit production takes place. The draft LANL SWEIS includes a cumulative impact analysis for a modern pit facility, capable of manufacturing 450 plutonium pits per year. DOE/NNSA must remove all references to a MPF from the LANL SWEIS. In the Alternative, DOE/NNSA must explain the impacts of a modern pit facility at LANL in the individual sections of the SWEIS as well.

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DOE/NNSA must explain in detail how the Los Alamos National Security, LLC (LANS) is allowed “some flexibility to perform cost-reimbursable work for other entities” in the new draft LANL SWEIS. p. 1-6. Please explain how LANS reimburses taxpayers for use of taxpayer-funded facilities, equipment, staff and overhead at LANL.

317-30

more information refer to Chapter 4, Section 4.3.2, of the Final SWEIS, and Section 2.5, Water Resources, of this CRD.

**317-13** The water quality standards presented in Chapter 4, Tables 4–7 and 4–9, have been updated to reflect standards recently issued by the New Mexico Water Quality Control Commission. The new standards have not yet been approved by EPA; nevertheless, they are used in the LANL 2005 Environmental Surveillance Report and in this SWEIS to evaluate water quality data. As Table 4–7 demonstrates, LANL compares its surface water data to a variety of legally applicable standards to identify contaminants and data trends that could indicate the need for corrective actions.

**317-14** DOE (and by extension NNSA) defines low-income populations in terms of the Census Bureau’s statistical poverty level, which was used in the LANL SWEIS. This approach is consistent with EPA’s, as discussed in the Agency’s “Final Guidance for Incorporating Environmental Justice Concerns in EPA’s NEPA Compliance Analysis” (EPA 1998). DOE’s definition of “low-income” has been added to the Glossary of the Final SWEIS.

**317-15** NNSA undertook a scoping process in January and February 2005 that allowed any interested member of the public to submit comments in writing or verbally (see Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD). In addition, in January 2005, NNSA met with interested Accord Pueblos to discuss the scope of the planned NEPA document. NNSA notes that the referenced Executive Order 2005-56 concerns state activities, not those of the Federal Government.

**317-16** Chapter 5, Section 5.11, of the SWEIS discusses environmental justice-related impacts on populations that depend on subsistence farming and fishing, including environmental justice-related cumulative impacts resulting from background radiation levels, weapons testing fallout, and previous radiological releases from LANL. The discussion concluded that no populations were disproportionately impacted from LANL operations. Section 5.13 was revised to describe the potential for environmental justice-related cumulative impacts.

**317-17** NNSA is aware that multiple Pueblo feast days are held by each of the regional Pueblos on both fixed and floating dates throughout the year.

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p. 1-7. **Figure 1-1. Location of LANL Site.** All maps and figures in the new draft LANL SWEIS must include the full length of the Rio Grande for the mapped areas. It is unrealistic and misleading to include only the Rio Grande below TA-33 and TA-70, as demonstrated in Figure 1-1. Furthermore, the new draft LANL SWEIS must include a map in this section that depicts the Rio Grande from its headwaters in Colorado to where it empties out into the Gulf of Mexico. The map must include acequias and communities along the Rio Grande that rely on the river for such purposes as recreation, irrigation, drinking, etc. from Colorado through New Mexico and into Mexico. The new draft LANL SWEIS must examine implications of LANL activities on environmental and human health for the entire length of the river. The Rio Grande is unique in the way that it crosses international borders. DOE/NNSA must analyze the potential risk for contamination to cross from the United States into Mexico in the reanalysis for a new draft LANL SWEIS.

317-31

p. 1-8. **Section 1.1. Background.** DOE/NNSA must provide an information box, similar to the Nuclear Facility Hazard Categorization on p. 1-10, with descriptions for Security Category I, II, III and IV and Hazard Category 1, 2 and 3. The information box on p. 1-13 describes the Security Categories, but it is titled "Special Nuclear Material Safeguards and Security." Please explain the difference between Security Categories, Hazard Categories and Nuclear Facility Hazard Categorizations in one place within the final LANL SWEIS. Please see Environmental Justice comments below regarding the need for clarity in documents provided to the public.

317-32

p. 1-11. **Section 1.2. Purpose and Need for Agency Action.** DOE/NNSA must cite the source that allows for the "nonnuclear aboveground experimentation" in the new draft LANL SWEIS. Further, DOE/NNSA must define the term "nonnuclear aboveground experimentation" in the new draft LANL SWEIS.

317-33

p. 1-12. **Section 1.3. Scope and Alternatives in this New SWEIS for LANL Operations.** DOE/NNSA must explain why "NNSA is not legally obligated to include the Consent Order impacts analysis" in the new draft LANL SWEIS. Fr. 6, p. 1-17. CCNS and EVEMG consider the environmental impacts of cleanup under the Consent Order a "major federal action" which requires NEPA analysis.

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Further, it is unclear why the activities and potential impacts under the Consent Order are only included in the Expanded Operations Alternatives. DOE/NNSA is proposing a Faustian bargain with the people of Northern New Mexico by implying that increased plutonium pit production must go hand in hand with cleanup under the Consent Order.

317-35

It may be necessary to correct the deadline for the transfer of additional land by the end of 2007 as required by Public Law 105-119. In late June 2006, the U.S. Senate approved an extension of time for the land transfer as part of the 2007 Defense Authorization Bill.

317-36

The Eight Northern Pueblos and the four LANL Accord Pueblos were invited to a special briefing on the SWEIS hosted by Santa Clara Pueblo early during the comment period. The schedule for public hearings was discussed with the Pueblo representatives that attended this briefing, including alternate means of providing both oral and written comments on the Draft SWEIS. NNSA recognizes that it is not possible to hold a public hearing at a time and place that is convenient to every interested person, and so provides alternate means of submitting comments to provide multiple opportunities to participate in the NEPA process. See additional discussion in Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD.

**317-18** Potential impacts to persons living year-round in the areas immediately surrounding LANL, including Tribal members who live nearby and use the area on a daily basis, were evaluated in Chapter 5, Section 5.11, and Appendix C of the SWEIS. Impacts to Native Americans who visit the area only for ritual practices would be expected to be less than for those who use the area year round. It was determined that minority and low-income populations did not face disproportionately high and adverse impacts as a result of LANL operations. Refer to Section 2.11, Environmental Justice, of this CRD for additional information.

**317-19** Direct contact with regional counties and Pueblos was only one of the methods used to collect information for analyses of cumulative impacts. Much of the needed information was collected from Federal, state, and county agencies, as well as private company plans, studies, reports, databases, and websites. Local officials confirmed the information collected from these other sources. Follow-up contact was made with counties that declined initial requests for cumulative impacts information. Chapter 5, Section 5.13, of the Final SWEIS was revised to reflect input received from all but one county. In addition, the Santa Clara and San Ildefonso Pueblos declined to provide information. Much applicable information for these geographic areas was collected from other agencies, including the Central Federal Lands Highway Division, New Mexico Department of Transportation, New Mexico Water Quality Control Commission, Public Service Company of New Mexico (PNM), U.S. Army Corps of Engineers, Bureau of Land Management, U.S. Bureau of Reclamation, U.S. Environmental Protection Agency, U.S. Forest Service, Western Area Power Administration, as well as county websites.

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p. 1-15. **Section 1.3.2. Reduced Operations Alternative.** CCNS and EVEMG support discontinuing all accelerator operations at TA-53 Los Alamos Neutron Science Center (LANSCE). When LANSCE is operating, over 90% of the off-site radiation dose is emitted from the facility. In order to protect public health and the environment, CCNS and EVEMG support placing LANSCE in indefinite safe shutdown mode under all Alternatives.

Further, as stated in the DOE Inspector General (IG) Audit Report on LANSCE, there is a newer facility at Oak Ridge National Laboratory. <http://www.ig.energy.gov/documents/CalendarYear2004/ig-0666.pdf>. The new facility makes LANSCE obsolete. Please include the DOE IG Audit Report in the new draft LANL SWEIS analysis.

CCNS and EVEMG support reducing the High Explosives Processing Facilities operations at TA-8, 9, 11, 16, 22 and 37 by 20% from the No Action Alternative level of operation.

CCNS and EVEMG support reducing the High Explosive Testing Facilities operations conducted at TA-14, 15, 36, 39 and 40 by 20% from the No Action Alternative level of operation.

CCNS and EVEMG support eliminating all dynamic experiments using plutonium at the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility. Please see the video of the September 6, 2006 RRW Hydro test that LANL recently posted on its website: [http://www.lanl.gov/news/newsbulletin/QuickTimes/rrw\\_darht\\_2.mov](http://www.lanl.gov/news/newsbulletin/QuickTimes/rrw_darht_2.mov). There is no containment of the dynamic experiments. There is no justification for dispersing depleted uranium (DU) into the environment. Through the dynamic experiments, the DU is split into smaller pieces, distributed through the air, can enter the bodies of living beings, be deposited on the soil where it can travel through surface water to the Rio Grande, a future source of drinking water for Santa Fe and Albuquerque, or migrate toward groundwater on the Pajarito Plateau, the sole source of drinking water for the residents of Los Alamos County.

CCNS and EVEMG support discontinuing all TA-18 Pajarito Site operations and placing the facility into indefinite safe shutdown mode. Given the number of safety and security issues surrounding TA-18 and the materials currently stored there, CCNS and EVEMG support discontinuing all operations at TA-18. CCNS and EVEMG support relocating all Security Category III and IV materials, along with the Solution High-Energy Burst Assembly (SHEBA).

p. 1-15 **Section 1.3.3. Expanded Operations Alternative.** It is disingenuous and misleading for DOE/NNSA to not explicitly state that "a modern pit facility" is

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317-20 The 50-mile radius was not intended as a limit for cumulative impacts analysis. Each resource area may have a different region of influence; for instance, cumulative impacts to cultural resources would be largely confined to LANL. However, surface water resources could potentially have cumulative impacts far downstream on the Rio Grande. Impacts from radiological air emissions are typically modeled out to 50 miles (80 kilometers). If the modeling results indicate that air quality impacts could be significant beyond 50 miles (80 kilometers), additional analysis is performed. Operational impacts are greatest within a few miles of the source of the air emissions. Appendix C includes an analysis of the radiological dose from airborne emissions as a function of distance from the source. With increasing distance from the source (LANSCE), the dose dropped dramatically from approximately 7.5 millirem per year at 0.5 miles (0.8 kilometers) to 0.035 millirem per year at 50 miles in the direction of the highest potential dose (north-northeast of LANSCE). The large drop in radiological dose with distance was due primarily to dispersion of the emitted contaminants, which reduced their concentrations. Additional discussion and a graphic depiction were added to Appendix C. Extending the impacts analysis of air emissions from the most severe potential accident at LANL out to 100 miles (161 kilometers) would change calculated results for population doses by approximately 3 percent. Additional information about the potential impacts of accidents extending out to 100 miles was added to Appendix D (Section D.3.2).

For Sandia National Laboratories, only air emissions would potentially add to the cumulative impacts from LANL. The 2005 Sandia National Laboratories dose to the offsite maximally exposed individual (MEI) is estimated at 0.0001 millirem, and the 2005 population dose is estimated to be 0.00017 person-rem (SNL 2006). The dose to the MEI under the Expanded Operations Alternative at LANL is estimated at 8.2 millirem, and the annual population dose within 50 miles (80 kilometers) of LANL is estimated at 36 person-rem. The Sandia National Laboratories MEI dose is 0.0012 percent of the LANL MEI dose, and the Sandia National Laboratories population dose is 0.00047 percent of the LANL population dose. Even if the results of the 50-mile radius air emissions modeling for Sandia National Laboratories were superimposed on the 50-mile radius of impacts for LANL, the combined impacts would be very small. Because there would be no significant increase in cumulative impacts

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included in the analysis in the draft LANL SWEIS. See comments about the Cover Sheet.

The draft LANL SWEIS is actually proposing a production rate of 530 pits [80 (expanded operations alternative) plus 450 (a modern pit facility)] per year. DOE/NNSA states that "although NNSA has proposed a new pit manufacturing facility in order to meet the long-term requirements for maintaining the anticipated nuclear weapons stockpile, NNSA has not completed [the Modern Pit Facility] EIS and therefore has not made a decision whether it would build such a facility, and, if such a facility were built, where it would be located, the size and type of facility that would be built, or its production level." The draft Modern Pit Facility (MPF) EIS proposes a manufacturing facility capable of producing 450 plutonium pits per year. Further, the MPF is referenced over 60 times in the draft LANL SWEIS. CCNS and EVEMG believe that DOE/NNSA will write Record of Decision(s) (ROD) giving itself authority to construct and operate the MPF at LANL, without proper analysis.

Further, DOE/NNSA has done an analysis of the cumulative impacts for both the Expanded Operations Alternative and a modern pit facility, a capacity to manufacture 530 pits per year.

It is unclear why a high annual production rate of 80 pits per year is needed in order to produce 50 certified pits each year. Especially as the draft LANL SWEIS states, "NNSA does not believe it would need to produce 80 pits per year is needed in order to obtain 50 certified pits." p. 1-16. If we were grading the DOE/NNSA proposal to produce 80 pits per year in order to obtain 50, they would receive a "D-" for a 62.5% performance. However, given the lackadaisical production in the past, it is difficult to fathom how DOE/NNSA would actually produce 50 certified pits per year.

DOE/NNSA must explain in the final LANL SWEIS how "NNSA expects to attain [20 pits per year] production level in 2007." p. 1-16. Please give include information regarding the current pit production level in the new draft LANL SWEIS.

**p. 1-17. Three types of new projects under the Expanded Operations Alternative that are addressed in this SWEIS.** It is unclear why TA-18 is listed under the first type of proposed projects for new construction and operation of certain Security Category III and IV operations and, at the same time, listed under the second type for Decontamination, Decommission, and Demolition (DD&D). Please explain in the new draft LANL SWEIS how this can be so.

**p. 1-18. Projects Associated with New Infrastructure or Levels of Operation.** CCNS and EVEMG are very concerned about the further concentration of sealed sources as waste at LANL, including radioisotope thermoelectric generators (RTG). We are also concerned about the DOE/NNSA proposal to allow both actinide and nonactinide sealed sources to be stored indefinitely at LANL.

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due to activities at Sandia National Laboratories, these impacts were not considered in the cumulative impacts section. However, for completeness, Chapter 5, Section 5.13, of the SWEIS was revised to include the rationale for not including Sandia National Laboratories impacts.

**317-21** The discriminators listed on the Cover Sheet are the resource areas evaluated in the SWEIS, not individual actions or projects. The Notice of Intent for the *Complex Transformation SPEIS* also announced cancellation of NNSA's previous proposal to build a modern pit facility (71 FR 61731). Consequently, impacts related to a modern pit facility were deleted from the SWEIS. The potential impacts of locating a new plutonium facility at LANL (and at other NNSA sites) are being evaluated in the *Complex Transformation SPEIS*. Chapter 5, Section 5.13, of the SWEIS was updated to address cumulative impacts from a potential new plutonium facility evaluated in the *Complex Transformation SPEIS*. Additional information regarding NNSA Complex Transformation planning can be found at [www.nnsa.doe.gov](http://www.nnsa.doe.gov).

**317-22** Impacts from radiological air emissions are typically modeled out to 50 miles (80 kilometers). If the results of the modeling indicate that air quality impacts could be significant beyond 50 miles (80 kilometers), additional analysis is performed. Operational impacts are greatest within a few miles of the source of the air emissions. Appendix C, Section C.1.3.3, of the SWEIS includes an analysis of the radiological dose from airborne emissions as a function of distance from the source. The dose drops dramatically with increasing distance from the source, as described in the response to Comment no. 317-20. Extending the impacts analysis of air emissions from the most severe potential accident at LANL out to 100 miles (161 kilometers) would change the calculated results for population doses by only around 3 percent. Additional information about the potential impacts of accidents extending out to 100 miles is included in Appendix D, Section D.3.2, of the SWEIS.

For Sandia National Laboratories, only air emissions would potentially add to the cumulative impacts from LANL. For additional information on cumulative impacts from both LANL and Sandia National Laboratories, please see the response to Comment no. 317-20. Because there is no significant increase in cumulative impacts due to activities at Sandia National Laboratories, those impacts were not considered in the

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These proposals raise several serious concerns, which have not been adequately addressed in the draft LANL SWEIS. DOE/NNSA must not be allowed to bring additional waste to LANL before addressing the above-ground storage of 40,000 drums of transuranic waste at TA-54, Area G in fabric tents.

Further, included in the 40,000 drums are 2,000 high activity drums of transuranic waste as well as countless drums that have no disposal pathway. Further, DOE/NNSA has not properly handled the 2,000 high activity drums which were given a code name of the "Quick to WIPP" drums. Following the Cerro Grande fire, DOE/NNSA made promises to the surrounding communities that they would remove the 2,000 high activity drums to the Waste Isolation Pilot Plant (WIPP). However, due to waste characterization problems as well as the shipment of low-level waste to WIPP, the number of "Quick to WIPP" drums on the Pajarito Plateau remains basically the same.

DOE/NNSA also made representations following the Cerro Grande fire that they would build hardened, on-site storage (HOSS) facilities for the 40,000 drums. At the same time, DOE/NNSA expressed their optimism and ability to remove the drums from TA-54 prior to the time any NEPA documents were prepared to build HOSS facilities, let alone constructing the facilities. Now, more than a half a decade later, the drums are still sitting in fabric tents on the end of the mesa top, very near to the White Rock community and even closer to the proposed low-income housing units along State Road 4.

p. 1-22. DOE/NNSA must explain in the final LANL SWEIS the impact of disposal of Greater-Than-Class-C waste will have at LANL, including the sealed sources and transuranic waste.

**Section 1.3.4. Preferred Alternative.** DOE/NNSA explain that given the "uncertainty regarding the nuclear weapons missions that will be assigned to LANL in the future, NNSA might issue two or more Records of Decision (RODs) to implement its decisions." DOE/NNSA must explain the uncertainties in more detail in the final LANL SWEIS. From our perspective, the uncertainties may allow for one or more of the RODs to provide for the construction and operation of a Modern Pit Facility at LANL, manufacturing 450 plutonium pits per year.

DOE/NNSA must explain why closure of the Los Alamos County Landfill should be the subject of the first proposed RODs in the final LANL SWEIS. Please also explain the relationship between DOE/NNSA and Los Alamos County concerning the Landfill. DOE/NNSA must also explain the basis for monitor around the landfill site and down-canyon from the site. p. 1-25.

**Section 1.4. NNSA Decisions To Be Supported by the SWEIS.**

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cumulative impacts section. However, for completeness, Chapter 5, Section 5.13, Cumulative Impacts, was revised to include the rationale for not including Sandia National Laboratories impacts. Please refer to Section 2.6, Offsite Contamination, of this CRD for additional information about the choice of a 50-mile radius for impacts analysis.

**317-23** The SWEIS presents an independent assessment of public health impacts from contaminants in the LANL environment. The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry (ATSDR) *Public Health Assessment for Los Alamos National Laboratory* in any specific way for its conclusions. However, under the 1986 amendments to the Superfund law, ATSDR is responsible for conducting public health assessments at each site on the U.S. Environmental Protection Agency (EPA) National Priorities List, and it is appropriate for the SWEIS to acknowledge the conclusions of the *Public Health Assessment for Los Alamos National Laboratory* because it is a relevant Federal agency study. The draft *Public Health Assessment for Los Alamos National Laboratory* was available for public comment from April 26 to December 1, 2005. The EPA did not reject the draft document; it submitted comments that were by addressed by ATSDR in the final document. Appendix I to the final *Public Health Assessment for Los Alamos National Laboratory* describes how the comments on the draft received from the public, other Federal agencies (including EPA), and other stakeholders were addressed. As stated in the final *Public Health Assessment for Los Alamos National Laboratory* (ATSDR 2006), released August 31, 2006, ATSDR conducted its evaluations in accordance with guidance provided in the *Public Health Assessment Guidance Manual* (available at [www.atsdr.cdc.gov/HAC/PHAMannual/index.html](http://www.atsdr.cdc.gov/HAC/PHAMannual/index.html)).

**317-24** An updated performance assessment for Area G is in preparation; until this document is finalized and approved, the current performance assessment and composite analysis for waste disposal remains valid. To the extent possible, the most recent technical documents have been considered in the Final SWEIS analysis. Information currently under development that is not available for use in the Final SWEIS will be considered as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information.



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p. 1-24. DOE/NNSA must spell out in the RODs what decisions the NNSA Administrator is making regarding operations at LANL. There must not be any "de facto" decisions to implement any Alternative. DOE/NNSA must state affirmatively or negatively their plans with regard to specific LANL activities or projects at separate facilities described in the draft LANL SWEIS. Action other than what is suggested will lead to confusion, wasted time and continued ill-will between LANL and surrounding communities.

317-45

p. 1-25. CCNS and EVEMG remain concerned that when the public asks DOE/NNSA to estimate the cost of various remediation options and contrast those to the long-term monitoring costs, the federal agency claims that it is not possible. Other federal agencies provide such information to the public. DOE/NNSA at LANL must provide such cost estimates in order that the public be as informed as possible in providing comments to the New Mexico Environment Department about remediation decisions, as well as DOE/NNSA/LANS.

317-46

p. 1-26. Section 1.5. Relationship to Other DOE NEPA Documents and Information Sources. CCNS and EVEMG request that the dates for the various documents were finalized be included in the new draft LANL SWEIS.

317-47

p. 1-32. Consideration of Future Projects and Emerging Actions Affecting LANL. It is disingenuous of DOE/NNSA to state that a decision on a MPF at LANL would not be expected to "prejudice the decisions to be made based on this SWEIS." Is LANL the only DOE site of the five proposed sites for construction and operation of a MPF which is conducting a SWEIS public process which includes analysis of a MPF in the cumulative impacts? This fact would clearly prejudice any decisions made on the basis of the draft LANL SWEIS.

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p. 1-35. Summary of Major Scoping Comments and NNSA Responses. Further, DOE/NNSA states that "a decision on the construction or location of a modern pit facility has not been made by NNSA; however, the potential impacts of such a facility being constructed and operated at LANL are addressed as part of the cumulative impacts in Chapter 5, Section 5.13." This implies that the analysis done in the cumulative effects could be used for the basis of a ROD, CCNS and EVEMG oppose any construction of an MPF and state that DOE/NNSA must remove all mention of a MPF from the new draft LANL SWEIS.

Furthermore, CCNS requested that no mention be made of the MPF in our scoping comments for a supplemental LANL SWEIS. Our request must be incorporated into the new draft LANL SWEIS.

p. 1-33. Section 1.6. Public Involvement. CCNS and EVEMG question whether DOE/NNSA has followed proper procedural rules under the National Environmental

317-48

317-25 The data on seismic activity in Chapter 4, Section 4.2.2.3, of the SWEIS is based on data from the *Information Document in Support of the Five-Year Review and Supplement Analysis for the Los Alamos National Laboratory Site-Wide Environmental Impact Statement (DOE/EIS-0238)* (LA-UR-04-5631) (LANL 2004a), which LANL staff prepared for use in the SWEIS analyses, and the seismic hazard analysis completed in June 2007. Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

The new geological information in the 2007 seismic hazard analysis report has been interpreted as indicating that the seismic hazard at LANL is greater than previously understood. The relevance of the seismic hazard to facility accidents will undergo a rigorous and thoughtful evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

Following the NEPA process but prior to the design and operation of specific facilities, safety studies in the form of Hazard Assessment Documents and Safety Analysis Reports that include seismic concerns and take into account the most current seismic information would be prepared to address a comprehensive set of accident risks. The results of these safety studies would be incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

317-26 NNSA notes the commentor's desire for two new alternatives, one that would eliminate activities related to nuclear weapons production and another characterized as a "Greener Alternative." Cessation of LANL's primary mission activities in support of NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President; therefore, it is not considered in the SWEIS. Chapter 3, Section 3.5, of the SWEIS discusses NNSA's decision not to

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Policy Act (NEPA) for the release of the draft LANL SWEIS for public comment. Specifically, DOE/NNSA published a Notice of Intent (NOI) to prepare a Supplemental SWEIS in the Federal Register on January 5, 2005. 70 FR 807. However, it does not appear that DOE/NNSA issued a new NOI to prepare the draft LANL SWEIS, nor published it in the Federal Register, nor held new public scoping meetings. DOE/NNSA must issue a new NOI and hold new public scoping meetings before issuing the new draft LANL SWEIS.

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p. 1-37. DOE/NNSA must explain how the draft LANL SWEIS addresses the public scoping comment about the effects of the 1999 SWEIS accident scenarios or new accident scenarios that have been reduced or mitigated as a result of the \$345 million given to LANL by Congress following the Cerro Grande Fire.

317-49

DOE/NNSA must provide a table in the final draft SWEIS to demonstrate that "extending the region of influence out to 100 miles (160 kilometers) would change the calculated results only a few percent for the accidents with the highest potential for widespread impacts." We suggest showing the impacts at 50 miles (80 kilometers), 100 miles (160 kilometers) and 150 miles (240 kilometers). However, the final determination of the region of influence must be based on technical sound science.

317-50

Further, DOE/NNSA must provide a table in the final draft SWEIS to demonstrate that the results of the potential impacts to a maximally exposed individual (MEI) near the site boundary "do not indicate the need to evaluate impacts beyond a distance of 50 miles (80 kilometers)." We suggest showing the impacts at 50 miles (80 kilometers), 100 miles (160 kilometers) and 150 miles (240 kilometers).

p. 1-38. Please explain in more detail why the reports and recommendations made by the DOE Inspector General and the Defense Nuclear Facilities Safety Board are not incorporated into the draft LANL SWEIS. DOE/NNSA must incorporate these recommendations into the new draft LANL SWEIS.

317-51

p. 1-41. Section 1.7. Content of this New SWEIS. CCNS and EVEMG suggest that everyone who comments on the draft LANL SWEIS be put on a mailing list to receive the annual LANL SWEIS Yearbook. Please include those who attended the public comment hearings on this mailing list.

317-52

analyze a "Greener Alternative" in the SWEIS. A "Greener Alternative" was analyzed in the 1999 SWEIS, but was not selected for implementation. NNSA does not believe, 7 years later, that a "Greener Alternative" is reasonable for future operation of LANL, given its primary mission of supporting the Stockpile Stewardship Program as directed by the Congress and the President, and has identified the Expanded Operations Alternative as its Preferred Alternative. In addition to LANL's stockpile stewardship activities, however, research is conducted in areas promoted by the commentor. These activities would continue at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

317-27 The Expanded Operations Alternative would not violate the Treaty on the Non-Proliferation of Nuclear Weapons. Continuing to ensure a safe and reliable nuclear stockpile violates none of the terms of the treaty. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives. U.S. confidence in its stockpile stewardship capabilities is likely to remain important to future arms control negotiations as the Nation moves to reduce its overall stockpile size further. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

317-28 Production of up to 80 pits per year at the LANL site is considered an interim action to meet NNSA's overall long-term need for pit production as established in the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (DOE 1996). Limited-scale production is that level that can be supported by currently operating facilities, but does not meet long-term production needs for maintaining the nuclear weapon stockpile. As stated in Chapter 1, Section 1.3.3, DOE decided in 1999 to manufacture up to 20 pits per year, which has been the operating basis since. In its Notice of Intent to prepare the *Complex Transformation SPEIS* (71 FR 61731), NNSA also announced cancellation of its previous proposal to build a modern pit facility, for which a draft supplemental EIS was issued in June 2003 (67 FR 59577). Consequently, analysis of a modern pit facility has been deleted from the cumulative impacts section of the SWEIS. The cumulative impacts analysis of the Final SWEIS addresses the possible impacts from siting and operating a new consolidated nuclear production center at LANL as

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**Chapter 2. LANL Activities and Facilities Update**

p. 2-11. Section 2.2.6. Environmental Restoration Project. CCNS and EVEMG request that DOE/NNSA include a list of the 100 potential release sites of the Environmental Restoration Project at "increased risk of contaminant release and transport either through direct burning or through vulnerability to increased surface water runoff or erosion," along with the controls that have been installed, times of inspection and maintenance as part of the LANL Storm Water Program.

317-53

p. 2-23. Table 2-3. LANL Key and Nuclear Facilities - 1999 SWEIS and 2005 Listing. What is the basis for increasing the Nuclear Hazard Category from nothing to Category 2 for the Radioactive Liquid Waste Treatment Facility (TA-50) for the Low-Level Waste Tank Farm, Acid and Caustic Tank Farm and Holding Tank?

317-54

analyzed in the *Complex Transformation SPEIS* which was issued as a draft on January 11, 2008 (73 FR 2023).

**317-29** See the response to Comment nos. 317-4 and 317-6.

**317-30** All cost-reimbursable work at LANL and other DOE sites is performed in compliance with DOE Orders and policies. The DOE laboratories are available to conduct work for other Federal agencies on a full cost-recovery basis through the Economy Act of 1932, as amended (31 USC 1535), which authorizes an agency to place orders for goods and services with another government agency when the head of the ordering agency determines that it is in the best interest of the government. In addition, the Atomic Energy Act of 1954, as amended (42 USC 2011), authorizes conduct of research and development and training activities by non-DOE entities, provided private facilities or laboratories are inadequate for that purpose.

**317-31** Chapter 1, Figure 1-1, of the SWEIS is a map specifically designed to depict the location of LANL relative to the surrounding counties and Pueblos and to the rest of the State of New Mexico. The commentor is referred to Chapter 4, Figure 4-1, which shows the course of the Rio Grande above and below LANL. The level of detail requested by the commentor is not necessary to support the analysis of impacts on drinking water and crops that is reported in Chapter 4. As part of LANL's environmental surveillance program, NNSA conducts regional monitoring, the results of which do not indicate a need to monitor across international borders.

**317-32** As described in Chapter 1, Section 1.1, nuclear facilities are categorized according to the potential consequences in the event of an accident. The title of the text box at the end of Section 1.1 was changed to "Nuclear Facility Hazards Categories" to match the Hazard Category descriptions in the text box. The text box in Section 1.3.1 titled, "Special Nuclear Material Safeguards and Security," was moved forward to Section 1.1 and retitled, "Security Categories," to make it easier for readers to find. As this text box indicates, the purpose of security categories is to provide layers of safeguards and security for nuclear materials

**317-33** The cited text is from the purpose and need statement of the *1999 LANL SWEIS*, which remains the purpose and need of the current SWEIS; it

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**Environmental Justice Comments**

*There's been a quantum leap technologically in our age,  
but unless there's another quantum leap in human relations,  
unless we learn to live in a new way towards one another,  
there will be a catastrophe.*  
- Albert Einstein

*All issues related to Los Alamos County and LANL are environmental justice issues.*  
- NMED official

The treatment of Environmental Justice in the draft LANL SWEIS is wholly inadequate. It appears that little to no analysis was actually done. This is unacceptable in a document which is required to analyze the impacts to public health and the environment from polluting facilities, such as LANL. CCNS and EVEMG find this lack of emphasis on and respect for Environmental Justice issues reprehensible.

317-55

New Mexico bears and has historically born an un-paralleled burden from DOE activities. Within its borders there are two of the nation's three nuclear weapons research facilities, the nation's only nuclear weapons waste dump, a uranium belt and now a uranium enrichment facility. New Mexico has been subjected to 63 years of nuclear weapons activities starting back when there were no environmental laws and regulations.

New Mexico has the highest minority majority population of the 48 contiguous states and is second only to Hawai'i in the nation. New Mexico has extraordinary incidences of poverty. New Mexicans demand a complete analysis of Environmental Justice impacts. Considering that a fundamental policy of the National Environmental Policy Act (NEPA) is to "encourage productive and enjoyable harmony between man and his environment," and the situation at LANL, Environmental Justice should have been one of the priorities in this draft LANL SWEIS. (42 U.S.C. paragraph 4321) As it was not, reanalysis in a new draft LANL SWEIS is necessary.

317-56

The most conscious omission of DOE/NNSA's lack of adequate analysis is that there is no mention of Environmental Justice in the cumulative impact analysis in Chapter 5. Section 5.13. Section 3-301 (b) of Executive Order 12898 states, "Environmental human health analysis. . . shall identify multiple and cumulative exposures." Land resources, geology and soils, water resources, air quality and noise, ecological resources, human health, cultural resources, infrastructure, waste management and transportation were all analyzed. DOE/NNSA must explain the basis of the decision to leave Environmental Justice out of the Cumulative Impact analysis of Chapter 5.

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refers to testing done by the High Explosives Testing facilities that does not involve exploding a nuclear device. In the 1999 LANL SWEIS Record of Decision, DOE selected a modified preferred alternative that included operation of the High Explosives Testing facilities (64 FR 50797). The term "non-nuclear aboveground experimentation" and its definition were added to the glossary provided in Chapter 8 of the SWEIS.

**317-34** DOE is party to the Consent Order (signed in March 2005) that establishes requirements for remediation of LANL; decisions to be made regarding cleanup will be made by the New Mexico Environment Department, not DOE. NEPA is a tool to support decisionmaking on actions (not impacts) to be taken by the Federal Government; it explicitly does not apply to non-Federal organizations such as the State of New Mexico. Regardless, NNSA included the impacts of environmental cleanup in the SWEIS. As many commentors have noted, and NNSA agrees, compliance with the Consent Order is not optional. As stated in Chapter 1, Section 1.4, NNSA intends to select actions that support the Consent Order in a Record of Decision regardless of other decisions made.

**317-35** NNSA notes the commentor's opinion that the impacts associated with activities to comply with the Consent Order should be analyzed for all three alternatives. NNSA does not consider compliance with the Consent Order to be optional and is not linking Consent Order compliance with decisions about pit production, proposed new projects, or activities, increased operational levels, or waste generated from other LANL activities. Chapter 1 explains the rationale for including these activities only under the Expanded Operations Alternative and that NNSA does not have to pick all of the elements of a single alternative. As noted above, NNSA also states in Chapter 1 that it intends to include actions that support the Consent Order in a Record of Decision regardless of other decisions made (that is, under any alternative selected). To assist readers in understanding the impacts associated with environmental restoration, the Summary, Table S-5, and Chapter 3, Table 3-19, were revised. The impacts associated with environmental restoration can now be distinguished from other impacts under the Expanded Operations Alternative for those resource areas dominated by environmental restoration impacts (for example, waste management and transportation).

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The decision to omit Environmental Justice from the cumulative impact analysis is reprehensible because Environmental Justice is an issue for which cumulative impacts are particularly significant. In the 63 years that LANL has been in existence, it has produced substantial toxic pollution and had a large impact on its surroundings and public health. One cannot consider the use of land, or the cultural significance of certain sites, without considering this contamination which the residents of New Mexico have been living with for three or more generations --- and will continue to live with for many more. For more on this topic, please see our comment regarding traditional land use and background radiation, regarding page 5-157 below.

A second indication of shallow analysis done for EJ issues was the short length of the chapter and the lack of reference documents cited. Other than statistics, only Executive Order 12898 and a report entitled "Environmental Justice: Guidance under the National Environmental Policy Act," were cited. Significant work has been done over the past two decades regarding environmental justice and the policies associated with it. Reports have been prepared specific to NM, following New Mexico Environment Justice Executive Order 2005-56, which will be of particular use to DOE/NNSA as they discuss LANL. DOE/NNSA must use the final report of the New Mexico Environmental Justice Committee as a basis of a reanalysis for the new draft LANL SWEIS. This report is available at: [www.nmenv.state.nm.us/Justice/index.html](http://www.nmenv.state.nm.us/Justice/index.html).

**Importance of meaningful involvement.** The reference document 'Environmental Justice: Guidance under the National Environmental Policy Act' states,

Agencies should recognize that the question of whether agency action raises environmental justice issues is highly sensitive to the history or circumstances of a particular community or population, the particular type of environmental or human health impact, and the nature of the proposed action itself. There is not a standard formula for how environmental justice issues should be identified or addressed. P.14

CCNS and EVEMG agree with the statement there is not a standard formula for how EJ issues should be addressed. Only the communities who are affected can decide the necessary solution. Therefore, in order to follow the guidelines DOE must establish meaningful dialogue with the affected communities. There is no discussion in the draft LANL SWEIS of a future process through which DOE/NNSA and LANL will involve the surrounding low-income and minority communities in the decision making process. DOE/NNSA must include a plan for developing this dialogue, which must be included in the reanalysis for a new draft LANL SWEIS. DOE/NNSA must evaluate the level of public involvement achieved and the outreach methods used for the public comment hearings in the analysis done for a new draft LANL SWEIS.

Crucial to Environmental Justice is the early and meaningful involvement of the low-income and minority communities who are impacted by past, existing and proposed

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- 317-36 The discussion in Chapter 4, Section 4.1.1, of the SWEIS regarding conveyance of land to Los Alamos County and transfer of land to the Department of the Interior to be held in trust for the Pueblo of San Ildefonso was revised to reference the 2007 Defense Authorization Bill and the extension of the deadline for conveyance and transfer until 2012.
- 317-37 NNSA notes the commentor's support for reducing or eliminating certain operations at LANL.
- 317-38 A discussion of the proposed increase in pit production up to an 80 pit per year maximum is included in Chapter 1 of the SWEIS. In part, the maximum production rate of up to 80 pits per year allows for the high initial anticipated rejection rate of newly produced pits as personnel are trained and the process is fully established at LANL, after which NNSA anticipates the product rejection rate will diminish considerably.
- 317-39 Chapter 1, Section 1.3.3, indicates that LANL has not achieved the production level of 20 pits per year that was selected in the 1999 SWEIS Record of Decision; since the Record of Decision, only a few pits have been produced while the LANL contractor refines its manufacturing processes.
- 317-40 In the Record of Decision for the *Environmental Impact Statement for the Proposed Relocation of Technical Area 18 Capabilities and Materials at the Los Alamos National Laboratory* (DOE/EIS-0319) (67 FR 79906), NNSA decided to relocate Security Category I and II capabilities and related materials to the Device Assembly Facility at the Nevada Test Site. This did not include a decision regarding the future location of TA-18 Security Category III and IV capabilities or the disposition of the TA-18 facilities. Appendix G, Section G.3, of the SWEIS includes impacts analyses of projects to maintain existing capabilities at LANL, including the proposed construction and operation of the Radiological Sciences Institute, the first phase of which is the Institute for Nuclear Nonproliferation Science and Technology. This project includes providing facilities to maintain the capabilities remaining at TA-18 (except the Solution High-Energy Burst Assembly). Appendix H, Section H.1, addresses the closure of the TA-18 site, including relocation of the remaining capabilities (except the Solution High-Energy Burst Assembly) followed by decontamination, decommissioning, and demolition of the structures. To avoid analyzing the impacts of decontamination,

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activities. It is not something which can be assessed, awarded or achieved from the outside, but rather something which must come from an working relationship between the government agency and the impacted communities. The importance of such a process is discussed in the reference document 'Environmental Justice: Guidance under the National Environmental Policy Act', which states,

Early and meaningful public participation in the federal agency decision-making process is a paramount goal of NEPA. CEQ's regulations require agencies to make diligent efforts to involve the public throughout the NEPA process. Participation of low-income populations, minority populations, or tribal populations may require adaptive or innovative approaches to overcome linguistic, institutional, cultural, economic, historical, or other potential barriers to effective participation in the decision-making processes of Federal agencies under customary NEPA procedures. These barriers may range from agency failure to provide translation of documents to the scheduling of meetings at times and in places that are not convenient to working families. P.13

CCNS found the methods used to foster public involvement for this draft LANL SWEIS to be very ineffective and exclusionary. Foremost, the hearings were scheduled during the Pueblo feast days, which prevented the involvement of some of the most affected people. This decision should not have been made as DOE/NNSA must know the timing as these feast days are an annual event. DOE/NNSA should be well aware of such events due to their tribal accord relations. Furthermore, even after Elisabeth Withers, the DOE/NNSA manager for this process, was informed of the scheduling dilemma, she did not re-schedule the hearings nor schedule a later hearing in order to correct this.

There were other scheduling difficulties with the comment hearings. Primarily, the hearings were only held at night. This prevented many from attending, such as those who work at night or have a second job. The tourist industry is large employer in Northern New Mexico, and it requires many to work evenings and nights. Furthermore, childcare was not provided. Parents found it necessary to pay for or arrange childcare. If the purpose of NEPA is to involve low-income populations than these matters must be taken into consideration. Furthermore, DOE/NNSA was not effective in involving the Spanish speaking population of New Mexico. Although a translator was present at all three public hearings, his services were never used. This is was not because a significant portion of those living in the surrounding communities would not have required one, but a failure on the part of NNSA to fulfill its executive order duties to involve the community.

CCNS and EVEMG will offer two explanations for why no one requested the use of the translator. The first is that is that few or no outreach efforts were made towards those requiring a translator. The second explanation is that individuals requiring a translator

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decommissioning, and demolition of TA-18 structures twice, the project-specific analyses of impacts for the Radiological Sciences Institute in Appendix G excluded decontamination, decommissioning, and demolition of TA-18.

**317-41** NNSA is responsible for safely storing unwanted radioactive sealed sources for safety and national security purposes. In addition, DOE is responsible under Public Law 99-240 for ensuring safe disposal of commercially generated Greater-Than-Class C radioactive waste (see below). Over a number of years, NNSA has recovered and stored actinide-bearing sealed sources at LANL under its Off-Site Source Recovery Project; it now proposes to store additional sealed sources containing other isotopes if appropriate and safe commercial or other management options cannot be identified. Stored sealed sources containing transuranic isotopes that are determined to be defense-related are eligible for disposal at WIPP, including all of the plutonium-239 sources that have been collected; as stated in the SWEIS, 132 drums of plutonium-239 sealed sources have already been shipped to WIPP. Recently, some of the americium-241 and plutonium-238 sealed sources were determined to be defense-related and thus eligible for disposal at WIPP. Stored sealed sources containing these and other isotopes that are determined not to be defense-related may be considered Greater-Than-Class C waste or DOE waste with similar characteristics. At this time, there is no identified disposal facility for Greater-Than-Class C waste; however, DOE issued a Notice of Intent to prepare an *Environmental Impact Statement for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste (GTCC EIS)* (72 FR 40135). DOE intends this environmental impact statement to enable selection of a new or existing disposal location and methods of disposal of Greater-Than-Class C low-level radioactive waste, as well as DOE waste having similar characteristics. If the concentrations of these isotopes in waste do not exceed the Class C concentrations listed in Nuclear Regulatory Commission Regulation 10 CFR Part 61, the sources may be disposed of at an existing commercial or DOE low-level radioactive disposal facility. For instance, the strontium-90 radioisotope thermoelectric generators currently stored at LANL are considered low-level radioactive waste. Appendix J of the SWEIS discusses the transportation impacts of shipping these radioisotope thermoelectric generators to the Nevada Test Site for disposal. Clarifying language was added to Appendix J.

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may not have felt comfortable attending or requesting that aid. These issues are in fact one and the same. Meaningful involvement of a community begins with having respect for the community you are trying to involve. One important step is establishing relationships with the organizers and leaders in these communities.

The report "Environmental Justice: Guidance under the National Environmental Policy Act" lists "Assistance to hearing impaired or sight impaired individuals" (p.13) as one important step for encouraging early and meaningful involvement. This type of assistance was not provided for the draft SWEIS. At the hearings there was no sign language interpreter available. No versions of the document were made available for the seeing impaired. CCNS and EVEMG were informed that the digital version of the SWEIS was made to be compatible with software which could translate the document into either large print or Braille, however we do not believe that this is enough to ensure meaningful involvement. Furthermore, the translation software is quite expensive, the Duxbury Braille Translator v10.5, for example costs \$569.00, if purchased from enablemart.com. Requiring a seeing impaired individual to have own this software discriminates against those who cannot afford such costly technology. The new draft LANL SWEIS must be available in large-print, Braille and audio recording at the request of individuals and groups. If DOE/NNSA decides not to provide these materials, please state your justification for denying the seeing impaired access to the document.

The Executive Order requires each agency to "ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and easily accessible to the public." (section 5-5) DOE/NNSA must take significant steps to make the new draft LANL SWEIS *concise, understandable and easily accessible*. Unfortunately, on a fundamental level the draft LANL SWEIS was not physically accessible to many individuals of the public nor were the reference documents. CCNS distributed the draft SWEIS to many members of the community who had not received one, including congressional staff, who only received the summary.

CCNS and EVEMG requested and had great difficulty receiving an electronic version of the reference documents. But once we received them we distributed four complete sets. Even after the documents were posted on the Nuclear Watch New Mexico website, many who did not have high-speed internet access required CD versions.

DOE/NNSA must also take significant steps to make the content of the new draft LANL SWEIS and future documents more *concise, understandable and easily accessible* to the public. There are two key components to doing so, the first is to ensure that the scientific discussions are written with the intention of being read by a member of the public and the second is to place the activities and information within a context.

In order to ensure that the scientific writing is accessible to the public DOE/NNSA must hire a member of the public to read through and comment on the entire document

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**317-42** NNSA acknowledges the difficulties that have occurred related to repackaging and certifying transuranic waste for shipment to WIPP. Many of these issues have been addressed, however, and the number of shipments has been increasing. Almost 2,800 containers have been shipped to WIPP from LANL in 2006 (as identified by the WIPP Waste Information System, available at the WIPP website), and this shipment rate should increase. NNSA is not planning to construct HOSS facilities at LANL; however, to more significantly increase the rate of repackaging and certifying transuranic waste, NNSA is proposing to install and operate additional equipment and facilities, and upgrade existing processes, as identified in Appendix H, Section H.3.2.2.3, of the SWEIS. The amount of stored transuranic waste is therefore expected to decrease.

**317-43** As addressed in Appendix J, Section J.3.1, in cooperation with the U.S. Nuclear Regulatory Commission, DOE, and later NNSA, have for many years provided safe temporary storage for excess sealed radioactive sources that would present a public health and safety risk if abandoned, lost, or disposed of inappropriately. Some of these sealed sources may be determined to be low-level radioactive wastes that are subject to the Low-Level Radioactive Waste Policy Amendments Act (Public Law 99-240), which assigned the Federal Government responsibility for disposal of commercially-generated Greater-Than-Class C waste. The *Greater-Than-Class-C EIS* has not progressed sufficiently to evaluate the possible impacts of disposal of any Greater-Than-Class C or similar DOE waste by any method at any site. Therefore, it would be premature to address Greater-Than-Class C waste disposal in the LANL SWEIS. See the response to Comment no. 317-41 for additional information.

**317-44** A modern pit facility was not discussed under the alternatives analyzed in the Draft SWEIS and is not discussed in the Final SWEIS. As stated in Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD, the Notice of Intent for the *Complex Transformation SPEIS* announced cancellation of the supplemental EIS for construction of a modern pit facility (71 FR 61731). The proposed action for the maximum level of pit production in this SWEIS is the same as that in the *1999 LANL SWEIS*, which addressed production of up to 80 pits per year. The cumulative impacts analysis of the Final SWEIS addresses the possible impacts from siting and operating a new consolidated nuclear production center at LANL as analyzed in the *Complex Transformation SPEIS* which was issued as a draft on January 11, 2008 (73 FR 2023).

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with the intention of making it accessible. This should be done for both the English, Spanish and Braille versions of the final SWEIS. For clarity and ease in reading it is essential that scientific terms are defined the first time they are used in each chapters, as well as in a cumulative glossary at the end. This can be done either in the text or in a text box on the side

One example is the definition of a 'pit'. DOE/NNSA defined the 'pit' as "the central core of a primary assembly in a nuclear weapon typically composed of plutonium-239 and/or highly enriched uranium and other materials." (8-23) This definition does not give the full meaning of a 'pit'. There is no discussion of the use of nuclear weapons to put expanding plutonium pit production into perspective. CCNS requests the definition of a pit be expanded to something more like, "the trigger of a nuclear weapon such as the one the United States government dropped on Nagasaki Japan on August 9<sup>th</sup> 1945. A pit is typically composed of plutonium-239 and/or highly enriched uranium and other materials."

The draft SWEIS uses phrases which hide the significance of what they are discussing and does not connect proposed or current operations to their eventual outcome and purpose. One example from the Environmental Justice section in chapter 5 is the phrase "special pathways receptor." (5-157) No definition was given for this term in the draft LANL SWEIS. This phrase is speaking of a human being who has been exposed to radionuclides, but to one inexperienced with the technical language employed by DOE/NNSA it appears that this is discussing a mechanical instrument. It is of paramount importance that it is understood that human beings is being discussed.

In order to make the document *understandable* and *easily accessible* the principle of adding context must be applied to all terms or phrases that have reference to weapons activities. DOE/NNSA must ensure that the purpose of the projects are clearly stated and include the full ramifications of what is being discussed. Nuclear weapons activities cannot be hidden within vague scientific descriptions. Furthermore the health effects of all toxic, radioactive and hazardous materials must be clearly listed whenever the first time these materials are mentioned in a chapter, regardless of amount, without diluted qualification of greater or lesser amounts.

Furthermore DOE/NNSA must include a cost analysis or estimate for proposed actions within the document. Monetary sums put the projects proposed into a type of perspective that is *concise*, *understandable* and *easily accessible* to the general public.

The assessment of Environmental Justice issues must take place internally within LANL as well as outside of it. LANL has recently been sued for discriminatory practices in its employment policies. Please see attached article, from the Associated Press, entitled 'Lawsuit accused LANL of discrimination against women, Hispanics' dated August 6, 2006 in Exhibit 9.1. This is only the most recent in a long line of discrimination practices

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The Los Alamos County Landfill is operated by the county under a Special Use Permit granted by NNSA. Historically, LANL has used the landfill as its primary facility for disposal of municipal wastes generated by LANL operations. County operation of the landfill on DOE property was considered mutually beneficial to all parties because it provided LANL and the county with convenient disposal and recycling capabilities. As operator of the landfill, the county is working with the New Mexico Environment Department regarding the schedule and design for closure of the landfill. NNSA has a responsibility as owner of the property and because of DOE's historical use of and association with the facility. Following closure, requirements for monitoring in the vicinity of the landfill will be addressed under the Consent Order as part of investigating and remediating the Upper Sandia Canyon Aggregate Area. Under the current schedule, the Investigation Work Plan for Upper Sandia Canyon Aggregate Area (including proposed groundwater monitoring) is due to the New Mexico Environment Department by the end of March 2008; therefore, the basis for groundwater monitoring cannot be provided until that time.

317-45 NNSA will publish one or more Records of Decision in compliance with Section 1505.2 of the Council on Environmental Quality regulations. As stated in Chapter 1, Section 1.4, of the SWEIS, NNSA could choose to implement the alternatives either in whole or in part. NNSA intends to clearly communicate its decisions and the related rationale for those decisions in any Record of Decision that is published. Lack of an explicit decision in a Record of Decision following this SWEIS does not mean that a decision has not been made. Previous decisions, such as those that followed issuance of the 1999 SWEIS Record of Decision, would still be applicable unless another decision is made to supplant them.

317-46 Analysis of cost data is not within the scope of the SWEIS. Decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including the Consent Order, under which the New Mexico Environment Department can invoke a corrective measures process that requires NNSA to prepare a corrective measures evaluation report for a specific cleanup action and provides an opportunity for public involvement. The corrective measures proposed in the report would be evaluated based on a number of factors, including cost. Following evaluation of the report, the New Mexico Environment



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at LANL. DOE/NNSA must include a discussion of the social impacts of its internal policies in the reanalysis of Environmental Justice for a draft LANL SWEIS.

The discriminatory practices at LANL raise the issue of DOE/NNSA's sensitivity to gender both within and outside the laboratory. DOE/NNSA must give special consideration given to women in this section. Although women are not a minority, it is a population for whom the health effects of LANL are exaggerated. Furthermore women are a disempowered portion of the community whose voice must be sought out and heard if a significant discussion of the internal policies and impacts of LANL activities on the surrounding communities is to be had.

**Specific Comments about Environmental Justice**

**Chapter 4: Affected Environment, Section 4.11 Environmental Justice**

[4-150] Please note that the following comment is referenced several times below. "Persons whose income is below the federal poverty level are designated as low income." CCNS and EVEMG find DOE/NNSA's analysis to be misleading and inaccurate. The term 'low income' is not defined as, nor conventionally used interchangeably with, 'below the federal poverty level.' The United States Department of Education webpage, states, "the term 'low-income individual' means an individual whose family's taxable income for the preceding year did not exceed 150 percent of the poverty level amount," at <http://www.ed.gov/about/offices/list/ope/trio/incomelevels.html>. Below is a table taken from the same page:

(Effective February 2006. Unit: Dollar. Notice)

Size of Family Unit	48 Contiguous States, D.C., and Outlying Jurisdictions	Alaska	Hawaii
1	\$14,700	\$18,375	\$16,905
2	\$19,800	\$24,750	\$22,770
3	\$24,900	\$31,125	\$28,635
4	\$30,000	\$37,500	\$34,500
5	\$35,100	\$43,875	\$40,365
6	\$40,200	\$50,250	\$46,230
7	\$45,300	\$56,625	\$52,095
8	\$50,400	\$63,000	\$57,960

For family units with more than 8 members, add the following amount for each additional family member: \$5,100 for the 48 contiguous states, the District of Columbia and outlying jurisdictions; \$6,375 for Alaska; and \$5,865 for Hawaii.

The term "low-income individual" means an individual whose family's taxable income for the preceding year did not exceed 150 percent of the poverty level amount.

The figures shown under family income represent amounts equal to 150 percent of the family income levels established by the Census Bureau for determining poverty status. The poverty guidelines were published by the U.S. Department of Health and Human Services in the *Federal Register*, Vol. 71, No. 15, January 24, 2006, at 3848-2849.

Using these numbers from the Federal Registry, the average income for a family of four in New Mexico would be \$30,000 a year rather than \$17,029 as the analysis in

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Department would propose a remedy and offer an opportunity for public review and input. After this public participation phase, a final remedy would be selected, which NNSA would undertake in accordance with an established schedule.

**317-47** Chapter 1, Section 1.5, was revised to include the year each document was finalized.

**317-48** NNSA prepared this SWEIS in accordance with Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and DOE NEPA implementing procedures (10 CFR Part 1021). NNSA originally announced its intent to prepare a supplement to the *1999 LANL SWEIS*, which included all operations at LANL as well as newly proposed projects as part of an Expanded Operations Alternative. Consistent with some of the comments received during the scoping period, NNSA decided to prepare a new SWEIS instead of the originally planned supplement. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

**317-49** The LANL SWEIS appropriately makes conservative assumptions regarding the potential occurrence and impacts of a wildfire at LANL. As discussed in a number of locations in the SWEIS, such as Chapter 3, Section 3.6.1, Facility Accidents, and Appendix D, Section D.5.2.1, mitigation measures have been taken at LANL since the fire. These include thinning several thousand acres of forest to reduce fuel load, as well as activities to reduce the fuel load within waste management domes in TA-54, Area G.

**317-50** A more comprehensive description of the analysis that supports the rationale for limiting the region of influence for accident analyses to a 50-mile radius was added to Appendix D, Section D.3.2. This description demonstrates that the analysis results given in the SWEIS are appropriate and that extending the distance beyond 50 miles would result in only small differences (about 3 percent) in the population dose results. See the responses to Comment nos. 317-20 and 317-22 for additional information.

**317-51** Reports and recommendations made by the DOE Inspector General and the Defense Nuclear Facilities Safety Board that are applicable to NEPA are considered in the SWEIS analyses, particularly the accident analyses, which consider a range of possible incidents that could result in the release

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the draft LANL SWEIS currently states [4-154]. This would include a far larger low-income population than is analyzed the draft LANL SWEIS. It is unacceptable for DOE/NNSA to determine a private definition for 'low-income' when the us department of human health and services has already done so.

The following is a list of the percentage of the population in the affected counties that earn less than \$34,999 a year per family and per household. This information was taken from the 2000 United States Census data. Please note that the Census data is not presented in such a way as to allow us to calculate the percentage of the populations which earns 30,000 or less annually with out great difficulty. For that reason CCNS and EVEMG determined to raise the cut off point to \$34,999. What is provided below is intended to serve as an indication of the increase in affected population if the correct definition of low-income is used.

Los Alamos County: 8.2% of families, 16.4% of the households  
[[http://factfinder.census.gov/servlet/QTTable?\\_bm=y&-geo\\_id=05000US35028&-qr\\_name=DEC\\_2000\\_SF3\\_U\\_DP3&-ds\\_name=DEC\\_2000\\_SF3\\_U&-\\_lang=en&-redoLog=false&-\\_sse=on](http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=05000US35028&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-redoLog=false&-_sse=on)]

Mora County: 59.2% of families, 66.4% of households  
[[http://factfinder.census.gov/servlet/QTTable?\\_bm=y&-geo\\_id=05000US35033&-qr\\_name=DEC\\_2000\\_SF3\\_U\\_DP3&-ds\\_name=DEC\\_2000\\_SF3\\_U&-\\_lang=en&-\\_sse=on](http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=05000US35033&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-_sse=on)]

Rio Arriba: 52.5% of families, 58% of the households. In Espanola City alone: 45.6% the households earned under \$35,000 a year.  
[[http://factfinder.census.gov/servlet/QTTable?\\_bm=y&-geo\\_id=05000US35039&-qr\\_name=DEC\\_2000\\_SF3\\_U\\_DP3&-ds\\_name=DEC\\_2000\\_SF3\\_U&-\\_lang=en&-\\_sse=on](http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=05000US35039&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-_sse=on)]

Sandoval County: 30.6% of families, 36.7% of households  
[http://factfinder.census.gov/servlet/QTTable?\\_bm=y&-geo\\_id=05000US35043&-qr\\_name=DEC\\_2000\\_SF3\\_U\\_DP3&-ds\\_name=DEC\\_2000\\_SF3\\_U&-\\_lang=en&-redoLog=false&-\\_sse=on](http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=05000US35043&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-redoLog=false&-_sse=on)

San Miguel County: 55.8% of families, 62.7% of households  
[[http://factfinder.census.gov/servlet/QTTable?\\_bm=y&-geo\\_id=05000US35047&-qr\\_name=DEC\\_2000\\_SF3\\_U\\_DP3&-ds\\_name=DEC\\_2000\\_SF3\\_U&-\\_lang=en&-redoLog=false&-\\_sse=on](http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=05000US35047&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-redoLog=false&-_sse=on)]

Santa Fe County: 34% of families 40.6% of the households  
[[http://factfinder.census.gov/servlet/QTTable?\\_bm=y&-geo\\_id=05000US35049&-qr\\_name=DEC\\_2000\\_SF3\\_U\\_DP3&-ds\\_name=DEC\\_2000\\_SF3\\_U&-\\_lang=en&-redoLog=false&-\\_sse=on](http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=05000US35049&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-_lang=en&-redoLog=false&-_sse=on)]

CCNS and EVEMG Comments about draft LANL SWEIS \* September 20, 2006 \* Page 23

**317-63  
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of materials to the environment. Detailed analysis is then focused on the most significant of those accidents, based on the potential consequences and risks. Thus, although not all accidents or failures may be addressed specifically, the impacts of the accidents analyzed in Chapter 5 of the SWEIS are expected to bound the impacts of other reasonably foreseeable events.

The Defense Nuclear Facilities Safety Board does not regulate or authorize operation of facilities at LANL. Its function, as mandated by the Congress, is to provide independent safety oversight of the NNSA nuclear weapons complex. For all NNSA nuclear weapons complex sites, the Defense Nuclear Facilities Safety Board reviews safety issues and prepares reports regarding the safety of nuclear weapons complex facilities for submission to NNSA. NNSA and the LANL contractor review DNFSB reports and respond with commitments to update and improve safety basis documentation. Similarly, NNSA and the contractor review reports and recommendations made by the Inspector General and develop plans for implementing appropriate changes. The Los Alamos Site Office Safety Authorization Basis Team assures the development and approval of adequate controls in support of operations at LANL in a safe manner. All LANL facility operations are authorized and approved by NNSA based on its evaluation of the acceptability of existing relevant safety documentation. Refer to Section 2.13, Recommendations of the Defense Nuclear Facilities Safety Board, of this CRD for more information.

**317-52** The commentors' suggestion is noted, but NNSA believes it would be inappropriate to decide unilaterally to send the LANL SWEIS Yearbooks to people who have not requested them. The Yearbooks can be accessed via the LANL website at <http://catalog.lanl.gov/F> and will be provided on request.

**317-53** The cited portion of Chapter 2, Section 2.2.6, does not refer to additional potential release sites. Rather, it summarizes information given in a previous bullet: "Evaluate and stabilize sites touched by fire." This was clarified in the Final SWEIS, and a citation for the source of the information (LANL 2001b) was added. A reference for the current LANL Stormwater Monitoring Plan (LANL 2005a) was added.

**317-54** The listing in Chapter 2, Table 2-3, of the SWEIS is consistent with the listing in the LANL Nuclear Facility List, PS-SBO-401, Rev 7 (DOE and

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Taos County: 51.6% of families, 60.9% of households  
[[http://factfinder.census.gov/servlet/QTTable?\\_bm=y&-geo\\_id=05000US35055&-qr\\_name=DEC\\_2000\\_SF3\\_U\\_DP3&-ds\\_name=DEC\\_2000\\_SF3\\_U&-lang=en&-redoLog=false&-sse=on](http://factfinder.census.gov/servlet/QTTable?_bm=y&-geo_id=05000US35055&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-lang=en&-redoLog=false&-sse=on)]

It is crucial when assessing the above data to note that Los Alamos County has a vastly different demographic from the surrounding area, both in income and in race/ethnicity. DOE/NNSA must ensure that the statistical analysis is not weighted by the large population of affluent Anglo individuals living in Los Alamos County. It is unacceptable for DOE/NNSA to use the Anglo scientists who have chosen to come to LANL and receive good salaries to weight the scale when assessing the Environmental Justice issues in the surrounding area. For this reason it is crucial that analysis also be done excluding the residents of Los Alamos County.

317-64

Although LANL makes mediocre contributions to the surrounding communities, the positive economic impact of its presence is also called into question by the income disparity. When working with the surrounding communities to develop future plans for operations at LANL, DOE/NNSA must also receive input as to ways in which LANL could contribute in a more positive fashion. Members of the public who came to the public comment hearings for the draft LANL SWEIS discussed this topic at length. Such discussion must be fostered.

#### 4.11.1 Region of Analysis

4-151 Please cite the scientific justification behind the NNSA methodology of using a 50-mile radius for assessing the potential risks to populations. Precedent is not adequate scientific justification.

Expanding the radius to 60 miles would include Albuquerque and Sandia National Laboratories. Including Albuquerque is important for ensuring Environmental Justice. Albuquerque has a population of 448,607 people. The 2000 Census found that 39.9% of the Albuquerque population is Hispanic or Latino, and the sum of other non-white population is 28.4%. [http://factfinder.census.gov/servlet/QTTable?\\_bm=y&-qr\\_name=DEC\\_2000\\_SF3\\_U\\_DP3&-ds\\_name=DEC\\_2000\\_SF3\\_U&-lang=en&-sse=on&-geo\\_id=16000US3502000](http://factfinder.census.gov/servlet/QTTable?_bm=y&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-lang=en&-sse=on&-geo_id=16000US3502000)

317-65

A significant portion of the Albuquerque population is low-income, 35.3% of the families and 45.6% households have an annual income of less than \$34,999.

The state of affairs is similar in the whole of Bernalillo County, the 2000 census data shows that in 1999, 36% of families and 45.1% of households had an annual income of less than \$34,999. [http://factfinder.census.gov/servlet/QTTable?\\_bm=y&-context=q&-qr\\_name=DEC\\_2000\\_SF3\\_U\\_DP3&-ds\\_name=DEC\\_2000\\_SF3\\_U&-tree\\_id=403&-redoLog=true&-all\\_geo\\_types=N&-caller=geoselect&-](http://factfinder.census.gov/servlet/QTTable?_bm=y&-context=q&-qr_name=DEC_2000_SF3_U_DP3&-ds_name=DEC_2000_SF3_U&-tree_id=403&-redoLog=true&-all_geo_types=N&-caller=geoselect&-)

LANL 2005). As stated in Chapter 2, Section 2.4.12, of the SWEIS, the four primary structures (Radioactive Liquid Waste Treatment Facility, Tank Farm and Pumping Station, Acid and Caustic Solution Tank Farm, and influent holding tank) are considered one Hazard Category 2 nuclear facility. The 1999 SWEIS description of the Radioactive Liquid Waste Treatment Facility Key Facility, which was rated a Hazard Category 2 nuclear facility, included the functions of these structures, but not all of the structures were identified by name.

**317-55** The report referenced by the commentor was reviewed; its recommendations would not change the environmental justice analysis presented in the Draft SWEIS. A search was conducted to identify reports specific to New Mexico, following New Mexico Environment Justice Executive Order 2005-56, which would be of particular use to NNSA because they discuss LANL as suggested by the commentor. A number of references were made to monitoring LANL activities by participants in the listening sessions, as reported in the final report of the New Mexico Environmental Justice Committee, but none was related to specific actions to be taken by NNSA. As designated by New Mexico Executive Order 2005-56, the New Mexico Environment Department is the lead agency for the New Mexico Environmental Justice Task Force. NNSA received a number of comments from the New Mexico Environment Department on the Draft SWEIS, but none was focused on concerns related specifically to environmental justice. Refer to Major Issue 2.11 of this CRD, Environmental Justice, for additional information.

**317-56** Environmental justice was analyzed in Chapter 5, Section 5.11, of the SWEIS, as NNSA understands the issue. Refer to Section 2.11, Environmental Justice, of this CRD for additional information.

**317-57** As stated in Chapter 5, Section 5.11, of the SWEIS, based on the analyses of impacts for other resource areas, NNSA expects no high and adverse impacts from the continued operation of LANL under any of the alternatives. To date, two communities have identified perceived environmental justice issues related to LANL operations. NNSA already has an established process for discussing issues with those communities under the four Pueblo Accords signed by DOE and each of the Pueblo Governors, and does not believe additional processes are necessary.

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Expanding the radius would also include the Laguna Pueblo lands. DOE/NNSA must include Canoncito Pueblo within the Environmental Justice analysis for a new the draft LANL SWEIS because of its proximity to the circumference of the affected area.. Further more DOE/NNSA must include the tribes which use the land and natural resources surrounding LANL for sacred purposes, such as the Hopi who use the water.

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Furthermore, section 3-301 (b) of the Federal Executive Order states, "Environmental human health analysis. . . shall identify multiple and cumulative exposures." The draft LANL SWEIS states that "cumulative impacts for this SWEIS includes . . . a review of past, present, and reasonably foreseeable actions for other federal and non-federal agencies in the region." (5-180) Although DOE/NNSA failed to include analysis of the cumulative impacts as they pertain to Environmental Justice, the Executive Order requires such analysis. DOE/NNSA must include these impacts in the assessment for a new draft SWEIS. Please see our comments regarding the cumulative impacts to Laguna lands.

**317-66**

Other sites which DOE/NNSA must assess include, but are not limited to Sandia National Laboratories (which fall within the 60-mile radius of LANL) WIPP, NEF, the Nevada Test Site and past present and future uranium mining sites.

**317-67**

The Environmental Justice repercussions of the alternatives for waste storage and transportation were not analyzed in the draft LANL SWEIS. The draft LANL SWEIS states that if expanded operations, a modern pit facility and full cleanup are to be implemented it would require over 100,000 shipments to WIPP. S-87 This statement begs the question of how these communities through which the waste is transported, would be impacted. Furthermore, it demands the question as to which communities the WIPP route passes through. The trucks pass through land that is sacred to many tribes. They pass through San Ildefonso, Pojoaque and Tesuque lands. Furthermore, the trucks pass through many low-income and minority communities in central and southeastern New Mexico. See CCNS comments about the National Enrichment Facility Permit Application in Exhibit 9.2 for more information about the demographic of these communities. DOE/NNSA must include the Environmental Justice issues associated with waste transportation in the reanalysis for a new draft SWEIS.

**317-68**

Further multiple impacts that must be considered are the way that increased LANL activities will affect those at sites, which perhaps remote in location, are directly implicated by LANL operations. Please see CCNS and EVEMG comments below regarding Section 5.13 Cumulative Impacts, for further comment on these multiple impacts.

4.11.2 Changes Since the 1999 SWEIS

CCNS and EVEMG Comments about draft LANL SWEIS \* September 20, 2006 \* Page 25

**317-58** NNSA is aware that each individual Pueblo has multiple feast days that occur on either fixed or floating dates throughout the year. The Eight Northern Pueblos and the four LANL Accord Pueblos were invited to a special briefing on the SWEIS hosted by the Santa Clara Pueblo early during the comment period. The schedule for public hearings and alternate means of providing both oral and written comments on the Draft SWEIS were discussed with the Pueblo representatives that attended the briefings. NNSA recognizes that it is not possible to hold a public hearing at a time and place that is convenient to every interested person, and therefore provides alternate means of submitting comments to provide multiple opportunities to participate in the NEPA process. See additional discussion in Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD. The Spanish-speaking translator present at the three meetings asked the meeting attendees in Spanish whether Spanish translation services were needed and received a negative response at each meeting. NNSA disagrees that the lack of a Spanish-language translation directly corresponds with any lack of effective involvement of the Spanish-speaking population of New Mexico in the NEPA compliance process.

**317-59** Accommodations were made for all members of the public who were hearing- or sight-impaired and requested such accommodations while participating in the public comment process for the Draft LANL SWEIS. NNSA was not previously advised of the need for assistance, but a hearing-impaired individual participated in the Los Alamos hearing by reading the transcript that was being recorded by the court reporter. The NNSA Los Alamos Site Office continually updates the list of people and organizations that have requested summaries or copies of LANL NEPA documents, and responded to any requests for full copies or summaries of the Draft LANL SWEIS during the comment period. See additional discussion in Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD.

**317-60** NNSA strives to meet Council of Environmental Quality regulations (40 CFR Parts 1500 to 1508) and DOE implementing procedures (10 CFR Part 1021) regarding the readability of the EIS for the public. When a commentor notes that something in the EIS is not understandable or needs clarification, NNSA responds to the commentor in the CRD by explaining the text and revising it as necessary in the Final SWEIS to

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

**Non United States Citizen Population.** How are non-citizen residents accounted for in the draft LANL SWEIS Environmental Justice Analysis? No mention is made of this group, nor their land uses. CCNS and EVEMG have knowledge of many immigrants fishing, gathering plants for medicinal purposes and hauling water for many activities. This population and their use of the land, water and wildlife must be addressed in the reanalysis for a new draft LANL SWEIS.

Furthermore, there is no discussion of undocumented residents in this section. The fact that this community is undocumented does not mean that they do not exist, nor are they impervious to the impacts of LANL's activities. DOE/NNSA must include an estimate of that population, its income and demographic, in the Environmental Justice section of the reanalysis for a new draft LANL SWEIS. DOE/NNSA must make efforts to include the immigrant and undocumented communities in the discussions regarding Environmental Justice issues. Although difficult such efforts are not impossible.

4-153 It is not adequate to look simply at those individuals below the poverty level. As stated above in reference to page 4-150, a 'low income individual' by federal definition is one who's family income is less than 150% of the federal poverty level, not below it. See above comment in reference to p. 4-150

4.11.4 Low-Income Population in 2000

4-154 It is not adequate to look simply at those individuals below the poverty level. As stated above in reference to page 4-150, a 'low income individual' by federal definition is one who's family income is less than 150% of the federal poverty level. It is not adequate to look simply at those individuals below the poverty level. See above comment in reference to p. 4-150.

4-155, 4-156 Figure 4-33 Minority Population and Figure 4-34: DOE/NNSA must add a joint figure which shows both the overlap of minority population and low-income population at the same time. As previously stated, by low-income, CCNS does not mean those individuals living below the federal poverty level, but rather those who qualify as low income individuals under the Federal Registry regulations cited above. DOE/NNSA must include an additional figure to indicating the portion of the affected environment which overlaps with Sandia National Laboratory's affected environment. Please see the attached image of the multiple if the effected area were extended to 60 miles, Exhibit 13.1.

**Chapter 5: Environmental Consequences**

5.11 Environmental Justice

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improve its understandability. NNSA provided a glossary in the Draft LANL SWEIS and Summary document that defines important terms such as "pit." Regarding the term "special pathways receptor," Section 5.6.1.1 directs the reader to Appendix C for a more detailed description; Section 5.11 was revised to add a reference to Appendix C. The impact of toxic, radioactive, and hazardous materials on human health are provided in Section 5.6, and project-specific impacts are provided in Appendices G, H, and I. More detailed information is provided in Appendices C and D regarding the determination of human health impacts.

**317-61** The costs of implementing the Proposed Action and alternatives are not within the scope of this SWEIS, which discusses the potential environmental impacts of operations at LANL. As noted in Chapter 1, Section 1.4, NNSA will make decisions based on the environmental impacts of the proposed actions, as well as other factors such as cost, schedule considerations, and safeguards and security concerns.

**317-62** NNSA notes the commentor's concern about potential discrimination in employment practices. There are provisions in law for dealing with such issues; however, they are not appropriate subject matter for the environmental justice analysis in a NEPA document.

**317-63** As discussed in the response to Comment no. 317-14, DOE (and by extension NNSA) defines low-income populations in terms of the Census Bureau's statistical poverty level, which is the was used in the LANL SWEIS. This approach is consistent with EPA's, as discussed in the Agency's "Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis" (EPA 1998). Other measures are used throughout the Government for purposes such as determining eligibility for certain programs. The reference in the comment to a Department of Education definition of low-income is one of these measures, but it does not apply throughout the Federal Government.

**317-64** As noted in Chapter 4, Sections 4.8.1.2 and 4.8.1.3, of the SWEIS, there is a significant difference between Los Alamos County and the surrounding counties in terms of demographics and income. The environmental justice analysis conducted for the SWEIS was not weighted by the individuals living in Los Alamos County. As discussed in Section 4.11, the analysis focused on those census block groups with large concentrations

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5-156 DOE/NNSA must expand the Environmental Justice analysis to include not only "the potential for disproportionately high and adverse human health and environmental effects on minority and low-income populations," but also the social and psychological impacts to minority and income populations. Further, DOE/NNSA must explain their efforts to foster meaningful involvement of these populations in the development and implementation of activities at LANL and the impacts of this process on their health, environment and communities. DOE/NNSA must include analysis of the psychological impacts both of being involved and of being neglected. DOE/NNSA must access the impact to and role of women in the Environmental Justice assessment of a new draft LANL SWEIS.

317-71

CCNS and EVEMG object to the definition: "Low-income population: Low income populations in an impacted area are identified with the annual statistical poverty thresholds from the Census Bureau's Current Population Reports, Series PB60, on Income and Poverty." As stated above in reference to page 4-150, a 'low income individual' by federal definition is one who's family income is less than 150 percent of the federal poverty level, not below it. See above comment in reference to p. 4-150.

317-63  
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See above comment regarding CCNS and EVEMG's objection to use of a 50-mile radius for the Environmental Justice analysis on page 4-151.

317-65  
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CCNS and EVEMG object to the following sentence and it's conclusion: "Based on the analysis of impacts for other resource areas, DOE expects few high and adverse impacts from the continued operation at LANL under any of the alternatives, and, to the extent impacts may be high and adverse, DOE expects the impacts to affect all populations in the area equally." This conclusion is impossible when most of the population has limited to nonexistent recourses and/or resources to mitigate the damage caused by LANL.

317-72

Foremost CCNS and EVEMG object to the analysis of impacts for other areas. Especially as the analysis does not account for the health of women. And as the analysis does not account for psychological factors, which are of particular concern to Environmental Justice analysis. Please see above discussion of the importance of meaningful involvement.

317-73

5-157 There is no information about the traditional, current or cultural significance of consumption of fish and wildlife, subsistence farming, the soil and water used in religious ceremonies in the text. Cited references, such as the 1999 LANL SWEIS are inadequate as they do not describe current nor past uses nor the cultural and psychological import of the land. How can DOE/NNSA make conclusions without any information? CCNS has witnessed subsistence based people fishing for dinner at Cochiti Lake. DOE/NNSA must include a detailed discussion on the cultural consumption of fish and wildlife in the reanalysis for new draft LANL SWEIS and use this to make a determination.

317-74

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of minority or low-income populations. Refer to Section 2.11, Environmental Justice, of this CRD for additional information.

**317-65** Use of a 50-mile radius for analyzing radiological impacts via the air pathway is consistent with other analyses performed by DOE and NRC. Nonetheless, an analysis of the impacts of extending the region of influence out to 100 miles was performed, which found that the change in population dose amounted to only a few percent. A description of this analysis was added to Appendix C for normal operations and to Appendix D for accidents. As discussed in the response to Comment no. 317-20, effects beyond 50 miles are expected to be small compared to those within 50 miles and would not be expected to pose a significant risk to any person regardless of their affluence or ethnicity.

**317-66** As discussed in the response to Comment no. 317-16, Chapter 5, Section 5.13, Cumulative Impacts, of the Final SWEIS was revised to describe the potential for environmental justice-related cumulative impacts.

**317-67** Impacts at other DOE facilities are covered in separate NEPA documentation that is available at DOE's NEPA website ([www.eh.doe.gov/nepa](http://www.eh.doe.gov/nepa)). Transportation and disposal of LANL wastes at pertinent offsite facilities are analyzed in Chapter 5. For Sandia National Laboratories, as discussed in the response to Comment no. 317-20, only air emissions would potentially add to the cumulative impacts from LANL. The 2005 Sandia National Laboratories dose to the offsite maximally exposed individual is estimated at 0.0001 millirem, and the 2005 population dose is estimated to be 0.00017 person-rem (SNL 2006). The dose to the maximally exposed individual at LANL under the Expanded Operations Alternative is estimated at 8.2 millirem, and the annual population dose within 50 miles (80 kilometers) of LANL is estimated at 36 person-rem. The dose to the maximally exposed individual at Sandia National Laboratories is 0.0012 percent of the dose to the maximally exposed individual at LANL, and the Sandia National Laboratories population dose is 0.00047 percent of the LANL population dose. Even if the results of the 50-mile radius air emissions modeling for Sandia National Laboratories was superimposed upon the 50-mile radius of impacts for LANL, the combined impacts would be very small.

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In gathering this information, it is important to foster meaningful involvement of the community. In order to address this, DOE/NNSA must initiate a dialogue with those living in the surrounding area before coming to a conclusion. Please see above discussion regarding the importance of meaningful involvement. Please include alternative sources of information such as mythology, oral histories and interviews to see what minority and low-income individuals dream and aspire to using the land for. DOE/NNSA must involve women, as life-givers, in this discussion and decision making process.

"Special pathways were considered that took into account the levels of contamination in native vegetation (. . .), crops, soils and sediments, surface water, fish and game animals on or near LANL." However, 'special pathways' are not defined here in this document. DOE/NNSA must define 'special pathways' in the new draft LANL SWEIS.

DOE/NNSA must broaden its list of special pathways. It is very possible that a hiker or camper, especially children, may drink the water flowing from springs, for this reason springs as a source of drinking water must be included in the reanalysis for a new draft LANL SWEIS. Children have a tendency to ingest dirt while playing. Have DOE/NNSA accounted for the impacts of ingesting soil? If not, then DOE/NNSA must consider soil ingestion as a special pathway in the reanalysis for a new draft LANL SWEIS. Please see the attached comments by IEER about the clean up of the South Fork of Acid Canyon.

"Additional exposures. . . from the ingestion pathway." The BEIR VII report found that the risks from radiation exposure should be assessed using a linear non threshold model. This means that each additional exposure, no matter how small leads to an increase in risk. DOE/NNSA must not dismiss even the smallest exposure in this way. Furthermore, DOE/NNSA must consider all health impacts from radiation exposure, see CCNS comments on the health analysis in the draft LANL SWEIS.

**Background Radiation Levels** "This included natural background, weapons testing fallout, and previous radiological releases from LANL. The actual contribution from recent operations at LANL is only a small fraction of this value. The overall risk to the special pathway receptor would not differ between the alternatives considered in this new SWEIS, because most of the risk is attributed to the existing low-levels of radiological contamination in water and soils in the area"

The 1979 LANL SWEIS states, "summing the cosmic and terrestrial components, the average expected total yearly dose is about 135 mrem/year." 3-58 The June 2006 draft LANL SWEIS places the background radiation at 450 mrem/year. 5- 91 DOE/NNSA's calculation of background radiation has grown by a three fold increased since the 1979 LANL SWEIS. The background radiation estimate has absorbed, no

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317-75

**317-68** The statement referred to by the commentor in the Draft SWEIS Summary states that, "The Removal Option would result in over 100,000 shipments of radioactive and nonradioactive wastes potentially requiring transport to offsite disposal facilities." The Removal Option refers to removing waste from the material disposal areas and, when included under the Expanded Operations Alternative, is the most intensive alternative analyzed in the SWEIS in terms of transportation requirements. Not all of these shipments would be transported to WIPP, as indicated by the commentor. As shown in Chapter 5, Table 5-50, of the SWEIS, up to 5,044 transuranic waste shipments would be made to WIPP over the 10-year period under consideration. This represents approximately 2 shipments per working day. A transportation impacts analysis was performed for all potential shipments under this alternative, including those to WIPP, to evaluate the impacts of these shipments on people living along the proposed transportation routes. The results of this analysis are presented in Chapter 5, Table 5-51, of the SWEIS. This table shows that the largest impacts to the public would be nonradiological traffic fatalities resulting from accidents involving trucks transporting the waste offsite. It was estimated that up to 3 fatalities could be sustained over the 10-year period. None of the other risks (for example, radiological accident risks) would be expected to result in any fatalities to people living along the proposed transportation routes. This information was considered in the environmental justice analysis discussed in Section 5.11 of the SWEIS, which concluded that transportation activities associated with the Expanded Operations Alternative would not result in disproportionately high and adverse impacts on minority and low-income populations; therefore, there would be no adverse transportation-related impacts from an environmental justice standpoint.

**317-69** As discussed in Chapter 5, Section 5.11, no disproportionately high and adverse impacts would be expected to result from LANL operations. The analysis presented in the SWEIS used the most recent census data available at the time the analyses were prepared. In collecting data for the census, the Census Bureau does not ask about the legal status of respondents. The Census Bureau expects, however, that undocumented residents are included in the population counts, given the Bureau's success in counting nearly every person residing in the United States. DOE (and by extension NNSA) defines low-income populations in terms of the Census Bureau's statistical poverty level. This is the definition used in

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doubt, the contamination generated by past LANL activities. However, the environmental crimes of LANL do not belong to nature and cannot be attributed to her.

Before the Manhattan project began and LANL's establishment in 1943, the Pajarito Plateau was pristine. Much of the land and water was used for traditional and subsistence farming, as well as sacred rituals. The draft LANL SWEIS manipulates scientific data to make it appear as though the contribution from 'weapons testing fallout, and previous radiological releases from LANL' are the same as natural background, which they are not and must not be treated as such. DOE and NNSA must use 135 mrem/year as the background for reanalysis in a new draft LANL SWEIS. While doing so, DOE/NNSA must acknowledge that the contribution of background radiation may have been lower in 1943.

The BEIR VII report found that the risks from radiation exposure should be assessed using a linear non threshold model. This means that each additional exposure, no matter how small leads to an increase in risk. Based on the determination of the BEIR VII, CCNS objects to the conclusion that "consequently, no disproportionately high and adverse human health impacts would be expected in the special pathway receptor populations in the region as a result of subsistence consumption of fish and wildlife." The linear non threshold model would indicate that adverse human health impacts would result from subsistence consumption, and further that the impact grows higher with each addition release from LANL activities. Based on this evidence it appears that any further release would lead to significant harm. DOE/NNSA must address these concerns in a reanalysis for a new draft LANL SWEIS.

There are significant health impacts from toxic, chemical and hazardous contamination in native vegetation, crops, soils and sediments, surface water, springs, fish and game animals on and in the area surrounding LANL. In February of 2006 New Mexico governmental agencies issued a "no eat advisory" for fish in the Rio Grande and Rio Chama watersheds for polychlorinated biphenyls. The New Mexico Environment Department, Health Department, State Parks and Department of Game and Fish advised against eating channel catfish and common carp caught from Abiquiu and Cochiti reservoirs and from the Rio Grande below LANL. The fish advisory is based on do-not-eat guidelines for various contaminants established by the Environmental Protection Agency. This is the first advisory for fish caught from the Rio Grande. The contamination was linked to LANL through PCB fingerprinting. See NMED advisory in Exhibit 9.4.

One example of a significant step in developing a meaningful relation with the surrounding communities would be for LANL to post warnings to the public of such contamination. These warnings should be posted on the LANL website and alerts should go out to impacted communities both upstream and downstream, grocery stores that will potentially sell local produce and game, and to local media.

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the SWEIS. Since the Draft EIS was published, the Census Bureau has released revised projections through mid-2005 for select counties in New Mexico, including Santa Fe County. This information was compared to the 2000 data, but these more recent projections would not change any of the analyses in the SWEIS because the level of minority or low-income populations did not change substantially from the levels reported in 2000.

**317-70** Adding a joint figure that shows the overlap of minority and low-income populations would not change the environmental justice analysis presented in the SWEIS. It is understood that such an overlap does exist (that many of the people considered to be low-income are also members of a minority), but this overlap would not change the analysis with respect to whether these populations are disproportionately affected by the impacts associated with the different alternatives analyzed in the SWEIS. As discussed above in the response to Comment no. 317-69, DOE (and by extension NNSA) defines low-income populations in terms of the Census Bureau's statistical poverty level. Refer to the response to Comment no. 317-20 for a comprehensive description of the analysis demonstrating that the results presented in the SWEIS are bounding for distances exceeding 50 miles.

**317-71** NNSA is not required to consider the social and psychological impacts to any population as part of the NEPA compliance process, nor is it required to separately analyze potential impacts to determine whether women or men are differently affected. The SWEIS identifies ongoing and potential impacts of current and proposed LANL operations on all members of the public.

**317-72** The text has been revised to state "Based on the analysis for other resource areas described in the previous sections, NNSA expects no high and adverse impacts from the continued operation of LANL under any of the alternatives." NNSA intends to prepare a mitigation action plan and would mitigate any damage caused by LANL operations.

**317-73** Refer to the response to Comment no. 317-71.

**317-74** Appendix C of the SWEIS examines the potential health impacts to persons whose traditional living habits and diets could result in greater exposure to environmental contaminants than would be experienced by the hypothetical offsite resident. The additional foodstuffs and pathways that



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5.11.1 No Action Alternative

5-157 CCNS objects to the conclusion that there would be no disproportionately high and adverse impacts because we object to the analysis done in other parts of chapter five. DOE/NNSA must incorporate CCNS comments regarding on going activities at LANL for the reanalysis of a new draft LANL SWEIS. This reanalysis must be used to draw new conclusions regarding the No Action Alternative.

5.11.2 Reduced Operations Alternative

LANL Site-Wide Impacts

5-158 CCNS objects to the conclusion that there would be no disproportionately high and adverse impacts because we object to the analysis done in other parts of chapter five. DOE/NNAS must incorporate CCNS comments regarding activities at LANL.

5.11.2 Expanded Operations Alternative

LANL Site-Wide Impacts

5-158 CCNS objects to the conclusion that there would be no disproportionately high and adverse impacts because we object to the analysis done in other parts of chapter five. Please see and incorporate out comments about the other subsections of this chapter.

In order to fully address the impacts of the expanded operations alternative DOE/NNSA must include an analysis of the psychological and spiritual impact of having sacred land used in support of nuclear weapons production. This discussion of sacred land must take into account the Hopi's use of water from the LANL area, and the salt formations of WIPP, which are the Great Salt Mother to many of the Northern Pueblos. In the scientific considerations of Environmental Justice issues at LANL DOE/NNSA must consider science that was not developed to support the nuclear weapons complex but developed to protect public health and the environment.

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were analyzed for that group were ingestion of game animals (including consumption of some organ meats not assumed for the "resident" receptor), ingestion of game fish and bottom-feeding fish taken from local waters, and ingestion of native vegetation through use of Indian Tea (cota). Several other contact exposure pathways (including dermal absorption of contaminants from clays used in pottery, bathing or ceremonial use of springs, and smoking of native vegetation) were examined when the 1999 SWEIS was prepared and found not to be significant contributors to risk. During preparation of this SWEIS, it was concluded that diet, land use, and cultural practices remain largely unchanged from conditions noted in the 1999 SWEIS analysis, and that ingestion continues to be the only significant pathway, other than inhalation, by which people in the region adjacent to LANL might be exposed to radioactive and other contaminants resulting from operations at the site. As detailed in Appendix C, consumption of all components of the offsite resident diet at high intake rates, including bottom-feeding fish, Indian Tea (cota), and organ meats, approximates a complete subsistence diet (estimated at more than 5000 calories per day) for someone living in the vicinity of LANL. The "special pathways" are defined in Appendix C, Section C.1.4.1.

All of the pathways mentioned in this comment are included in the SWEIS analyses, as detailed in Appendix C. Intake of contaminants through consumption of onsite surface waters (such as springs and running water in the Los Alamos canyons) and the sediments contained in those waters is analyzed for the recreational resources user. Ingestion of soil at the rates specified in the EPA *Exposure Factors Handbook* (EPA 1997) is analyzed, not only for children, but also for all offsite residents, recreational users, and special pathway receptors. The dose and risk contributions from each pathway can be found in Section C.1.4.2.

The BEIR VII Committee recommendation (that risk from radiation exposure be assessed using a linear non-threshold model) reaffirmed a principle upon which U.S. radiation protection standards and practices have long been based. This SWEIS uses a linear, non-threshold relationship to assess radiation risks. A single radiation risk estimator value (0.0006 lifetime probability of fatal cancer per person-rem) is applied to all of the calculated individual and population radiation doses regardless of how small those doses may be. As discussed in

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Surface Water Issues in the draft LANL SWEIS

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Section C.1.2, fatal cancer risk is the major contributor to the total detriment resulting from low dose or low dose rate exposure to ionizing radiation. Other risks from radiation exposure (nonfatal cancers and severe hereditary effects) can be easily estimated by comparing them with the fatal cancer risk estimates (See Appendix C, Table C-2 of the SWEIS).

**317-75** The 1979 LANL SWEIS (DOE/EIS-0018) only presents two components of background radiation that a human would be expected to receive during a year. The value of 135 millirem per year was used to compare to measured annual radiation dose at perimeter stations. However, cosmic and terrestrial components are only two contributors to an individual's exposure to background radiation. Chapter 4, Section 4.6.1.2, of the SWEIS estimates annual cosmic radiation of between 50 and 90 millirem per year, depending on elevation around LANL, and terrestrial radiation of 50 to 150 millirem per year around LANL. The sum of these two components is a range of 100 to 240 millirem. As explained in Chapter 4, Section 4.6.1, of the 1999 SWEIS and in Chapter 4, Section 4.6.1.2, of this updated SWEIS, background radiation is composed of cosmic, terrestrial, naturally occurring radon, naturally occurring radioisotopes in the human body, medical and dental x-rays, and naturally occurring radioactive material in building structures such as adobe and concrete. When radon, radioisotopes in the human body, and medical/dental x-rays are added to cosmic and terrestrial radiation, the sum is larger than the background radiation value discussed in the 1979 LANL EIS. Chapter 4, Section 4.6.1.1, Table 4.6.1.1-1, of the 1999 LANL SWEIS presents a total radiation dose in the Los Alamos area of 413 millirem (393 millirem in the White Rock area). Chapter 4, Section 4.6.1.2, of the current SWEIS presents a range of 300 to 500 millirem as the sum of all these contributors, which is comparable to the 413 millirem presented in the 1999 LANL SWEIS. The background radiation value presented in the SWEIS does not represent an increase in radiation due to LANL operations, but instead reflects an accounting for radon, natural radioisotopes in the human body, and medical and dental x-rays, all of which were not included in the 1979 LANL EIS, but have been included in all EISs for over 10 years. Section 4.6.1.2, Figure 4-27, of this SWEIS presents 13 years of measured radiation doses to the maximally exposed individual at LANL. This person was calculated to have received a maximum annual dose of less than 8 millirem during this period, which is less than 2 percent of the annual background radiation value. Appendix C, Section C.1.4.2, of

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**Air Issues in the draft LANL SWEIS**

**Open Air Burning and Explosions using Depleted Uranium and High Explosives.** DOE/NNSA proposes to process 87,000 pounds of high explosives and up to 6,900 pounds of depleted uranium (DU) for dynamic experiments and studies annually in open air burning and explosions. The No Action Alternative and the Expanded Operations Alternative are the same for the High Explosives Testing Facilities to conduct approximately 1,800 experiments per year using the 6,900 pounds (3,130 kilograms) of DU.

While we oppose these experiments, within the DOE/NNSA complex, facilities exist where similar experiments are conducted in enclosed, double-walled facilities with extensive air filtration systems. The particulates and toxic air pollutants are collected as opposed to the activities at LANL where the materials are dispersed into the open air to be deposited on the land and flow during rain and melting snow events through the watersheds to the Rio Grande and into other downwind watersheds.

DOE/NNSA must monitor and implement comprehensive sampling programs, including but not limited to, air at all open burning and open detonation sites and for all activities using high explosives and depleted uranium. DOE/NNSA have reduced the number of air monitoring stations surrounding the sites where these burning and explosive activities continue to take place. Specifically, AIRNET stations 77, 78 and 79, which were located in the downwind direction from the Dual-Axis Radiographic Hydro Test Facility (DARHT) have been turned off and possibly removed.

DOE/NNSA propose to conduct 100 major hydrodynamic tests annually. S-41. CCNS and EVEMG oppose the claim that there will be no harm from these tests. Please see the video of the September 6, 2006 RRW Hydro test that LANL recently posted on its website: [http://www.lanl.gov/news/newsbulletin/QuickTimes/rrw\\_darht\\_2.mov](http://www.lanl.gov/news/newsbulletin/QuickTimes/rrw_darht_2.mov). It is clear from this video that there are releases from experiments at the DARHT facility. DOE/NNSA cannot be allowed to continue stating that there will be no harm from these activities simply because they have no data to prove otherwise.

CCNS and EVEMG have been involved in a long process requesting that AIRNET stations 77, 78 and 79 be turned back on. These AIRNET stations are located on the firing sites and near DARHT. The highest measurements of DU on the LANL site were recorded at these stations. We demand that these AIRNET stations be turned back on and that bi-weekly sample collection and analysis take place. We demand that the data be posted in a timely manner on the Internet as well as included in the annual Environmental Surveillance Reports.

Further, the 1979 LANL Final Environmental Impact Statement estimates that 220,000 pounds of depleted uranium were used in dynamic experiments during the history of LANL. From 1979 to present we do not know how much DU and high explosives have

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the SWEIS presents calculated doses to individuals identified as offsite residents, recreational users, and special pathways receptors (people with a subsistence diet including local fish and wildlife). The highest annual dose for a special pathways receptor was calculated to be between 4.5 and 10.7 millirem higher per year due to the special pathways. Therefore, the average annual dose to those individuals subsisting on all of the special pathways would increase by between approximately 1.1 to 2.7 percent. Similarly, an analysis of the risk to the special receptor from consumption of fish with chemicals present is presented in Appendix C, Section C.2. Based on sampling and analysis by both LANL and the New Mexico Environment Department, the concentrations of polychlorinated biphenyls in the Rio Grande River are similar upstream and downstream of LANL. Mean total polychlorinated biphenyls concentrations in fish from the Abiquiu Reservoir in the Rio Chama River, which is upstream of LANL, were statistically similar to those in fish from the Cochiti Reservoir in the Rio Grande River downstream from LANL. This indicates that there are other sources of polychlorinated biphenyls in the Rio Grande River than LANL.

**317-76** As discussed in the response to Comment no. 317-74, the BEIR VII committee recommendation reaffirmed a principle upon which U.S. radiation protection standards and practices have long been based. This SWEIS uses a linear, non-threshold relationship to assess radiation risks. For a person whose diet and lifestyle reflect all of the special pathways considered, his or her annual dose would be expected to increase by between 4.5 millirem and 10.7 millirem annually. Using a risk estimator value of 0.0006 lifetime probability of fatal cancer per person-rem, this increased dose would equate to an increased annual risk of developing a fatal cancer of between 1 in 370,000 ( $2.7 \times 10^{-6}$ ) and 1 in 156,000 ( $6.4 \times 10^{-6}$ ). By comparison, the average resident of New Mexico receives a dose of approximately 400 millirem per year from background sources; therefore, for those individuals participating in all of the special pathways, the average annual dose and risk of a fatal cancer would increase by approximately 1.1 to 2.7 percent due to these special pathways.

Psychological and spiritual impacts are not within the scope of this SWEIS, which focuses on the environmental impacts of three proposed alternatives for continued operation of LANL. All public comments are documented and responded to in this CRD. Water consumption by Special

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been used in experiments and remains in the environment. In order to understand what remains in the environment, extensive soil sampling on lands downwind and downstream of LANL is required and must be implemented immediately, with citizen oversight.

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**Toxic and Hazardous Air Pollutants.** DOE can no longer hide under the New Mexico "grandfather clause," which allows for facilities existing before December 31, 1988 to emit toxic air pollutants without regulation. For instance, "the amounts of toxic materials used and the amounts emitted to the air continue to show considerable variation. Although the actual quantities and chemicals vary from those analyzed in the 1999 SWEIS, the concentrations to which the public is exposed continue to be below levels of potential consequences." S-30. Yet, there are many of these toxic material emissions for which there are no federal and state standards. Further, DOE's sister agency, the Department of Defense continues to work towards removing already listed chemicals from the toxics lists in spite of known harmful effects.

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The DOE must support the regulation of toxic and hazardous air pollutants from its facilities. This holds true for LANL as it is a research and development facility, which creates new toxic and hazardous materials in order to further its national security mission. If DOE/NNSA is going to continue to release these toxic and hazardous materials into the air, water and soil, then it has the additional responsibility to name them. In the alternative, DOE/NNSA must stop all toxic and hazardous air pollutant emissions from LANL facilities and activities. Any new toxic or hazardous material created by LANL must have a proposed air emission limit, as well as discharge to surface water limit and soil concentration limit.

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Further, the Expanded Operations Alternative would result in an increase of hazardous air pollutants by "up to 2.5 percent from the higher level of High Explosives Processing." S-58.

**317-78**

In all cases of emissions of toxic and hazardous air pollutants and DU, the cumulative and synergistic impacts must be considered.

**Evaporation of Tritium as Waste Disposal.** DOE/NNSA states "the possible elimination of the RLWTF outfall to Mortandad Canyon if the auxiliary action to evaporate treated effluents were implemented." We understand this to mean the continuation of using evaporation of these treated effluents into the air at TA-53. Given the reduction of air monitoring at TA-53, can DOE/NNSA state with certainty that these emissions are being monitored? When will evaporation of treated effluents, including tritium, as a waste disposal method end? When will DOE/NNSA develop a waste treatment method for effluents that does not result in the involuntary exposure to humans and other living beings? This method of waste disposal is unacceptable. DOE/LANL must pursue an alternative method that imposes zero harm to humans and the environment.

**317-79**

Pathways Receptors is accounted for in the calculations of the special receptor dose in Appendix C, Section C.1.4.2, of the SWEIS. WIPP is not included in the scope of this SWEIS. The analyses and evaluations presented in the SWEIS are based on scientific principles and applications that are relevant and applicable to a determination of public health and safety.

**317-77** Placement of AIRNET stations is analyzed annually to determine whether a trend or impact exists that warrants further analysis. The stations in question showed no impacts from the Dual Axis Radiographic Test Facility and were moved elsewhere. The open burning permits were withdrawn at NNSA's request. Any burning being done is regulated under LANL's Resource Conservation and Recovery Act permit. For further information about the placement of AIRNET stations, high explosives testing, and depleted uranium, refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD.

**317-78** The 2.5 percent increase in explosives processing activity would result from increased processing of mock explosives. Chapter 5, Section 5.4.1.3, was revised to indicate the primary pollutants from explosives processing and the existence of applicable permit limits. Section 5.13 was revised to better describe the cumulative effects of toxic air pollutant emissions.

The cumulative concentrations of all air pollutants are expected to remain in compliance with requisite air quality standards. Compliance with air quality standards is documented in Annual Site Environmental Reports. NNSA is not aware of synergistic impacts that would result from emissions of toxic and hazardous air pollutants and depleted uranium.

**317-79** Previous air monitoring at TA-53 showed no presence of tritium. Air monitoring in and around LANL is conducted by a network of sampling stations that are located to ensure effective measurement of radioactive and nonradioactive substances. The presence and concentrations of tritium are measured at all air monitoring stations in and around LANL. Evaporation was developed as a method to dispose of tritium while meeting the goals of LANL's zero liquid discharge program, as discussed in the response to Comment no. 317-7.

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**Maximally Exposed Individual (MEI).** DOE/NNSA recognize the need to move the LANL site-wide maximally exposed individual (MEI) under the Reduced Operations Alternative to near the firing sites at TA-36. The Reduced Operations Alternative provides for the shutdown of LANSCE, the largest emitter of radionuclides to the air. Regardless of which option is chosen, CCNS and EVEMG maintain the necessity for LANL to calculate and report a MEI for both LANSCE (generally at East Gate) and TA-36. Because of increasing public concern about the open burning and open detonation activities at the firing sites, as well as the recent leak at LANSCE, CCNS and EVEMG support the MEI being calculated at both places. We understand that the regulations only require one MEI, but given the diverse topography of the LANL site, the different emissions and concern about air quality over Bandelier National Monument, a Clean Air Act Class 1 area, two MEIs are needed at LANL.

317-80

**Air Emissions Due to Increased Power Demand.** DOE/NNSA must evaluate the increased air emissions due to the increased power demand under all the Alternatives. We find it ironic that the Department of Energy generates energy at LANL in old, inefficient and wasteful facilities. DOE/NNSA must include to option of using clean renewable energy sources such as wind and solar in the reanalysis for the new draft LANL SWEIS.

317-81

**Air Emissions Due to Increased Commuting.** DOE/NNSA must evaluate the increased air emissions as a result of the proposed hiring of more employees, contractors and subcontractors. The regional efforts for public transportation are commendable, however, DOE/NNSA must provide incentives so that people will get out of their cars and utilize the public transportation system, including Park and Ride and shuttles in Velarde, Dixon, Ojo Caliente and other rural areas where LANL employs concentrations of the population.

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**Bandelier National Monument.** We remain concerned about LANL emissions impacting Bandelier National Monument, a Class 1 area under the Clean Air Act, and question the decision making process which would lead to proposing to operate a modern pit facility on the doorstep of a National Monument and historic treasure.

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**317-80** Chapter 5, Section 5.6 presents the doses to one maximally exposed individual (MEI) for each of the alternatives. However, in Appendix C, Tables C-17 through C-19 show the dose calculated for the MEI for each listed facility (including LANSCE and TA-36) based on the dose contributions due to emissions from all of the other facilities.

Environmental sampling and monitoring are conducted at or around the locations of the LANSCE and TA-36 MEIs. LANL's Rad-NESHAP compliance program routinely evaluates dose at a variety of public receptor locations, not just a single MEI, as part of routine dose assessment processes. This information is included in the annual Rad-NESHAP compliance report submitted to the EPA in June of each year.

**317-81** The SWEIS discusses the electricity demand for the various alternatives in Chapter 5, Section 5.8.2. Most of the demand would be met from a number of hydroelectric, renewable (solar and wind), coal-fired, and natural gas-powered generators throughout the western United States, as discussed in Chapter 4, Section 4.8.2.1. Part of this demand could be met by the TA-3 Co-Generation Complex. The air quality impacts of operating this complex are considered in the bounding analysis discussed in Chapter 5, Section 5.4.1.1. As discussed in Chapter 4, Section 4.8.2.1, NNSA has made a number of upgrades to improve the energy efficiency and reliability of steam and electric delivery to LANL. The development of alternate power generation sources at LANL was considered in the selection of natural gas-fired combustion turbines to meet the immediate need for more reliable electric power for LANL, as discussed in the *Environmental Assessment for the Installation and Operation of Combustion Turbine Generators at Los Alamos National Laboratory* (DOE/EA-1430) (DOE 2002b). The environmental assessment considered and dismissed the development of local or onsite alternative power technologies such as solar, wind, fuel cells, nuclear, microturbines, geothermal, and coal to deliver the needed electricity. As discussed in Section 4.8.2.2, NNSA has reduced heating demand at LANL by replacing buildings with more energy-efficient ones.

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**Water Issues in the draft LANL SWEIS**

Past, present and future LANL activities jeopardize both water quality and quantity for surface and ground water on the Pajarito Plateau as well as for the downstream users along the Rio Grande watershed. New Mexicans and others downstream rely on surface and groundwater for many uses, including drinking, farming, ranching, recreating and for cultural practices. Water is essential for a healthy ecosystem that supports life in its many diverse forms.

In the past few years, contaminants, such as tritium, PCBs, perchlorate, hexavalent chromium and 1, 4-dioxane, have been found in surface water and the regional aquifer on the Pajarito Plateau. For many of these contaminants, the source is known to be from LANL activities. These activities include discharges to surface water and the continuing practice of burying toxic, hazardous and radioactive waste in unlined pits, trenches and shafts, which provides direct pathways for contaminants to travel to groundwater. Further, DOE/NNSA is not monitoring 1,405 sites that have the potential to release contaminants during storms and when the snow melts.

For these reasons, in May 2006, a diverse network of non-governmental organizations sent a 60-Day Notice of Intent to Sue DOE/NNSA for violations of the Clean Water Act at LANL ("60-Day Notice"). The 60-Day Notice details the Clean Water Act violations at LANL, including failure to conduct adequate monitoring, failure to report violations, failure to have pollution controls in place and unauthorized discharges. The 60-Day Notice is available at [www.nuclearactive.org](http://www.nuclearactive.org). We request that the detailed 60-Day Notice be included as part of our comments to the draft LANL SWEIS.

Further, Amigos Bravos and CCNS recently released a report about LANL water issues. The report is entitled, "Historic and Current Discharges From Los Alamos National Laboratory: Analysis and Recommendations" ("Discharge Report"). This report concludes that the movement of pollutants in stormwater at LANL is an issue of grave concern. Specifically, stormwater samples taken by the New Mexico Environment Department (NMED) in Los Alamos, Pueblo, Sandia, Mortandad, and Water Canyons show contaminant levels that are well above water quality standards that protect human health and wildlife habitat. In Los Alamos Canyon, PCB levels in stormwater have been detected at 25,000 times above the standard that is protective of human health. In addition, the Discharge Report identifies numerous problems with non-stormwater related discharges, such as toxic impacts to aquatic life and inadequate monitoring. The Discharge Report is available at [www.nuclearactive.org](http://www.nuclearactive.org). We request that the Discharge Report be included as part of our comments to the draft LANL SWEIS.

We refer to both the 60-Day Notice and Discharge Report as references which support and enhance our comments.

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In order to ensure that water quality and quantity is protected now and in the future, DOE/NNSA must adopt the Removal Option for all clean up activities at LANL. All cleanup must be done to a pregnant subsistence farmer standard.

317-82

**Surface Water**

DOE/NNSA discharges approximately 163,000,000 gallons per year, which is more than 500 acre-feet a year, of treated industrial waste and sanitary effluent into the canyon systems at LANL. DOE/NNSA proposes to increase that amount to 822 acre-feet per year, an increase of 61%. Please note that the proposed increase of discharge of 322 acre-feet of water per year could sustain a small rural community in Northern New Mexico for 20 years.

317-83

Unfortunately, DOE/NNSA did not use the most current state water quality standards when assessing impacts in this draft SWEIS, nor did DOE/NNSA use the most current data about the number of streams that are impaired on the Pajarito Plateau from LANL activities. DOE/NNSA must withdraw the draft LANL SWEIS and conduct a re-analysis of LANL's impacts to surface and ground water based on the latest state water quality standards and the current impaired stream information and then submit a new draft LANL SWEIS.

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Our comments are limited in this area because DOE/NNSA did not use the most current water quality standards in the analysis. As a result, many of the tables and figures presented in the draft LANL SWEIS are incorrect, including information presented in Tables 4-4 and 4-6. There are a number of glaring errors and omissions in Chapter 4.3.1, including the statement "Most surface water on the Pajarito Plateau is designated for use as wildlife habitat and livestock water." p. 4-34. In fact *all* surface water on the Pajarito Plateau is designated for use as wildlife habitat, livestock watering, some form of human contact (either secondary or primary) and some form of aquatic life. Given the amount of federal tax dollars that were spent in preparing this document, please provide an explanation why these substantial errors were allowed. Please describe the quality assurance standards applied to preparing the draft LANL SWEIS.

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**Surface Water Quality – Impacts from Storm Water and Construction Sources.**

DOE/NNSA states that it "still requires Storm Water Pollution Prevention Plans and best management practices to protect surface waters from pollutants from industrial storm water sources and construction projects." S-28. Please see the 60-Day Notice and Discharge Report for our comments about the lack of adequate monitoring and Storm Water Pollution Prevent Plans at LANL. The draft LANL SWEIS does not mention or address the increase of impacts to water resources due to the substantial increase in construction activities at LANL in 2005 and 2006. In early 2006, the number of construction activities permitted was more than 50, which is a substantial increase from

317-84

317-82 Although Appendix I of the SWEIS discusses the environmental impacts associated with potential remedial action alternatives, decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department, for the Consent Order. To determine a remediation strategy for a contaminated site, alternative remedies may be considered as needed, including containment in place, treatment, or removal. Any remedy selected for a site requiring environmental restoration must meet several criteria, including protection of human health and the environment and attainment of applicable cleanup standards such as those for groundwater, surface waters, and soil. If the site is to remain under DOE ownership, then cleanup standards commensurate with a restricted type of land use may be used as long as offsite areas are protected. If the site is to be released for unrestricted access by the public, then the site would need to meet cleanup standards for unrestricted access. Decisions about the appropriate cleanup levels for sites that are subject to the Consent Order will be made by the New Mexico Environment Department using cleanup criteria documented in Section VIII of the Consent Order. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for additional information.

317-83 Estimates of wastewater discharges were provided in Chapter 5, Table 5-5, including a 30 percent increase in cooling tower wastewater from the Metropolis Center and a 25 percent increase in wastewater from the Radioactive Liquid Waste Treatment Plant due to increased activity. As a result of the elimination of discharges from other outfalls, the total discharge under the Expanded Operations Alternative is estimated at 268 million gallons (1,015 million liters) per year, versus 280 million gallons (1,060 million liters) per year under the No Action Alternative. Industrial discharges fluctuate from year to year, depending on operations. Therefore, comparison of one year's effluent (2004 – 163 million gallons [617 million liters]) to another's is not indicative of the range of discharges that can be expected. LANL operations discharged 317 million gallons (1,200 million liters [973 acre-feet]) of treated industrial wastewater in 1999, more than the 268 million gallons (1,015 million liters [822 acre-feet]) estimated under the Expanded Operations Alternative. LANL discharges remain within the envelope projected by the 1999 SWEIS and have generally decreased.

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the last cited level of 34 projects in 2004. p. 4-47. Given LANL's poor track record of controlling stormwater on their property, this increase of potential discharge poses a threat to water quality on and downstream from LANL. In addition, DOE/NNSA states "impacts from storm flows and construction or excavation projects were within 1999 SWEIS projections." S-28. However, information presented in the 60-day Notice and Discharge Report show that these flows represent numerous violations of the Clean Water Act.

Further, DOE/NNSA states "the number of industrial facilities requiring individual Storm Water Pollution Prevention Plans has ranged from 15 to 22. Storm Water Pollution Prevention Plans and best management practices are now required for all projects disturbing greater than 1 acre (0.4 hectares) of land." S-28. Please see the 60-Day Notice and Discharge Report for our comments about the impacts from the lack of adequate Storm Water Pollution Prevent Plans at LANL.

**Surface Water Quality - Contaminant Transport.**

DOE/NNSA states, "Several actions and best management practices were implemented to manage, control, and minimize storm water and sediment transport." S-28. The draft LANL SWEIS does not provide detailed information about these actions. However, the evidence indicates otherwise. Please describe in detail "several actions and best management practices."

Further, "As a direct result of the Cerro Grande Fire, storm water runoff increased (2 to 4 times for average flow, and 10 to 100 times for peak flows), increasing the potential for contaminant transport. Storm events in 2001 and 2002 were found to accelerate the transport of legacy contamination (radionuclides) from Pueblo Canon into lower watersheds and canyons." S-29. Please refer again to the New Mexico Environment Department DOE Oversight Bureau report about the increased transport of plutonium through the Pueblo Canyon system since the Cerro Grande fire. Draft LANL SWEIS reference section.

More plutonium and other contaminants have been transported through the canyon systems toward the Rio Grande since the fire, than before. This fact is alarming given the congressional response to the Cerro Grande fire - an additional \$345 million to address remediation and restoration on the Pajarito Plateau. Please describe in detail the actions implemented for the \$345 million with line-by-line accounting.

Nevertheless, the high priority sites with the most contaminant load, including Pueblo Canyon, were not adequately and promptly addressed with best management practices. As a result, plutonium, and other contaminants, mobilized in the Pueblo Canyon environment is traveling through surface water toward the Rio Grande and discharging above the intake for the proposed drinking water diversion projects for Santa Fe and Albuquerque, two of the largest cities in New Mexico. Additionally, plutonium

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**317-84** NNSA does not agree with the statement that there are unmonitored discharge sites and inadequate Stormwater Pollution Prevention Plans. As described in Chapter 4, Section 4.3.1.3, LANL manages construction projects under the EPA Construction General Permit. Table 4-16 shows the number of Stormwater Pollution Prevention Plans implemented at construction projects and the number of inspections conducted at those sites. As a result of these plans and inspections, 93 percent of LANL's construction projects were in compliance with National Pollutant Discharge Elimination System stormwater requirements in 2005. In addition, LANL has an excellent compliance rate of over 99 percent with its National Pollutant Discharge Elimination System outfall permits, as shown in Table 4-14 and Figure 4-14 in Section 4.3.1.2.

**317-85** In the Summary, Table S-3 is meant to summarize impacts and mitigative measures. Chapter 4, Section 4.3.1.3, provides more detail regarding actions and best management practices related to stormwater runoff, and references the best management practices guidance document used in the stormwater permit program.

**317-86** In 2005, the Pajarito Plateau Watershed Partnership completed installation of 3,000 linear feet (914 meters) of jute matting along Pueblo Canyon channel banks that contained elevated radionuclide concentrations and planted 3,000 willow plants to provide additional stream bank support. Hydrologic conditions in Pueblo Canyon below the burned areas have recovered to near pre-fire levels. However, urbanization in upper Pueblo Canyon has somewhat counteracted recovery after the fire due to the increased pavement area and number of roofs that shed more local precipitation into the canyon.

An estimated 5 microcuries of plutonium-239 and plutonium-240 was transported through the Pueblo/Los Alamos canyon systems in 2005 (LANL 2006c). This is significantly less than the approximately 60 microcuries estimated for the years 2001 through 2003 after the Cerro Grande Fire, but larger than the estimated pre-fire levels in the late 1990s of 1 microcurie per year or less. Monitoring bottom sediments in Cochiti Reservoir on the Rio Grande showed increased plutonium-239 and plutonium-240 concentrations for 1 to 2 years after the Cerro Grande Fire, but concentrations recovered to pre-fire levels in 2005. Plutonium-239 and plutonium-240 were not detected in base flow water samples taken from the Rio Grande in 2005.



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discharge from LANL is a very real threat to international waters, flowing to our southern neighbor, Mexico, via the Rio Grande.

"On average, outflows to individual watersheds have been within projections, and trends show that outfall flows per watershed have been declining, thereby reducing the potential for contaminant transport. The number of watersheds receiving outfall flow has been reduced from 8 to 6. The annual flow discharged to the individual watershed exceeded 1999 SWEIS projections 10 times from 1998 to 2000 and 0 times since 2000." S-28. DOE/NNSA must further reduce the discharges to the watersheds.

"While radionuclides at or above background levels have been detected in sediments on- and offsite, the overall pattern of radioactivity in sediments has not greatly changed since the 1999 SWEIS. Concentrations of metals, radionuclides, polychlorinated biphenyls, and high explosives residue above water quality standards have been detected during storm flows, however, these events are infrequent and short-lived." S. 28-29. Please review the data. These infrequent and short-lived storm events are the events which carry legacy contamination towards the Rio Grande and existing and future drinking water supplies.

**Groundwater**

"Monitoring of the quality and quantity of the regional aquifer would be needed to evaluate the rate and direction of contaminant movements, as well as to track the amount of water available for use." S-69. What is the status of the effort to determine the amount of water in the regional aquifer? The Hydrogeologic Workplan effort has been an on-going, very expensive, project of LANL for almost a decade. Please explain why a determination of the amount of water in the regional aquifer has not been made through the Hydrogeologic Workplan, an effort expending more than \$100 million.

CCNS and EVEMG submit detailed technical groundwater comments in Exhibits 1 through 4.

**Summary of Exhibits:** The past and present operations at LANL have caused great contamination to the groundwater resources that are not addressed in the Draft LANL SWEIS. The data tables in the Draft LANL SWEIS reveal the emerging presence of the radionuclide contaminants Neptunium-237, Plutonium-239, Plutonium-240, and Strontium-90 in the groundwater resource. The data tables document the presence of Neptunium-237 in the drinking water of Los Alamos County at levels above the Environmental Protection Agency (EPA) Drinking Water Standard (DWS). The water quality data in the Draft LANL SWEIS show that groundwater produced from "other springs" is contaminated with Strontium-90 at a level more than 13 times greater than the EPA DWS. In addition, Hexavalent Chromium contamination is present in the regional aquifer at concentrations greater than 4 times the EPA DWS. What is the scientific basis for determining that there is no disproportionate adverse effect from

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**317-87** Although storm events potentially carry contaminants to the Rio Grande, available data do not indicate a large change in the overall distribution of these contaminants. As stated in a LANL report titled *Environmental Surveillance at Los Alamos during 2005* (LANL 2006g), "All base flow samples from the Rio Grande had concentrations below drinking water standards and standards for the protection of aquatic life, wildlife habitat, and irrigation. Radioactivity in these samples was low. None of the radionuclide concentrations commonly associated with LANL operations were detected, except for uranium. Uranium concentrations, (0.5 to 2 µg/L) were well below the Federal drinking water standard of 30 µg/L," (page 180). Contaminants from LANL that historically have been detected in the Rio Grande are mostly attached to the stream sediments. Removal of stream sediments largely removes the contaminants from the water column.

The greatest potential for transport of contaminants toward the Rio Grande followed the Cerro Grande Fire. As stated in a LANL report titled *Water Quality and Stream Flow after the Cerro Grande Fire: A Summary* (LANL 2005d), "Three separate teams of public health risk assessors evaluated the long-term risks posed by post-Cerro Grande Fire contaminants. They calculated the risks to people from over 100 different chemicals and radioactive substances that were actually measured in environmental samples or hypothesized to be present. The risk calculations tracked the combined effect of all the individual contaminants on people from assumed normal daily activities. The three studies differed in their assumed exposure times and activities, yet the conclusions were similar: studies concluded that the overall risks were within acceptable EPA risk levels, below international radiological dose guidelines, and not significantly higher than pre-fire risk levels."

**317-88** The Hydrogeologic Work Plan was prepared and was implemented independent of the SWEIS. The scope of the Hydrogeologic Work Plan did not include determining the amount of water in the regional aquifer.

**317-89** Groundwater monitoring at LANL is being conducted in compliance with the Consent Order and consistent with the *Interim Facility-Wide Groundwater Monitoring Plan* (LANL 2006d) that was approved by the New Mexico Environment Department in June 2006. As addressed in NNSA's response to Comment no. 317-11, some of the groundwater data,

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contamination that is above the EPA standards? DOE/NNSA must issue a new draft LANL SWEIS following a thorough review of the data included in the June 2006 draft LANL SWEIS.

The above mentioned contamination in our drinking water is evidence that there is higher contamination away from the wells, at the source, beneath LANL. Unfortunately, we do not know the extent of this contamination because DOE/NNSA, LANL and New Mexico Environment Department (NMED) have constructed all of the monitoring wells over the past ten years with methods that mask the contaminants of concern. DOE/NNSA, LANL and NMED stated that the difficult geologic setting below LANL requires the drilling of monitoring wells with fluid assisted methods. The organic and clay based drilling fluids that were used for all LANL wells for the past ten years have well known properties that will mask the contaminants generated during the production of plutonium pits. The regulations of National Environmental Protection Agency (NEPA), Resource Conservation and Recovery Act (RCRA), DOE orders and the NMED consent order require accurate monitoring of laboratory operations. Therefore expanded activities to produce plutonium pits is prohibited.

A LANL report referenced in the Draft LANL SWEIS describes the great uncertainty in the knowledge of the travel pathways of contaminants from LANL past, present, and future nuclear weapons research and plutonium pit production to the regional aquifer and the travel of contamination in the regional aquifer to the drinking water wells, the property of the San Ildefonso Pueblo, and the Rio Grande. Below are excerpts from the recent LANL report by Keating, Elizabeth, B.A. Robinson, and V.V. Vesselinov, 2005, "Development and Application of Numerical Models to Estimate Fluxes through the Regional Aquifer beneath the Pajarito Plateau," Vadose Zone Journal, Volume 4, August, 2005:

"Data concerning the spatial distribution of anthropogenic [LANL] contaminants in the regional aquifer has been inconclusive because of the exceptionally thick and complex vadose zone which makes it impossible to define the location and timing of contaminant entry to the regional aquifer" [page 658, Keating et al., 2005].

"Finally, local recharge does occur along canyons that cross the LANL property - this recharge has important water quality implication in locations where contaminant effluent discharges have been released" [page 668, Keating et al., 2005].

"Travel times through the regional aquifer are poorly understood because of the lack of tracer tests and *in situ* measurements of effective porosity" [page 658, Keating et al., 2005].

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particularly those associated with certain multi-screen Hydrogeologic Workplan characterization wells constructed after 1999, are being reassessed due to potential residual drilling fluid effects. The drilling fluid effects are quantitatively assessed in the referenced Well-Screen Analysis Report. For those well screens that have been impacted by residual drilling fluids, LANL staff has initiated a program to better evaluate the wells and to rehabilitate the walls that may be producing suspect groundwater monitoring results. As well quality issues are clarified and resolved, the set of groundwater data will increase in size and improve in quality to support ongoing monitoring, investigations, and decisionmaking. Refer to Chapter 4, Section 4.3.2.2 of the SWEIS, Section 2.5, Water Resources, of this CRD for additional information about well construction, groundwater contamination, and groundwater monitoring.

**317-90** LANL staff is performing monitoring of all wells in accordance with applicable requirements including those of the New Mexico Environment Department, as described in the *Interim Facility-Wide Groundwater Monitoring Plan* that was approved by the New Mexico Environment Department in June 2006. As periodic watershed monitoring continues, LANL staff will continue a phased approach to determine which wells are needed and in what locations to satisfy long-term compliance monitoring needs. This process is established by and is in compliance with the Consent Order. Refer to Chapter 4, Section 4.3.2.2, of the SWEIS, and Section 2.5, Water Resources, of this CRD for additional information about water monitoring at LANL.

**317-91** NNSA is developing programs to reduce data uncertainty and to determine contaminant travel time in response to the Consent Order. These programs take into account the findings of Keating, et al. and others, as discussed in Chapter 5, Section 5.3.2, of the SWEIS. Section 2.5, Water Resources, of this CRD discusses ongoing and planned efforts to provide the required data for the necessary calculations.

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“The implication of this work for contaminant transport issues is that because of parameter uncertainty, predicted fluxes and velocities are quite uncertain. Uncertainties in permeability and porosity values lead to additional model uncertainty. These uncertainties can be reduced meaningfully with more data collection, including multiwell pumping and tracer tests” [page 668, Keating et al., 2005].

Exhibits 1 through 5 present a detailed discussion of the deficiencies in the Draft LANL SWEIS to address the requirements of the National Environment Protection Act (NEPA) to assess environmental impact of past, present and future LANL operations on contamination of groundwater resources. Because of the deficiencies with the assessment in the June 2006 draft LANL SWEIS, DOE/NNSA must withdraw it and perform a reanalysis for the new draft LANL SWEIS. In the alternative, the information in the five exhibits prove that DOE/NNSA must institute the *“Reduced Operations Alternative”* that was described in the draft LANL SWEIS.

The exhibits demonstrate that the DOE/NNSA, LANL and the NMED have not installed a network of monitoring wells that produce reliable and representative groundwater samples for the detection of groundwater contamination from past, present, and future operations for nuclear weapons research and pit production at the Laboratory facility. In order to lower costs, DOE/NNSA, LANL, and NMED decided to construct the network of LANL characterization wells with drilling methods that invaded the strata that are monitored with drilling additives that have well known properties to mask the detection of many LANL contaminants.

**Exhibit 1.** Exhibit 1 includes excerpts from reports by the DOE IG Inspector General, the EPA National Risk Management Research Laboratory, articles in the technical literature, and even LANL reports as irrefutable evidence that the LANL characterization wells impacted by the organic and bentonite clay drilling fluids do not produce representative water samples for many LANL contaminants of concern. This issue is especially problematic with the strongly sorbing radionuclide contaminants that would be produced by the *Expanded Operations Alternative*.

**Exhibit 2.** The information in Exhibit 2 identify the deficiencies with the water quality data presented in the Draft LANL SWEIS for water quality in perched zones of saturation and in the regional aquifer. LANL does not have the required monitoring well network for compliance with RCRA, DOE Orders, or the NMED LANL Consent Order. A fundamental requirement of NEPA is compliance with the Federal and State Regulations.

**Exhibit 3** Exhibit 3 describes the deficiencies of the existing network of monitoring wells to protect the drinking water wells of Los Alamos County and Santa Fe City and County from contamination by the Hexavalent Chromium plume. The Draft LANL

317-92

317-92 Refer to the response to Comment no. 317-89.

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SWEIS did not address the large but poorly characterized plume of Hexavalent Chromium that is present in the regional aquifer in a region of many of the Los Alamos County drinking water supply wells. The chromium plume is in aquifer strata with high permeability that are a fast pathway for travel of the contaminated groundwater over great horizontal distance.

**Exhibit 4.** Exhibit 4 describes the failure of DOE/NNSA, LANL and NMED to install a RCRA compliant groundwater monitoring program for the RCRA regulated waste disposal units at Technical Area 54 (TA-54) that contain DOE "Legacy Hazardous and Mixed Wastes" disposed of in unlined pits, trenches, and shafts. The Draft LANL SWEIS did not address the documented contamination of the regional aquifer by the "Legacy Wastes" in the improperly monitored disposal sites at TA-54.

**Exhibit 5:** George Rice, independent Ground Water Hydrologist and author of *New Mexico's Right to Know: The Potential for Groundwater Contaminants from LANL to Reach the Rio Grande*, reviewed the draft LANL SWEIS. Rice wrote comments about the Remediation of MDAs, Lateral flow into Wastes, Tritium in White Rock Canyon, Definition of background groundwater chemistry and Contaminants in Regional Aquifer, along with providing references. His comments are attached as Exhibit 5 and are incorporated by reference.

**Groundwater Use**

"The drop in the DOE well field has continued to be 1 to 2 feet (0.3 to 0.6 meters) per year, per the Water Supply at Los Alamos 1998 to 2001 report." S-29. As a result of this drop, at what point will the contamination increase to levels where people will no longer be allowed to drink the water?

317-93

"Impacts of LANL water use on the regional aquifer continue to be bounded by the impacts analyzed in the 1999 SWEIS." S-29. However, under the Infrastructure Section, DOE/NNSA states "demand for water could exceed the conservation limit of approximately 542 million gallons (2 billion liters [or 1,662 acre feet]) per year under the agreement with Los Alamos County." S-34.

317-94

The Expanded Operations Alternative will increase water usage by LANL above the amount allotted to it from the regional aquifer of "1,816 million gallons total (522 million gallons for LANL [1,601 acre feet]); 101 percent of system capacity." S-63. In water municipalities throughout the state there are fines and penalties associated with exceeding allotments. How will DOE/NNSA comply with the applicable laws governing water usage in the State of New Mexico given this scenario at LANL? Will DOE/NNSA work within the same legal boundaries as every other citizen of the State of New Mexico regarding water usage at LANL?

317-95

**317-93** Extraction of water from the regional aquifer does not mean that the downward movement of contaminated water through the unsaturated zone will be enhanced. DOE does not expect that contamination will increase to levels where people will no longer be allowed to drink the water.

**317-94** The text cited by the commentor from Table S-3 in the Summary regarding the "conservation limit" of 542 million gallons (2,050 million liters) of water per year was revised for clarity in the Final SWEIS. The cited "limit" is not a regulatory limit per se; it is an internal target ceiling or goal established to gauge water use management efforts, as detailed in Chapter 4, Section 4.8.2.3, of the SWEIS. To date, LANL's water demands have not exceeded this quantity, and Table S-3 was revised to reflect this fact.

**317-95** NNSA updated its utility demand projections in this Final SWEIS. As discussed in Chapter 5, Section 5.8.2.3, of the SWEIS, under the Expanded Operations Alternative, LANL operational demands combined with the larger and growing demands of other Los Alamos County users could require up to 98 percent, rather than 101 percent, of the currently available water rights. Even so, LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling of 542 million gallons (2,050 million liters) per year, as noted in the response to Comment no. 317-94. Refer to Section 2.8, Water Use, of this CRD for more information on LANL's water use, available water rights, and water supply planning.

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"Additional groundwater depletion projected as a result of potential new residential development within Los Alamos County could be somewhat offset by reduced depletion of the regional aquifer following implementation of the City of Santa Fe's water diversion project and reduced pumping of the Buckman Well Field." S-69. Please cite the draft Environmental Impact Statement for the Buckman Wellfield in the list of references for the new draft LANL SWEIS.

**Groundwater Quantity**

"LANL discharges have had little effect on groundwater quantities in the last 5 years." S-29. DOE/NNSA must back up this statement given references made in the draft LANL SWEIS to recent articles in *Vadose Zone Journal* about the uncertainties associated with LANL's groundwater modeling effort. These articles were authored by Elizabeth Keating and Bruce Robinson, among others, and are referenced in Exhibits 1 through 4.

"Impacts of LANL water use on groundwater quantities continue to be bounded by the impacts analyzed in the 1999 SWEIS." S-29. We disagree with this statement given the number of problems associated with the groundwater well drilling program as discussed in Exhibit 1 through 4 of our comments.

317-96

**317-96** The *Final Environmental Impact Statement for the Buckman Water Diversion Project, Santa Fe National Forest and Taos Field Office of the BLM in Santa Fe County, New Mexico* (BLM and USFS 2007), which was published in May 2007 by the U.S. Department of the Interior, Bureau of Land Management, and the U.S. Department of Agriculture, Forest Service, is cited in Chapter 5, Section 5.13.

317-97

**317-97** Refer to Section 2.5, Water Resources, of this CRD for a response to comments regarding groundwater contamination and data collection and current activities that are underway at LANL. These new activities are expected to provide data that will help reduce uncertainties regarding groundwater modeling.

317-98

**317-98** The cited portion of the Summary describes impacts to groundwater quantity, not quality. As described in Chapter 5, Section 5.8.2, LANL water use would remain within its annual water use ceiling quantity under all alternatives, including the Expanded Operations Alternative.

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Comments on TRU waste issues in the draft LANL SWEIS  
Don Hancock, Southwest Research and Information Center

1. The draft LANL SWEIS is fundamentally inadequate and extremely misleading about transuranic waste generation and storage. There is no disposal path for most of the transuranic waste proposed to be generated by the Expanded Operations Alternative. Can we format this to look like the rest of the document.

A. LANL's preferred Expanded Operations Alternative will turn the site into a permanent, large-scale transuranic (TRU) waste dump, a fact that is not mentioned in the document.

Buried on page 5-196 (Table 5-79), the draft LANL SWEIS estimates that the Expanded Operations Alternative from 2007 to 2016 would generate more than 25,000 cubic meters of TRU waste and the Modern Pit Facility would generate an additional almost 11,500 cubic meters of TRU waste during the same 10 years. The only TRU waste disposal site is the Waste Isolation Pilot Plant (WIPP), which in its most recent regulatory document (the Environmental Protection Agency Recertification Application) provides for 17,130 cubic meters of disposal capacity for LANL. Thus, the majority of the TRU waste that LANL would generate would not go to WIPP, but rather would very likely stay at LANL. The draft LANL SWEIS merely states: "Transuranic waste would be stored onsite until additional disposal capacity, at WIPP or elsewhere, was [sic] identified." P. 5-197. Of course, all of the TRU waste generation from continuing operations after 2017 would further add to the waste with "no disposal path" that would stay at LANL.

The draft LANL SWEIS is misleading in that it repeatedly does not fully report the amount of TRU waste that would be generated under the Expanded Operations Alternative. For example, Table 3-17 on pages 3-51 to 3-53, shows much smaller amounts of TRU waste transport, receipt and acceptance than 36,500 cubic meters. The table shows 8,400 cubic meters of legacy TRU, 2,000 cubic meters of newly generated TRU (200 cubic meters x 10 years), 190 cubic meters of additional TRU and 100 cubic meters of remote-handled TRU, for a total of 10,690 cubic meters. The table also states that an unspecified amount of TRU waste from DD&D and remediation activities would go to WIPP. Page 3-54 states that TRU wastes "are prepared for disposal and shipped to WIPP." There is no indication that any TRU waste, let alone most of it, could not go to WIPP.

Table 5-37 on page 5-128, entitled "Summary of Total ...Waste Generation Projections" (emphasis added) shows that the total amount of TRU was for the Expanded Operations Alternative would be 25,230 cubic meters. The large amounts of additional TRU waste from the Modern Pit Facility is not included. Table 5-49 on page 5-143 includes the same misleading underestimate of the amount of TRU waste. Table 5-50 on page 5-147 showing offsite TRU waste shipments also does not include Modern

317-99

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317-101

317-99 As discussed in the response to Comment no. 317-10, the estimates of operational transuranic waste generation are based on projections in the 1999 SWEIS, which were increased as necessary in this SWEIS based on actual generation rates and recent waste generation forecasts. The projections for transuranic waste generated by routine operations are designed to be conservative to provide an upper bound for measuring the impacts. The amounts of transuranic waste to be generated under each of the alternatives are included in Chapter 3, Table 3-19, and Chapter 5, Table 5-37, of the SWEIS. These tables do not include any waste associated with the modern pit facility. This waste was discussed in Section 5.13, Cumulative Impacts, in the Draft SWEIS. However, in October 2006, NNSA issued a Notice of Intent to prepare the *Complex Transformation SPEIS* which assesses the environmental impacts from the continued transformation of the nuclear weapons complex (71 FR 61731). This Notice of Intent also announced cancellation of NNSA's previously planned *Supplemental Programmatic EIS on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). For this reason, the Final LANL SWEIS does not reference a modern pit facility. In January 2008, NNSA issued the Draft *Complex Transformation SPEIS* (73 FR 2023); it includes alternatives in which LANL would be the site of a new consolidated plutonium center or a new consolidated nuclear production complex. The impacts from the Draft *Complex Transformation SPEIS* are included in Cumulative Impacts section of the Final SWEIS. Refer to the response to Comment no. 317-10, which addresses the remainder of this comment.

317-100 The waste volumes projected for various management activities (such as waste characterization) are based on historical volumes managed and waste volumes forecast. As such, the volumes presented in Chapter 3, Table 3-17, reflect the planned capabilities of the Solid Radioactive and Chemical Waste Facilities. To accommodate processing and storage of legacy transuranic waste and newly generated transuranic waste from LANL operations under the Expanded Operations Alternative, NNSA is proposing to install and operate additional waste management equipment and facilities and to upgrade its existing processes, as described in Appendix H, Section H.3. As discussed in the response to Comment no. 317-99, estimates of the total volume of transuranic waste to be generated under each alternative are included in Table 3-19, as well as in Chapter 5, Table 5-37. As discussed in the response to Comment

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Pit Facility TRU wastes. That same misleading shipment information is shown on Table K-5, page K-25.

B. The draft SWEIS provides no analysis of the impacts of some of the TRU waste that is proposed for LANL, specifically the sealed sources.

One element of the Expanded Operations Alternative is to increase the type and quantity of sealed sources brought from other sites to LANL. However, the draft SWEIS does not include all of the off-site sealed sources as TRU waste even under the largest waste estimates. On page J-47, the draft LANL SWEIS states: "At this point, sufficient information is not available to predict the total number of [actinide-bearing] sources to be managed." Thus, the draft LANL SWEIS proposes unlimited amounts of TRU waste in those sealed sources could come to LANL with no adequate analysis of their environmental impacts. And since those actinide-bearing sources are legally barred from being disposed at WIPP because they are not defense TRU wastes, those sources have no disposal path and would likely stay at LANL.

2. The draft SWEIS does not acknowledge that LANL is already storing increasing amounts of TRU waste, nor does it adequately analyze their impacts.

Since the issuance of the 1999 LANL SWEIS, WIPP has opened. The draft LANL SWEIS does not include any information about the amounts of TRU waste shipped to WIPP from LANL. Table 4-52 on page 4-149 shows that LANL made 47 shipments of TRU waste to WIPP from 2002 to 2004 but includes no information about the amounts of TRU waste (which was 344 cubic meters). Information from WIPP shows that from 1999 through 2004, LANL shipped 598 cubic meters of TRU waste to WIPP. Table 4-40 on page 4-134 of the draft SWEIS shows that during that same time period, LANL generated about 1,440 cubic meters of TRU and TRU mixed waste. Thus, even though TRU waste was being shipped from LANL, it was generating and receiving substantially larger amounts of TRU waste. Thus, LANL's mission is increasingly one of being a long-term TRU waste site, a fact that is not acknowledged in the draft LANL SWEIS and there is no adequate analysis of the impacts of that mission.

3. The draft LANL SWEIS does not describe the substantial problems that have occurred in managing TRU waste and preparing it for shipment to WIPP.

According to the draft LANL SWEIS under any of the three alternatives, LANL will ship its legacy TRU waste (8,400 cubic meters) as well as 2,000 cubic meters of newly generated TRU waste (200 cubic meters per year) to WIPP. Table 3-17, page 3-51. However, as already noted, the draft SWEIS does not acknowledge that in six years LANL shipped less than 600 cubic meters of waste to WIPP. During some of that period, LANL was prohibited from shipping TRU wastes because it did not comply with characterization procedures. The document describe the major changes that would need to be made in its operations in order to increase characterization and

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no. 317-10, WIPP disposal capacity is expected to be sufficient for disposal of all retrievably stored transuranic waste, including LANL's current inventory of legacy waste and all newly generated transuranic waste from the DOE complex over the next few decades.

**317-101** As discussed in the response to Comment no. 317-21, NNSA released a Notice of Intent on October 19, 2006, to prepare the *Complex Transformation SPEIS* (71 FR 61731). This Notice of Intent also announced cancellation of NNSA's previous proposal to build a modern pit facility, for which a draft supplemental EIS was issued in June 2003 (67 FR 59577). Consequently, impacts related to the modern pit facility were deleted from the SWEIS. In January 2008, NNSA issued the Draft *Complex Transformation SPEIS* (73 FR 2023); it includes alternatives in which LANL would be the site of a new consolidated plutonium center or a new consolidated nuclear production complex. The impacts from the Draft *Complex Transformation SPEIS* are included in Cumulative Impacts section of the Final SWEIS.

**317-102** The SWEIS analyzes the impacts of all of the transuranic waste proposed for storage at LANL. Under the No Action Alternative, the Off-Site Source Recovery Project would continue to recover plutonium-239, americium-241, and plutonium-238 sealed sources and store them as waste until they can be disposed of, for example, as transuranic waste at WIPP. Because they were generated from defense activities, many plutonium-239 sealed sources that have been collected are eligible for disposal at WIPP, as well as some of the americium-241 and plutonium-238 sources. The remainder is stored until either a defense transuranic waste determination is made that makes them eligible for WIPP disposal, or a disposal site for Greater-Than-Class C and similar DOE waste is identified (see below). The impacts of storing the sources at LANL and shipping transuranic waste to WIPP are included in the discussion of the impacts under the No Action Alternative in Chapter 5.

Under the Expanded Operations Alternative, the Off-Site Source Recovery Project would expand the types of sealed sources that it manages, and some of these could be stored at LANL if no commercial or other Federal facility were appropriate for their management. None of these additional sealed sources would qualify as transuranic waste; those with isotope concentrations less than the definition of Greater-Than-Class C waste would generally not require storage but could be disposed of at

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shipments of TRU waste by more than 10 times -- from an average of less than 100 cubic meters per year from 1999 to 2004 to more than 1,000 cubic meters per year from 2007 through 2016.

In fact, its past history shows that LANL does not have the capability to ship all of its legacy TRU waste to WIPP, so the draft LANL SWEIS statement that all legacy TRU will have been shipped to WIPP "by the end of 2015" (page 5-99) cannot be supported. Instead, the draft LANL SWEIS must analyze the impacts of further increasing amounts of TRU waste being managed at LANL.

**317-104  
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existing commercial and DOE disposal facilities. Sources that could not be disposed of or otherwise managed would be stored at LANL until DOE identifies a disposal site. At this time, there is no identified disposal facility for Greater-Than-Class C waste; however, DOE has issued a Notice of Intent to prepare an *Environmental Impact Statement for the Disposal of Greater-Than-Class-C Low-Level Radioactive Waste (GTCC EIS)* (72 FR 40135). Several options for disposal of this waste and DOE waste with similar characteristics are being considered. Clarifying language was added to Appendix J.

**317-103** NNSA notes that there have been difficulties with repackaging and certifying transuranic waste for shipment to WIPP. Although there have been delays in meeting planned transuranic waste shipments, process improvements have been made and shipment rates to WIPP have increased; therefore, the amount of stored transuranic waste is expected to decrease. Chapter 4, Section 4.9.4, was added to the SWEIS to document the amount of waste shipped offsite. Refer to the responses to Comment nos. 317-99 and 317-100, which address the remainder of this comment.

**317-104** As discussed in the response to Comment no. 317-103, NNSA acknowledges the difficulties that have occurred regarding repackaging and certifying legacy transuranic waste for shipment to WIPP. However, many of these issues have been addressed and the shipment rate has been increasing. Almost 2,800 containers were shipped to WIPP from LANL in 2006, as identified by the WIPP Waste Information System, which is available at the WIPP website ([www.wipp.energy.gov/](http://www.wipp.energy.gov/)), and this rate should increase. However, Appendix H, Section H.3.2.2.3, evaluates NNSA's proposal to improve repackaging and certification capabilities and increase the rate of shipments by installing and operating additional equipment and facilities and upgrading existing processes.



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**Chapter 5. Environmental Consequences  
Section 13. Cumulative Impacts**

The cumulative impacts analysis in the draft LANL SWEIS is inadequate and misleading. Cumulative impacts are "the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. Cumulative impacts can result from "individually minor but collectively significant actions taking place over a period of time." *Id.*; see also Attach No. \*\* (Council on Environmental Quality (CEQ) "Considering Cumulative Effects Under the National Environmental Policy Act" (January 1997)). Properly analyzing cumulative effects includes: (1) identifying the significant cumulative effects issues associated with the proposed action; (2) establishing the proper geographic scope for the analysis; (3) establishing an appropriate time frame for the analysis; and (4) identifying other actions affecting the resources, ecosystems, and/or human communities of concern. Under NEPA, it is not enough to simply list other actions cumulatively affecting the resources at issue - an actual analysis of the cumulative impacts is required. Here, the draft LANL SWEIS fails to properly address cumulative impacts in a number of significant respects, including the omission of environmental justice impacts.

**The Draft LANL SWEIS Needs to Consider the Impacts of All Authorized Activities in Conjunction with Other Federal, State, and Private Activities Taking Place in the Region.** According to the CEQ, the "most devastating environmental effects may result not from the direct effects of a particular action, but from the combination of individually minor effects of multiple actions over time." The requirement to consider cumulative impacts, therefore, is designed to avoid the "combination of individually minor" effects situation - to avoid the "tyranny of small decisions" or "death by a thousand cuts" scenario. See e.g., Grand Canyon Trust v. FAA, 290 F.3d 339, 346 (D.C. Cir. 2002); Save the Yaak Comm. v. Block, 840 F.2d 714, 721 (9th Cir. 1988) (Agency cannot consider environmental impacts of logging in isolation but must address cumulative effects of past and reasonably foreseeable logging in watershed); Neighbors of Cuddy Mountain v. U.S. Forest Service, 137 F.3d 1372 (9 Cir. 1998) (Agency must address impacts of future timber sales); Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208 (9th Cir. 1998) (impacts of project must be viewed in conjunction with other past, present and reasonably foreseeable future actions); Sierra Club v. U.S. Forest Service, 46 F.3d 835 (S.D. 1991) (EA must recognize impacts of activities reasonably expected to occur on private lands); Resources Ltd., Inc., v. Robertson, 35 F.3d 1300 (9 Cir. 1993) (cumulative impacts from non-Federal actions need to be analyzed by the Agency).

By way of example, DOE/NNSA must consider the synergistic impact of the location of two of the nation's nuclear weapons laboratories located within 60-miles of one another

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**317-105** The SWEIS cumulative impacts analysis incorporates quantitative information for non-LANL actions, where available. In some cases, the impacts of non-LANL actions have not been quantified and can only be discussed qualitatively. A cumulative impacts discussion was included in Chapter 5, Section 5.13, for every resource area identified in Chapter 5.

**317-106** Refer to the response to Comment no. 317-20.

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in New Mexico. DOE/NNSA has not made the case to exclude analysis of the impacts of Sandia National Laboratory in the draft LANL SWEIS. The only way to do this is to expand the geographic scope of the DOE/NNSA's cumulative impacts analysis to encompass the range of impacts from the two laboratories. Further, DOE/NNSA must conduct a realistic evaluation of the impacts to determine the geographic scope of those impacts in the new draft LANL SWEIS. Please see additional comments below.

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Collectively, the impacts of all of these and other activities – whether conducted by private individuals, state agencies, or other federal agencies – may be significant and must be analyzed. See e.g., Grand Canyon Trust, 290 F.3d at 346 (discussing collective impacts to Zion National Park); NRDC v. Hodel, 865 F.2d 288 (D.C.Cir. 1988) (discussing collective impacts to migratory whales). As the D.C. Circuit Court noted, Federal agencies must “give a realistic evaluation of the total impacts [of the action] and cannot isolate the proposed project, viewing it in a vacuum.” Grand Canyon Trust, 290 F.3d at 342. Even “a slight increase in adverse conditions . . . may sometimes threaten harm that is significant. One more factory . . . may represent the straw that breaks the back of the environmental camel.” 290 F.3d at 343 (quoting Hanly v. Kleindienst, 471 F.2d 823 (2d Cir. 1972)). It is imperative that the DOE/NNSA avoid the death by a thousand cuts scenario and take a hard look at the big picture impacts of its decision. The only way to do this is by engaging in a proper cumulative impacts analysis as required by NEPA.

**Environmental Justice** There is no mention of Environmental Justice in the cumulative impact analysis of Chapter 5. Section 5.13. Section 3-301 (b) of Executive Order 12898 states, “Environmental human health analysis . . . shall identify multiple and cumulative exposures.” Land resources, geology and soils, water resources, air quality and noise, ecological resources, human health, cultural resources, infrastructure, waste management and transportation were all analyzed, and the analysis of each was subsequently summarized as a part of the cumulative impacts section, but not environmental justice. What was the basis of the decision making process to omit Environmental Justice from the Cumulative Impact analysis?

**317-107**

**317-107** Chapter 5, Section 5.13, was revised to describe the potential for environmental justice-related cumulative impacts.

The decision to omit Environmental Justice from the cumulative impact analysis is particularly appalling because Environmental Justice is an issue to which cumulative impacts are particularly significant. During the 63 year existence of LANL, it has produced substantial radioactive, hazardous and toxic pollution and had a large impact on its surroundings. One cannot consider the use of land, or the cultural significance of certain sites, without considering this contamination which the residents of New Mexico have been living with for at least three generations — and will continue to live with for many more. For more on this topic, see our comment on Environmental Justice regarding page 5-157.

**The Draft LANL SWEIS Fails to Establish the Proper Geographic Scope for the Cumulative Impacts Analysis.** Establishing the proper geographic scope or boundary

**317-108**

**317-108** Each resource area may have a different region of influence. For instance, cumulative impacts to cultural resources would be largely confined to LANL. However, surface water resources could potentially have cumulative impacts downstream on the Rio Grande. Impacts from radiological air emissions are typically modeled out to 50 miles (80 kilometers). Refer to the response to Comment no. 317-20.

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for a cumulative impacts analysis is extremely important because the proposed action may have direct, indirect, or an even an "additive" effect on resources beyond the immediate area. According to the CEQ, project specific analyses are "usually conducted on the scale of counties, forest management units, or installation boundaries, whereas [a] cumulative effects analysis should be conducted on the scale of human communities, landscapes, watersheds, or airsheds." (12).

To determine the appropriate geographic boundaries for a cumulative effects analysis, DOE/NNSA must: (1) determine the area that will be affected by their proposed action (the "project impact zone"); (2) make a list of resources within that area or zone that could be affected by the proposed action; and (3) determine the geographic areas occupied by those resources outside the immediate area or project impact zone. (15).

In most cases, "the largest of these areas will be the appropriate area for the analysis of cumulative effects" *Id.* Here, DOE/NNSA's cumulative impacts analysis stops at the artificial and indefensible 50-mile boundary. As such, DOE/NNSA fails to take into account the real direct, indirect, or additive impacts its actions are having not only on the environment, but those Who live beyond the selective 50 mile radius or those who live within the 50 mile radiuses of both Sandia National Laboratory and LANL.

**The Draft LANL SWEIS Fails to Properly Assess Indirect Effects Under NEPA.** The Draft LANL SWEIS must consider the "indirect effects" of a proposed action. Indirect effects are effects that are caused by the action but occur later in time or are further removed in distance. 40 C.F.R. § 1508 (b). Indirect effects "may include growth inducing effects or other effects related to induced changes in pattern of land use; population density or growth rate; and related effects on air, water, and other natural resources." *Id.* Here, the draft LANL SWEIS fails to properly address indirect impacts of a modern pit facility capable of manufacturing 450 pits per year, let alone name it as primary discriminator on the cover sheet.

When considering the cumulative impacts in a reanalysis for the new draft LANL SWEIS, DOE/NNSA must examine impacts beyond the regional boundaries of our geographic area. A narrow sphere of analysis completely denies the impacts to the national and international contexts and is therefore insufficient. LANL requires other facilities, located in New Mexico and around the country, for disposal of radioactive hazardous and toxic materials generated. It also uses other facilities for some experiments. The LANL mission and the proposals put forth in the draft LANL SWEIS, therefore, directly cause impacts to these sites as well. DOE/NNSA must consider these impacts as a part of the cumulative impacts from operations at LANL in the reanalysis for a new draft LANL SWEIS.

Furthermore, the legacy of LANL activities does not merely impact the local environment. Rather, LANL has perpetrated an international tragedy onto innocent individuals. Examples of this are devastatingly apparent with the dropping of atomic

**317-108  
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**317-109**

**317-109** As discussed in the response to Comment no. 317-21, NNSA released a Notice of Intent on October 19, 2006, to prepare a *Complex Transformation SPEIS*. This Notice of Intent also announced cancellation of NNSA's previous proposal to build a modern pit facility, for which a draft supplemental EIS was issued in June 2003 (67 FR 59577). Consequently, impacts related to a modern pit facility were deleted from the SWEIS. In January 2008, NNSA issued the Draft *Complex Transformation SPEIS* (73 FR 2023); it includes alternatives in which LANL would be the site of a new consolidated plutonium center or a new consolidated nuclear production complex. The impacts from the Draft *Complex Transformation SPEIS* are included in Cumulative Impacts section of the Final SWEIS. Decisions on the disposal of various wastes generated across the DOE complex were made through Records of Decision based on the *Waste Management Programmatic Environmental Impact Statement (Waste Management PEIS)* (DOE/EIS-0200F), issued in May 1997 (DOE 1997a). The *Waste Management PEIS* evaluated the impacts of various treatment and disposal options for low-level radioactive waste, mixed low-level radioactive waste, transuranic waste, high-level waste, and hazardous waste. In the Records of Decision that followed issuance of the *Waste Management PEIS*, DOE made Complex-wide determinations regarding treatment and disposal of each waste type. The impacts of experiments at other DOE facilities are evaluated in separate NEPA documentation for those facilities.

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bombs on Hiroshima and Nagasaki and the horrific reality that the Hibaksha live with to this day. Or the tragedy imposed on the Marshall Islands and its Natives who withstood, but are suffering from, 67 atmospheric atomic tests. Some of these bombs bore pits manufactured at LANL. In all these instances, generations continue to bear the burden of this gross exploitation. Please see attached pictures in Exhibit 6.2. With advancements in technology, communities no longer exist as isolated islands from the international community. DOE/NNSA must assess historical, current, and international consequences due to LANL activities in the reanalysis for a new draft LANL SWEIS.

The current global political climate surrounding nuclear weapons is teetering on the edge of disaster. Please listen to *Eve of Destruction*. Exhibit 6.1. The United States pursued a war in Iraq under false pretenses that weapons of mass destruction had fallen into the hands of a dictator. The invasion of Iraq has left that country in shambles.

North Korea has already announced its nuclear weapons capabilities. Meanwhile, many speculate that Iran is pursuing nuclear weapons capabilities. In the case of Iran, the United States is relentlessly curtailing international efforts towards negotiating a resolution that involves a perspective other than its own demands. This type of unilateral thinking is fueling a cultural wildfire in the Middle East and beyond. With a proposal to increase nuclear weapons production at LANL, the United States is compromising security nationally and internationally. With this consideration at hand, a prudent proposal is necessary. CCNS and EVEMG request that the draft LANL SWEIS address the implications of continued operations at LANL on peace and security in the Middle Eastern, and a particular focus on Iran.

CCNS and EVEMG find the proposal to increase nuclear weapons activities at LANL to be in total disregard of both domestic and international laws and the commitments that underlie those laws. Without enforcement from the United Nations (UN) through a thorough inspection from the International Atomic Energy Agency (IAEA) into United States nuclear strategic plans, both weapons and energy based, disarmament will never be realized. The Preferred Alternative under the draft LANL SWEIS proposes increased nuclear weapons activities, which undermines international cooperation, diplomacy and brings to the forefront the hypocritical foreign policy of the United States. CCNS and EVEMG request that the draft LANL SWEIS outline exactly how a proposal to increase plutonium pit production of the United States nuclear stockpile honors the United States commitment under the Nuclear Non-Proliferation Treaty (NPT) and aligns with international efforts for disarmament. Further, an inspection into the nuclear weapons programs of the United States is rightfully due at this point in time. DOE/NNSA must open LANL's doors for inspections by the IAEA.

A recent report, *Weapons of Terror*, created and published by former chief weapons inspector Hans Blix and a team of diverse experts states that, "over the past decade,

317-110

317-110 Assessment of the international consequences of LANL activities is not within the scope of a NEPA compliance analysis. This LANL SWEIS evaluates the environmental impacts of historic, current, and reasonably foreseeable future operations at LANL on a specific region of influence, as discussed in the response to Comment no. 317-20.

317-111

317-111 The implications of LANL operations on peace and security in the Middle East are not within the scope of this SWEIS, which focuses on the environmental impacts of alternatives for continued operation of LANL.

317-112

317-112 Evaluation of the impacts on international treaties is not within the scope of this SWEIS, which focuses on environmental impacts of alternatives for continued operation of LANL. It may be noted, however, that operations at LANL do not violate the Treaty on the Non-Proliferation of Nuclear Weapons. Continuing to ensure a safe and reliable nuclear stockpile violates none of the terms of the treaty. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. The United States, as a nuclear weapons state identified in the Treaty on the Non-Proliferation of Nuclear Weapons, is not subject to International Atomic Energy Agency (IAEA) inspections. To prevent the proliferation of nuclear weapons to non-nuclear-weapons states, IAEA may conduct inspections within a non-nuclear-weapons state to provide assurance that technologies and materials are not being diverted or misused in order to assemble nuclear weapons and that no items required to be declared under safeguards are undeclared. The pits produced at LANL would be used to replace existing pits.

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there has been a serious, and dangerous, loss of momentum and direction in disarmament and non-proliferation efforts." Blix Report, p. 17. [www.wmdcommission.org/files/Weapons\_of\_Terror.pdf. The draft LANL SWEIS supports this claim. The draft LANL SWEIS Preferred Alternative proposes increasing pit production from 20 pits per year to 80 pits per year. Furthermore, a Modern Pit Facility is referenced over 60 times in the document itself, leading many to believe that LANL is preparing to become the new production factory for nuclear weapons, with the capability of producing 450 pits per year. The justification given from the DOE for this sharp increase is to replace aging weapons stockpile and fulfill commitments under the life extension and stockpile stewardship programs. There are two distinct problems with this argument. The first is that many have argued that a pit can withstand the weight of time over many decades, and is not aging as rapidly as first thought. Moreover, a pit's destructive capability can increase over these lengths of time. Therefore, pit replacement is not only unnecessary, but also a thorough waste of taxpayer funds.

The second flaw in this argument, and perhaps more disturbing, is that replacing these supposed aged pits send a clear message to the rest of the world of a *do as I say, not as I do* foreign policy. This message will resonate to non-nuclear states and will provide justification for their pursuit of a nuclear weapons arsenal and encourage nuclear states to maintain their existing arsenals. Thus, the United States is paving the path for a new, more dangerous arms race that will include new enemies, new targets and a new array of players.

*Weapons of Terror* states, "so long as any state has such weapons – especially nuclear arms – others will want them. So long as any such weapons remain in any state's arsenal, there is a high risk that they will one day be used, by design or accident. Any such use would be catastrophic" Blix Report, p. 17. While the United States continues to condemn Iran for its proclamation of the pursuit of nuclear energy, the DOE is undertaking the fulfillment of its nuclear weapons agenda at various facilities scattered across the nation. At the heart of these activities is LANL.

**The DRAFT LANL SWEIS' Cumulative Impacts Analysis Fails To Establish The Proper Baseline.** As mentioned earlier, cumulative impacts are "the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. § 1508.7. The draft LANL SWEIS, however, fails to properly take into account the impacts of LANL's own past actions by failing to establish the proper baseline and failing to conduct the requisite "trends analysis" – an assessment of the environmental impacts of its management decisions over an extended period of time – preferably from the earlier, pre-development days to the present. See also discussion of background radiation in the Environmental Justice portion of our comments above. Only by properly defining the baseline and engaging in this trends analysis can DOE/NNSA present the changes

317-113

**317-113** As described in the Council on Environmental Quality's guidance handbook, *Considering Cumulative Effects Under the National Environmental Policy Act* (CEQ 1997), trend analysis is one of 11 methods of analyzing cumulative impacts. The Council's guidance also states that analysis of environmental effects must focus on effects that are meaningful. The "sliding-scale approach" described in the DOE guidance paper, "Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements" (December 2004), requires the depth of impact analysis to be commensurate with the importance of the resource being analyzed. The DOE guidance further states that impacts should be quantified consistent with the available information, but should not be quantified when they are virtually absent. The cumulative impacts section of the SWEIS was prepared with these principles in mind. Therefore, historical trend analysis of cumulative impacts was not performed because: (1) impacts from LANL activities were minimal and did not warrant extensive cumulative impacts analysis; (2) other methods of cumulative impacts analysis were used; or (3) applicable and appropriate historical information for trend analysis was not available.

Historical trend data for the impacts of LANL operations over time can be found in Appendix C and Appendix F, as well as in Chapter 4, Section 4.6.1.3. Appendix F presents detailed environmental surveillance data for radioisotopes and chemicals in groundwater, surface water, sediment, and soil in and around LANL. These data account for any contaminants that have accumulated since operations began at LANL. Appendix C presents estimates of the doses to persons who are exposed to or consume contaminated water, soil, sediment, plants, animals, and agricultural produces near LANL. All of these doses represent only a very small fraction of the normal background dose received by persons living near LANL. Section 4.6.1.1 provides detailed information about cancer mortality and incidence rates both in New Mexico and in all of the counties surrounding LANL. This data, along with the final *LANL Public Health Assessment* issued in August 2006 by the Agency for Toxic Substances and Disease Registry, shows that, "...there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "... overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006).

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that have occurred to the area's resources overtime. According to the CEQ, "trends in the abundance and distribution of habitats are one of the most important indicators of cumulative effects problems." CEQ Guideline at A-26.

The following are specific comments related to portions of the text in the draft LANL SWEIS.

p. 5-180. "Additional DOE or NNSA actions potentially impacting LANL include the possible siting of a modern pit facility at LANL..." CCNS and EVEMG object to the many references made to a modern pit facility (MPF) capable of producing 450 plutonium pits per year. In 2003 when the draft EIS was issued for the MPF there was widespread public opposition by New Mexicans. Five sites were proposed for the MPF, including LANL. The funding for the MPF was later tabled by Congress, and the EIS was never finalized. It is unacceptable and misleading to refer to the impacts of this facility when the MPF EIS was never finalized. DOE/NNSA is violating NEPA by proposing a MPF at LANL in the draft LANL SWEIS. Furthermore, these activities have dire local, national and international implications. Increasing the plutonium pit production would exaggerate the repercussions addressed above. The draft LANL SWEIS omits a discussion of how an MPF or increased pit production would not violate the Nuclear Nonproliferation Treaty. DOE/NNSA must eliminate all references to a MPF at LANL in the reanalysis for a new draft SWEIS.

|| 317-114

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Rather than drastically expanding nuclear weapons production, Congress must change the mission of LANL to focus on life affirming research and development into renewable non-nuclear energy, such as solar, wind and biomass, and clean up technologies that support environmental and public health. DOE/NNSA must include an analysis of this transition as an additional Green Alternative in the cumulative impacts for a new draft LANL SWEIS. Such an analysis must include the international impacts that this transition would have. Please see Seeds of Change and Peace in Exhibit 6.2 and Exhibit 14.

|| 317-115

p. 5-181. DOE/NNSA must include a description of the type of research that will be conducted at the BSL-3 in the reanalysis for a new draft LANL SWEIS. Experiments with biological agents potentially have huge repercussions in light of the current international political climate. Therefore, the reanalysis for a new draft LANL SWEIS, as well as the draft EIS for the BSL-3 must include the state, national and international impacts of its operation. Psychological impacts must be included in the health assessment of the draft EIS for the BSL-3

|| 317-116

p. 5-181. What was the basis for the choice of building the BSL-3 out of stucco?

|| 317-117

p. 5-181. "Air emissions would be passed through HEPA filters and would not affect the air quality of the region." CCNS and EVEMG do not share DOE/NNSA's confidence in the HEPA filters; and neither does the Defense Nuclear Facilities Safety

|| 317-118

Table 4-26 shows that some cancer rates in Los Alamos County are lower than the national average and some are higher, which is typical of any area. Information on historical doses to the public is incomplete and is still being developed.

The Centers for Disease Control and Prevention is in the early phase of the dose reconstruction efforts at LANL. As described in its January 2006 publication titled, "Interim Report of the Los Alamos Historical Document Retrieval and Assessment (LAHDRA) Project" (CDC 2006), dose reconstruction is a five-phase process involving: (1) retrieval and assessment of data, (2) initial source term development and pathway analysis, (3) screening dose and exposure calculations, (4) development of methods for assessing environmental doses, and (5) calculation of environmental exposures, doses, and risks. The CDC project at LANL is still in the initial information-gathering phase, so this information was not available to include in the cumulative impacts analysis.

Cumulative impacts are discussed in Chapter 5, Section 5.13, of the SWEIS, which was updated with the information provided in this response.

**317-114** Refer to the response to Comment no. 317-9 regarding cancellation of NNSA's previous proposal to build a modern pit facility. The SWEIS was revised to reflect this decision.

**317-115** Cessation of LANL's primary mission activities in support of NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations; as such, they are included in the SWEIS under the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

**317-116** The Biosafety Level 3 Facility would expand the Bioscience Facilities' capabilities, described in Chapter 3, Section 3.1.3.11, of the SWEIS, by providing the ability to work with indigenous or exotic agents with a potential for respiratory transmission. The types of activities to be conducted by the Biosafety Level 3 Facility include forensic and research

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Board (DNFSB). A DNFSB Technical Report dated May 1999 (DNFSB/TECH-23), states, "today there is convincing evidence that [the] infrastructure [which supported production and quality assurance for the HEPA filter] is failing; this report describes significant degradation of the infrastructure supporting DOE's HEPA filter program." DOE/NNSA must provide justification for their confidence in the HEPA filters in the new draft LANL SWEIS.

p. 5-181. DOE/NNSA must list the contaminants, which are to be captured by the HEPA filter, as well as their respective regulatory limits and health impacts, which will be filtered through the HEPA filters. For context and clarity, this list must be presented in a text box on this page.

p. 5-181. "Liquid waste would be discharged to the LANL sanitary sewage system where it would be commingled and treated prior to discharge and would have minimal impact on local and regional water quality." As water quantity dwindles, water quality becomes increasingly significant. DOE/NNSA must not dismiss any risk to our drinking water supply as minimal. For context and clarity, DOE/NNSA must define "commingled" and "treated" in the new draft LANL SWEIS.

p. 5-182. "It is also necessary to consider activities implemented by other Federal, state and local agencies and individuals outside, but within the region of influence for LANL." The CEQ regulations quoted in the draft LANL SWEIS place no limit on the geographic area or person who undertakes the other actions. p. 5-180. Therefore, the cumulative impacts through out the entire state, nation and world must be assessed. See above comments.

p. 5-182. "The city of Santa Fe . . . ; the Santa Clara Pueblo and San Ildefonso Pueblos . . . were contacted regarding anticipated future activities that could contribute to cumulative impacts." Why were only the Santa Clara and San Ildefonso Pueblos contacted? DOE/NNSA must contact all impacted pueblos and tribes in a reanalysis for a new draft LANL SWEIS as required by law and regulations. Tribes who travel to use the Los Alamos area, such as the Hopi, must also be contacted.

Furthermore, DOE/NNSA must contact all sites whose activities are correlated or dependent upon LANL activities or with whom LANL will work. Along with those sites, DOE/NNSA must contact all communities and federal agencies which may have information regarding anticipated future activities which could contribute to cumulative impacts for those sites. See above comments regarding the CEQ regulations.

p. 5-182. "Rio Arriba and Santa Fe Counties, and the Santa Clara and San Ildefonso Pueblos did not provide information for the cumulative impact analysis." DOE/NNSA must work with these communities, taking the lead and the responsibility as the party

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sample analysis for strain characterization and attribution, culture and analysis of infectious microbes to study biochemical and pathogenic characteristics, micro and molecular biology to support development of detection technologies, and collection and storage of samples for archive. NNSA is preparing an *Environmental Impact Statement for the Operation of a Biosafety Level-3 Facility at Los Alamos National Laboratory, Los Alamos, New Mexico*; the cumulative impacts analysis (Chapter 5, Section 5.13) of the SWEIS was revised to summarize its environmental consequences (Cummings 2007).

Psychological impacts are not within the scope of NEPA analysis. In 1983, the U.S. Supreme Court ruled (*Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766) that "psychological effects" are not included among the environmental impacts required to be analyzed in environmental impact statements.

**317-117** This information was included in the SWEIS to describe the subject facility; the choice of building materials met the functional requirements for the facility and complied with LANL architectural standards.

**317-118** The specific statement about HEPA filters with respect to the Biosafety Level 3 Facility at LANL was removed from Chapter 5, Section 5.13.

To address the commentor's concerns about HEPA filters in general, the following information is provided. A HEPA filter is a dry-type filter that can typically remove particles as small as 0.1 micrometers (DOE 2003b). To mitigate the possibility of a HEPA filter failing during normal operations and accidents, air cleaning systems are designed to contain multiple (up to four) physically separated HEPA filter banks or stages arranged in a series so that, should the first HEPA filter stage fail, the additional HEPA filter stages would achieve the same air cleaning performance level. HEPA filters are purchased, maintained, and tested in accordance with DOE requirements and standards that identify specific criteria. DOE, together with the Defense Nuclear Facilities Safety Board, has been strengthening its HEPA filter program for several years through formal recommendations (DNFSB 1999, 2000, 2004). DOE tests HEPA filters based on specific analysis requirements that generally result in testing the filters in place every 12 months. The filters also are tested after replacement, when deemed appropriate by facility management,

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imposing potential harm, using every means possible, to obtain such information, for the reanalysis for the new LANL SWEIS.

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p. 5-184. "The North Railroad Avenue groundwater contamination plume... would not contribute to cumulative impacts as LANL." CCNS and EVEMG disagree with the analysis of DOE/NNSA. The North Railroad Avenue groundwater contamination plume is moving towards the Rio Grande. It contains chlorinated solvents including "tetrachloroethene (PCE) and trichloroethene (TCE), cis-1,2-dichloroethene (c-DCE) and trans-1,2-DCE (t-1,2-DCE)." North Railroad Avenue Plume Site Proposed Plan Fact Sheet, June 2001, EPA. What will happen when this contamination reaches the river and mixes with the LANL contaminants already there, such as PCBs, perchlorate, nitrates and tritium? The determination that the North Railroad Avenue groundwater contamination plume does not contribute to cumulative impacts at LANL is ignoring the future migration of these contaminants. DOE/NNSA must include an analysis of the impacts of this inevitable mixing in a reassessment for a new draft LANL SWEIS.

317-123

p. 5-186. "Some resources were not provided with a detailed analysis based on... a judgment that cumulatively there would be no appreciable impacts to these resources." DOE/NNSA must define the terms "judgment" and "appreciable" as they are not listed in Chapter 8.

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In the absence of a definition of "judgment" provided by DOE/NNSA, CCNS and EVEMG suggest that the Ancient philosopher Aristotle's concept of judgment be used. In *The Rhetoric*, Aristotle discusses judgment and states, "But since rhetoric is concerned with making a judgment [hepei d'heneka kriseos estin he retorike] (people judge what is said in deliberation, and judicial proceedings are also a judgment), it is necessary not only to look to the argument [ton logon], that it be demonstrative and persuasive [apodeiktikos kai pistos] but also for the speaker to construct a view of himself as a certain kind of person and to prepare the judge." Line 1377b20-24. Based on Aristotle's understanding of the term, CCNS and EVEMG are not confident in DOE/NNSA's ability to judge the "appreciable impacts to these resources." The quality of analysis in the rest of the draft LANL SWEIS has been too poor, inadequate and incomplete as to make DOE/NNSA appear to be of such a kind as to be able to judge. DOE/NNSA must include a table or list of all areas for which a judgment was made that there would be no cumulative impact in the reanalysis for a new draft LANL SWEIS and the reasoning behind that "judgment".

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p. 5-186. "Up to 826 acres (334 hectares) of this land could be developed after transfer with the potential introduction of incompatible land uses and the loss of recreational opportunities." What do the phrases "incompatible land use" and "loss of recreational opportunities" mean? DOE/NNSA must restate this sentence in such a way as the meaning can be easily understood by members of the public in a reanalysis for a new draft LANL SWEIS.

317-125

or in compliance with the facility safety authorization basis. General replacement criteria include wetting, facility fire, differential pressure changes, or radiation levels indicating an increase in filter loading. DOE-STD-3020-2005 requires further acceptance testing of HEPA filters that are intended for use in DOE nuclear facilities. Filters that are safety significant, safety class, or needed to protect workers must be tested at a DOE Filter Test Facility. At the Filter Test Facility, filters must pass a rigorous visual inspection by trained inspector personnel, as well as various flow tests (for example, penetration, resistance to flow). Only filters that pass the Filter Test Facility tests are forwarded to a DOE nuclear facility.

The *Nuclear Air Cleaning Handbook* (DOE 2003b) was reviewed, updated, and reaffirmed in accordance with a Defense Nuclear Facility Safety Board recommendation (DNFSB 2000). This handbook is used by NNSA to ensure that permanent programs are institutionalized and are in place to test and maintain HEPA filter performance. In accordance with applicable DOE and NNSA commitments, NNSA explicitly requires its contractors to ensure 100 percent testing of HEPA filters as part of their vital safety systems assessments. NNSA also has requested its site management and operations contractors to prepare a formal response documenting the steps they take to routinely verify that all applicable HEPA filter testing requirements are being met (NNSA 2003). This has been accomplished by changes that were incorporated into the revised DOE Standard (DOE-STD-3020-2005) (DOE 2005c). As a part of these efforts, DOE updated the *Nuclear Air Cleaning Handbook* (DOE 2003b) and many of the HEPA filter-related standards (such as DOE Technical Standard 3020-2005, Specification for HEPA Filters Used by DOE Contractors [DOE 2005c]) to reflect current best practices and expectations.

317-119 NNSA has revised Chapter 5, Section 5.13, to update the cumulative impacts analysis with potential environmental consequences associated with the BSL-3 Facility based on the *BSL-3 EIS* NNSA is currently preparing; therefore, the references to commingled and treated wastewater discharges have been deleted. All liquid waste would be treated, if necessary, to meet the waste acceptance criteria for the TA-46 Sanitary Wastewater Systems Plant, which would then ensure the effluent meets water quality permit requirements set by the State of New Mexico prior to discharge.



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CCNS and EVEMG object to the phrasing "if the waste at the MDAs is confined in place" as a description of the MDA capping option. Contamination is not confined in place in this option, simply covered. Runoff from storm and melting snow events, heavy winds, change in land use and forest fires could easily move and remobilize this contamination. DOE/NNSA must use phrasing which more accurately describes the MDA capping option in a reanalysis for the new draft LANL SWEIS. See CCNS and EVEMG comments regarding water. See also attached comments by George Rice regarding MDA cleanup. Exhibit 5 Additionally, DOE/NNSA must pursue clean up technology with the same drive and intention as developing the atomic weapon in order to make it a viable alternative.

p. 5-187 - 5-191. Water: Please see CCNS and EVEMG comments regarding Water.

p. 5-191 - 5-193. Air Quality: Please see CCNS and EVEMG comments regarding Air.

p. 5-193. Human Health: CCNS and EVEMG object to DOE/NNSA limiting their analysis to cancer deaths. DOE/NNSA must assess all health impacts of not only radiation exposure but also those resulting from exposure to the other toxic and hazardous contaminants generated by LANL activities.

Please see Exhibit 17.2 "New Mexico's Right to Know: the Impacts of LANL Operations on Public Health and the Environment." Full report is available at [www.nuclearactive.org](http://www.nuclearactive.org). CCNS and EVEMG submit this report as a part of our formal comments.

"There would be no increase expected in the number of LCFs among the general public even if a modern pit facility operations were located at LANL." All references to the modern pit facility must be removed from the reanalysis for a new draft LANL SWEIS. Furthermore, the phrase "latent cancer fatality" and especially the acronym LCF mislead the public by disguising the significance of the topic. DOE/NNSA must use terminology which is easily understood by the general public.

If DOE/NNSA determines that they will retain references and analysis of a modern pit facility at LANL in the new draft LANL SWEIS, then they must explain how there could be no increase of impacts from such a drastic increase of pit production, emissions, discharges and waste generation as would be caused by the operation of a modern pit facility. Furthermore, DOE/NNSA must explain how the future use of one of the bombs built with a pit produced at the modern pit facility would have no increase in human health impacts. If DOE/NNSA does not consider the use of one of these bombs as a foreseeable future activity, then there is no justification for operating the facility. DOE/NNSA must include the life-cycle and international human health impacts of increasing nuclear weapons manufacturing.

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**317-120** As described in Chapter 5, Section 5.13, the impacts of other actions taken in the LANL region of influence are considered in the cumulative impacts analysis. The Council on Environmental Quality's guidance handbook, *Considering Cumulative Effects Under the National Environmental Policy Act* (CEQ 1997), states that it is not practical to analyze the cumulative effects of an action on the universe, and that the list of environmental effects must focus on those effects that are meaningful. The "sliding-scale approach" described in DOE's December 2004 guidance paper, "Recommendations for the Preparation of Environmental Assessments and Environmental Impact Statements" (DOE 2004), requires the depth of impact analysis to be commensurate with the importance of the resource being analyzed. The DOE guidance further states that impacts should be quantified consistent with the available information, but impacts should not be quantified when they are virtually absent. The cumulative impacts section of the SWEIS was prepared with these principles in mind.

**317-121** Direct contact with the counties and Pueblos was only one of the methods used to collect information for cumulative impacts. Much of the needed information was collected from Federal, state, and county agencies, as well as private company plans, studies, reports, databases, and websites. Local officials confirmed the information collected from these other sources. Follow-up contact was made with counties that declined the initial requests for cumulative impacts information. Chapter 5, Section 5.13, of the Final SWEIS was revised to reflect that input was received from all but one county and two pueblos. As shown on the distribution list in Chapter 11, representatives of all Native American Tribes in the region were sent the Draft SWEIS for comment to provide them an opportunity to correct or supplement the information presented in the SWEIS. In addition, as described in Chapter 6, Section 6.5, DOE consulted with the appropriate Tribal Governments, as required by Executive Memoranda and DOE Order 1230.2, "American Indian Tribal Government Policy."

**317-122** See the response to Comment no. 317-121.

**317-123** The North Railroad Avenue groundwater contamination plume originates in Española. Bioremediation testing at this site commenced in 2007 (NMED 2007). Tetrachloroethylene emission is the leading concern about this plume because it is the most widespread contaminant and is found in the highest concentrations in groundwater. Other contaminants present that are present in the plume and have possible health effects include

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DOE/NNSA must use more accessible terms than LCF and MEI to describe the impacts to individuals whose health has been harmed by the resumption of nuclear weapons manufacturing.

p. 5-194. Infrastructure: The cumulative impacts of infrastructure changes must assess not only the usage requirements for water, electricity and natural gas, but also the impact of the use. DOE/NNSA must include a life-cycle assessment for the use of these resources, in the reanalysis for a new draft LANL SWEIS.

p. 5-195. Infrastructure: The cumulative impact of infrastructure changes is not capacity constraints, but rather the socio-economic, environmental and human health impacts of using the resources. DOE/NNSA must include a life-cycle assessment of the emissions and discharges generated by obtaining the materials and generating the electricity in the reanalysis for a new draft LANL SWEIS.

"Without the San Juan-Chama water, demand could exceed the available water supply in the future." There is no plan to mitigate the effects of reduced flows through the San Juan/Chama diversion. Is it reasonable to assume an increase in pit production and an increase in contaminated discharge through the canyon system to the Rio Grande when the availability of San Juan/Chama water in the suggested quantities may be in doubt?

Two questions are raised by San Juan/Chama water discussion. One concerns the models used to predict water resources available below the Pajarito Plateau. These models use parameters that the modelers frankly call "uncertain." Please see Exhibits 1-4.

Second, the basic assumption that San Juan/Chama water will flow through the Rio Grande in the amounts predicted since the 1960s has not been proven given the scale and number of upstream demands on that water. If San Juan/Chama water is not available in the quantities predicted, what is the plan? This is particularly important question because LANL has the intention of discharging 60% more water to the river through a number of canyon systems, many of which contain contaminants. If the solution to pollution is dilution, how does LANL expect to deal with a situation in which they increase the contaminated discharge even if there is no increased volume in the river?

Until the uncertainties are dealt with in a realistic manner, the Final LANL SWEIS must be delayed. Water is the lifeblood without which neither LANL nor surrounding communities can expect to continue and prosper.

p. 5-195. Waste Management: The Waste Management assessment focuses only on the practicality of storing the proposed waste, but not the social, environmental and health impacts of such disposal. DOE/NNSA omit addressing the pertinent question with this analysis. The issue is what the impacts of the proposal will be, not what is possible.

CCNS and EVEMG Comments about draft LANL SWEIS \* September 20, 2006 \* Page 55

**317-129  
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**317-132**

**317-133**

trichloroethylene, cis-1,2 dichloroethylene, and trans-1,2 dichloroethylene (EPA 2006). This contamination plume is being remediated to protect drinking water and the Rio Grande from future chlorinated groundwater solvents, so it is not expected to migrate into groundwater or surface water impacted by past or present LANL operations. Chapter 5, Section 5.13, was modified to include this information.

**317-124** As discussed in the response to Comment no. 317-105, a cumulative impacts analysis was included for every resource area identified in Chapter 5.

**317-125** The phrase "incompatible land use" means that lands in adjacent areas have land use designations that would interfere with each other or restrict one another. Loss of recreational opportunities means a reduction in activities such as hiking or fishing. These terms are more clearly defined and discussed in Chapter 5, Section 5.1. Section 5.13 was reworded to clarify the sentence.

**317-126** The cited phrase in Chapter 5, Section 5.13, was reworded to read, "...if the waste at the MDAs remains in place." If capping were selected as a remedy for a material disposal area, the cap would be designed and emplaced after considering the processes that could affect the performance of the cap and the designated future use of the site. After capping is completed, the material disposal area would be maintained under a stewardship condition and monitored and repaired as needed to eliminate conditions such as severe erosion that could remobilize the contamination.

**317-127** Refer to the response to Comment no. 317-74 regarding the use of cancer deaths to measure impacts in the SWEIS. The SWEIS assesses the impacts of other toxic and hazardous substances in Chapter 5. Section 5.6.2 discusses the human health impacts associated with operational emissions chemical impacts under all three alternatives. Hazardous chemical accidents are discussed in Section 5.12.2, and nonradioactive contaminants in the environment and their impacts are discussed in Appendix C, Section C.2.

**317-128** In January 2008, NNSA issued the Draft *Complex Transformation SPEIS* (73 FR 2023); it includes alternatives in which LANL would be the site of a new consolidated plutonium center or a new consolidated nuclear production complex. The impacts from the Draft *Complex Transformation SPEIS* are included in Cumulative Impacts section of the Final SWEIS.

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DOE/NNSA must address the impacts of their proposal for waste management in a reanalysis for the new draft LANL SWEIS. Please see more Waste discussion near the end of these comments.

DOE/NNSA must not lump the waste from cleanup in with the newly generated waste. Waste from remediation and DD&D of facilities is waste which is already in existence and must be dealt with. Waste from future activities is waste which is being generated. DOE/NNSA omits analysis and consideration of the waste from the remediation of future activities, this waste would be rightfully considered generated. Remediation and DD&D of facilities is necessary for protection of the environment and public health. Planned future activities generate unnecessary waste in the service of weapons of mass destruction. DOE/NNSA must not conflate the two in reanalysis for the new draft LANL SWEIS.

p. 5-196. Table 5-79. Estimated Cumulative Waste Generation at LANL (2007 to 2016). See comments by Don Hancock regarding Transuranic Waste.

The sentence "therefore, Table 5-79 overestimates cumulative waste generation associated with pit production," is misleading. If a modern pit facility is a "reasonably foreseeable future action," then the table is an accurate estimation of foreseeable future actions, because LANL would have the capability to both produce the current 80 pits per year in addition to the 450 pits per year in the modern pit facility. If DOE/NNSA does not intend to utilize the full capability they are proposing to establish at LANL, they must be straightforward about their intentions to build redundant facilities.

"Increases in the cumulative waste generation rate may require the construction of additional facilities and assignment of additional staff to manage the wastes . . . Substantial quantities of low-level radioactive wastes and solid wastes (primarily the debris from excavation, construction and demolition activities) are projected." These statements are misleading and make it appear as though the limitations to storage space are not a serious concern. The Summary to the draft LANL SWEIS, however, states in Expanded Operations Alternative, with the MDA removal option and the operation of a modern pit facility were to be undertaken, "the projected low-level radioactive waste volume (1.5 million cubic yards [1.1 million cubic meters]) would exceed the onsite disposal capacity, and the transuranic waste volume (48,000 cubic yards [37,000 cubic meters]) would significantly exceed the volume (27,500 cubic yards [21,000 cubic meters]) attributed to LANL in the *Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement*." S-71. Which makes it a matter of great contention, because there is not enough storage space available for the low-level radioactive and transuranic waste at LANL.

The cited sentence above is purposefully misleading because it does not even mention the issues related to transuranic waste disposal.

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**317-135**

**317-129** The phrase "latent cancer fatality" and its acronym LCF are explained in detail in Appendix C, Section C.1.2, and are defined in the Glossary provided in Chapter 8 along with definition of a "maximally exposed individual (MEI)" and other terms commonly used in EISs. Latent cancer fatalities are the measure of long-term radiation exposure-related health effects that is universally accepted to express the health effects of exposure to radiation; it is used in EISs for DOE Nuclear Complex sites. Latent cancer fatalities also are the measure of long-term radiation exposure-related health effects endorsed and used by the U.S. Government, National Research Council, International Atomic Energy Agency (part of the United Nations), and the International Commission on Radiological Protection.

**317-130** Refer to the response to Comment no. 317-9 regarding cancellation of NNSA's previous proposal to build a modern pit facility. The lifecycle and international human health impacts of increasing nuclear weapons manufacturing, as well as analysis of the detonation of a nuclear weapon, are not within the scope of this SWEIS, which focuses on the environmental impacts of continuing LANL operations.

**317-131** The cumulative impacts of the Expanded Operations Alternative on electricity, water, and natural gas demands are discussed in Chapter 5, Section 5.13. Although not anticipated, future expansion of the LANL infrastructure to supply additional electricity, water, or natural gas would be preceded by appropriate environmental documentation. Changes made to the offsite infrastructure to meet LANL demands would be required to meet applicable state and Federal environmental regulations and permitted effluent standards. A lifecycle assessment of the use of these resources is not within the scope of the LANL SWEIS.

**317-132** DOE takes its resource stewardship and conservation responsibilities seriously and continues to work with Los Alamos County in implementing measures to conserve water and in planning for future water demands. LANL is now a County water customer. LANL's total and consumptive water use have decreased since 1999. LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling of 542 million gallons (2,050 million liters) per year. Meanwhile, Los Alamos County is working to lessen its dependence on the regional groundwater aquifer and is studying the possible use of the San Juan-Chama surface water allotment. Refer to Section 2.5, Water Resources, of this CRD for additional information.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

DOE/NNSA must not go forward with any activities until the issue of waste disposal has been determined. CCNS and EVEMG believe that it is common sense to apply a preventative principle such as this before expending taxpayer dollars on facilities that will continue to generate waste that does not have a disposal path.

|| 317-135  
cont'd

"Most wastes, with the exception of some low-level radioactive waste, are disposed offsite at permitted facilities." DOE/NNSA must define the term "some." Furthermore, waste remains on site until it has been shipped for permanent disposal. DOE/NNSA must address the time it has taken to ship the "Quick to WIPP" high activity waste drums before making the above statement. DOE/NNSA must explain the reason for the delays, including the EPA shutdown of activities. Furthermore, the socioeconomic, environmental, health and psychological impacts of the offsite disposal options must be assessed as part of the cumulative impacts of LANL activities.

|| 317-136

"The expansion of Area G into Zone 4 is expected. . . ." DOE/NNSA must fully and completely address the environmental impacts of continuing to bury low-level radioactive waste in unlined, pits, shafts and trenches. Such an analysis cannot be done until the area G performance assessment has been completed. See CCNS and EVEMG comment regarding the Area G performance assessment. Please note that the State of New Mexico has recognized the need to protect surface and ground water. All municipalities in the State of New Mexico are required to install liners in all new waste facilities. Please explain why DOE/NNSA omits such a requirement in the draft LANL SWEIS.

|| 317-137

"In addition, offsite disposal options. . . NNSA's Nevada Test Site. . ." The socioeconomic, environmental, health and psychological impacts of the Nevada Test Site must be assessed as part of the cumulative impacts of LANL activities.

p. 5-197. The socioeconomic, environmental, health and psychological impacts of disposal of transuranic waste at WIPP must be considered as a part of the cumulative impacts of LANL operations. DOE/NNSA must address the violation of environmental justice in using a sacred salt site to dispose of waste from the production of weapons of mass destruction.

|| 317-138

"Off site treatment options are available at commercial facilities across the country, including treatment facilities and disposal facilities in Nevada, Colorado, Utah and Texas." DOE/NNSA must analyze the socioeconomic, environmental, health and psychological impacts of the offsite treatment and disposal options, as part of the cumulative impacts of LANL activities.

"...appropriately permitted solid waste landfill. . ." DOE/NNSA must analyze the socioeconomic, environmental, health and psychological impacts of the solid waste landfill, as part of the cumulative impacts of LANL activities.

|| 317-139

Appropriate environmental impact documentation would be prepared by Los Alamos County to analyze the options carried forward to access San Juan-Chama project water. Currently, Sections 5.8.2.1 and 5.14.3 of the SWEIS note that the earliest that San Juan-Chama project water might be available is 2010. NNSA understands that proposed expansion of LANL and its future operations will be bound by the availability of water as will the growth of the greater Los Alamos area and other communities.

**317-133** As discussed in the response to Comment no. 317-109, decisions regarding disposal of various wastes generated across the DOE complex were made through Records of Decision based on the *Waste Management PEIS* (DOE/EIS 0200F) (DOE 1997a). The *Waste Management PEIS* evaluated the impacts of various disposal options for several waste types, including low-level radioactive waste, mixed low-level radioactive waste, transuranic waste, high-level waste, and hazardous (chemical) waste, as well as the social, environmental, and health impacts of each disposal option. In the Records of Decision that followed the *Waste Management PEIS*, DOE made Complex-wide determinations regarding disposal of each waste type and evaluated available disposal capacity. As presented in this SWEIS, the amounts of newly generated waste (from routine operations) are distinguished from environmental restoration waste. For example, Chapter 5, Table 5-49, identifies the waste quantities projected for three primary sources of waste: routine operations; decontamination, decommissioning and demolition; and environmental restoration. Table S-5 of the Summary was revised to separate environmental restoration waste from newly generated waste. Management of waste, however, is determined by the waste classification (e.g., chemical or transuranic waste), not by the source.

The environmental restoration waste quantities projected are based on all known potential release sites. Creation of new potential release sites is not anticipated because current operating and waste management practices comply with regulations designed to protect the environment. If additional remediation were necessary in the future, the need for supplemental NEPA documentation would be evaluated. Refer to Section 2.7, Waste Management, of this CRD for more information.

**317-134** Refer to the response to Comment no. 317-21.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

"... the Rio Rancho, Sandoval County, Torrance/Bernalillo County Landfills." DOE/NNSA must analyze the socioeconomic, environmental, health and psychological impacts of the solid waste landfill, as part of the cumulative impacts of LANL activities.

p. 5-197. Transportation: "The collective dose, cumulative health effects and traffic features from approximately 100 years of radioactive material and waste transportation across the United States are estimated in Table 5-80." What transportation of radioactive materials occurred 100 years ago? Does DOE/NNSA have data regarding the possible use of a Model A to transport radioactive materials to Madame Curie? It is disgraceful the scientists would expand the data in this way in order to simplify calculations about the environmental and health impacts of transportation of radioactive materials. DOE/NNSA must reanalysis the cumulative impacts of transportation based on actual data in a new draft LANL SWEIS.

317-140

p. 5-198. "For perspective, in 2004 there were 522 traffic fatalities in New Mexico and 58 in the three neighboring counties (Los Alamos, Rio Arriba, and Santa Fe)." Please describe what actions DOE/NNSA are taking to reduce the potential for a traffic accident involving their radioactive, hazardous and toxic materials. Please see attached articles and cartoons regarding traffic accidents in New Mexico.

317-141

p. 5-199. The draft LANL SWEIS refers to "a modern pit facility." The collective voice from Northern New Mexico: "No MPP! Nowhere! No way!" Please see Exhibit 6.2.

317-142

Local Transportation: DOE/NNSA must analyze the CO2 emissions from such a traffic increase. Furthermore, DOE/NNSA must assess the Environmental Justice implications of the health impacts due to such an increase.

317-143

p. 5-200. "Some resources were not provided with a detailed analysis based on... a judgment that cumulatively there would be no appreciable impacts to these resources." See above comment regarding "judgment." Please include the basis and decision making process for making this "judgment."

317-124  
cont'd

"The following paragraphs summarize the impacts for LANL and the surrounding region of influence." The CEQ regulations quoted in draft LANL SWEIS place no limit on the geographic area or person who undertakes the other actions. p. 5-180. Therefore, the cumulative impacts through out the entire state, nation and world must be assessed. See above comments.

317-22  
cont'd

"... and locate a facility producing 450 pits annually at LANL." Again, the collective voice of Northern New Mexico says, "No MPP! Nowhere! No Way!" Please see Exhibit 6.2.9.

317-142  
cont'd

**317-135** The quantities of wastes projected in the Draft SWEIS are conservative to provide a bounding estimate for evaluating the impacts. In addition, because the types and volumes of the wastes that will be generated from environmental restoration at LANL depend on future regulatory decisions (made primarily by the State of New Mexico), projections of the types and quantities of these wastes are subject to great uncertainty. NNSA recognizes in the SWEIS that some modifications to the waste management infrastructure may be undertaken. Appendix H, Section H.3, discusses waste management alternatives considering the upcoming closure of many TA-54 facilities, including construction of new facilities to store, process, and characterize waste. Should future waste generation rates approach or exceed the capacity of the new LANL waste management facilities, additional facility planning and associated NEPA analysis would be performed.

The environmental impacts of expanding low-level radioactive waste disposal operations into Zones 4 and 6 were evaluated in the 1999 LANL SWEIS and no changes are planned. In a Record of Decision following the DOE *Waste Management PEIS*, DOE determined that low-level radioactive waste generated at LANL would be disposed of at LANL and at two regional facilities (Hanford and the Nevada Test Site) (65 FR 10061). In that same Record of Decision, DOE determined that the disposal capacity for low-level radioactive waste is adequate. In the 1998 Record of Decision for the WIPP Disposal Phase (63 FR 3624), DOE recognized that WIPP would not provide a disposal solution for all transuranic wastes and that another disposal facility may be necessary in the future. Exceedance of WIPP capacity depends on a number of factors that remain to be determined, including: (1) actual waste volumes generated at LANL (versus the conservative projections presented in the SWEIS) and at other DOE facilities; (2) whether LANL operations would continue beyond WIPP's closure; and (3) the amount of waste generated at LANL through environmental restoration and decommissioning activities. Refer to Section 2.7, Waste Management, of this CRD for more information. With respect to waste generated from a modern pit facility, NNSA announced cancellation of its proposal to build a modern pit facility in its Notice of Intent to prepare the *Complex Transformation SPEIS* (71 FR 61731), as discussed in the response to Comment no. 317-9. In January 2008, NNSA issued the Draft *Complex Transformation SPEIS* (73 FR 2023); it includes alternatives in which LANL would be the site

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
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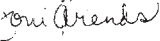
**CONCLUSION**


DOE/NNSA consistently uses misleading information, incomplete and technically indefensible data and information as a basis for analysis in the draft LANL SWEIS. It relies on documents which have not been finalized to make formal conclusions in the draft LANL SWEIS. Furthermore, DOE/NNSA has not followed proper procedural rules under the National Environmental Policy Act (NEPA) for the release of the draft LANL SWEIS for public comment. The public has not been afforded adequate time nor provided a genuine opportunity to fully review the draft LANL SWEIS, the referenced documents and the Data Call. Nor have the citizens in Albuquerque been provided with a hearing on the draft LANL SWEIS as requested by many elected officials, newspapers and non-governmental organizations. Therefore, the public has not responded to the draft LANL SWEIS as fully as we may have if we were given adequate time and opportunity to do so.

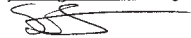
These patterns of behavior by DOE/NNSA endanger public health and wellbeing and further threaten an increasingly dangerous environmental burden. As demonstrated in our comments, DOE/NNSA has acted in an arbitrary and capricious manner with regard to preparing the draft LANL SWEIS. Therefore, CCNS and EVEMG demand that the current draft LANL SWEIS be withdrawn. Pending the finalization of the necessary reports used as a foundation for this document, accurate information and data collection and a subsequent reanalysis, DOE/NNSA must release a new draft LANL SWEIS for public review and comment under NEPA.


Thank you for your careful consideration of our comments. We submit them with the intent that they will be helpful, informative and useful during the reanalysis for the new draft LANL SWEIS. In the alternative, our comments must be incorporated into the final LANL SWEIS. We look forward to your response to both these written comments and the mixed CDs. Should you have any questions or comments, please contact us either by email or phone.

Sincerely,

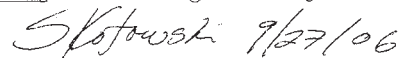
  
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 9/27/06

of a new consolidated plutonium center or a new consolidated nuclear production complex. The impacts from the Draft *Complex Transformation SPEIS* are included in Cumulative Impacts section of the Final SWEIS.

**317-136** In accordance with the low-level radioactive waste Record of Decision (65 FR 10061) following the *Waste Management PEIS* (DOE/EIS-0200), low-level radioactive wastes generated at LANL are generally disposed of onsite. To date, the vast majority of LANL low-level radioactive waste has been disposed of onsite. However, consistent with DOE's *Radioactive Waste Manual* (DOE M 435.1), the site manager can authorize disposal at commercial facilities. The amounts of low-level radioactive waste disposed of annually on and offsite depend on operational factors such as waste volumes generated, available disposal capacity, and cost factors.

Although there have been delays in meeting planned transuranic waste shipments, process improvements have been made and recent gains in shipment numbers have been realized, as discussed in Chapter 4, Section 4.9.4. Refer to Section 2.7, Waste Management, of this CRD for more information. Chapter 5, Section 5.10, of the SWEIS addresses analyses of the environmental impacts of offsite disposal of LANL-generated waste. These analyses address the resources areas as appropriate, placing particular emphasis on waste transport and health.

**317-137** The future use of lined rather than unlined pits for waste disposal is under evaluation through the Area G Performance Assessment and Composite Analysis that is required by DOE Order 435.1 and is periodically reviewed and updated. The Area G Performance Assessment and Composite Analysis will guide decisions regarding operational procedures and waste disposal. This SWEIS considers impacts from the use of unlined pits as its No Action Alternative baseline; this impact analysis thereby bounds possible actions with lesser environmental consequences, such as those that may result from use of alternate pit construction methods and operational techniques. Refer to Sections 2.2, National Environmental Policy Act (NEPA) Process, and 2.7, Waste Management, of this CRD for more information related to this comment.

**317-138** While the impacts of transporting LANL waste to WIPP are included in the LANL SWEIS, the impacts of WIPP operations are not. The impacts of operations at WIPP are analyzed in a separate EIS, *The Waste Isolation*

317-144

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

Exhibits  
In support of CCNS and EVEMG  
comments regarding  
the draft LANL SWEIS

**Exhibit 1:** Gilkeson, Bob. "The Complex Geologic Setting Beneath LANL Requires the Use of Drilling Methods that Mask Detection of Most Radionuclide and Chemical Contaminants in Groundwater."

**Exhibit 2:** Gilkeson, Bob. "Deficiencies in the Draft LANL SWEIS for the Water Quality Data Produced From the LANL Monitoring Wells."

**Exhibit 3:** Gilkeson, Bob. "Failure of Draft LANL SWEIS to Address the Environmental Impact From the Hexavalent Chromium Plume in the Regional Aquifer."

**Exhibit 4:** Gilkeson, Bob. "Failure of the Draft LANL SWEIS to Address Environmental Impact Because of Groundwater Contamination From the RCRA Regulated Disposal Sites at Technical Area 54."

**Exhibit 5:** George Rice, Remediation of MDAs

**Exhibit 6: Multi Media Compact Discs**

6.1 *Where do the Children Play?*

6.2 CCNS and EVEMG Comment Images and source list

**Exhibit 7:** Email, Elizabeth Withers to Joni Arends, September 19, 2006

**Exhibit 8: Census Articles**

**8.1** Cotreras, Russell. "N.M. 40<sup>th</sup> in Nation in High School Grads." *Albuquerque Journal* July 3, 2004.

**8.2** Garcia, Patricia. "State's Social Health Poor, Study Says." *Albuquerque Journal* November 19, 2003.

**8.3** Burford, Katie. "More Live in Poverty, Group Says." *Albuquerque Journal* July 9, 2003.

**8.4** Armas, Genaro. "Thousands of Minority Kids Missed in Census." *Albuquerque Journal* December 7, 2002.

*Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement (DOE/EIS-0026-S2) (DOE 1997b), issued in 1997.*

**317-139** The "appropriately permitted solid waste landfill" referred to in the Draft SWEIS is a standard nonradiological landfill used by municipalities throughout the United States for solid sanitary waste disposal, including disposal of normal solid wastes from homes and construction debris. As such, there would be no special requirements to accept LANL nonradiological solid waste. While there may be some socioeconomic benefits from a few additional jobs created by the demand for additional capacity at existing solid waste landfills, no additional environmental or health impacts are anticipated. Impacts from transportation of solid wastes are evaluated in Chapter 5, Section 5.10, of the SWEIS. Psychological impacts are not within the scope of this EIS.

**317-140** As stated in Chapter 5, Section 5.13, of the SWEIS, cumulative impacts are evaluated in accordance with Council on Environmental Quality regulations, which state, "...the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions..." (40 CFR 1508.7). The cumulative transportation impacts presented in Section 5.13 reflect an estimate of the potential doses to workers and the public from transport of various radioactive materials from 1943 through 2047. The values presented are based on the state-of-art analyses referenced in the section and are considered good indications of what the impacts could be; thus, they are appropriate for the purpose intended.

**317-141** Whenever trucks and cars are on the road, regardless of their cargo, there is a possibility of a traffic accident that could result in vehicular damage and occupant injury or death. Even when drivers are trained in defensive driving and take great care, traffic accidents may still occur. The Department of Transportation sets the rules and regulations for hazardous material transport in commerce (49 CFR Parts 171 to 180). It also establishes the requirements for driving, parking, and selecting routes to transport the materials (49 CFR Parts 391 and 379). DOE and NNSA use contract carriers and shippers who meet these requirements to transport hazardous materials to and from facilities. DOE and NNSA add further terms and conditions, as specified in DOE Order 460.2A,

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

8.5 Armas, Genaro. "N.M Tops U.S. For Poverty in 2001." *Albuquerque Journal* September 25, 2002.

8.6 Dickinson, Joy. "N.M. Ranks 50<sup>th</sup> in Child Poverty Report." *Albuquerque Journal* May 24, 2002.

8.7 Propp, Wren. "Los Alamos Leads State In Median Income Level." *Albuquerque Journal* January 15, 2002.

8.8 Massey, Barry. "Report: N.M. Still Among Nation's Worst for Poverty," Associated Press, "Poverty Rate up for 4<sup>th</sup> Strait Year," *The New Mexican* August 8, 2005.

8.9 Armas, Genaro. "White Counties Found Big Income Gains." *The New Mexican* June 28, 2002.

8.10 Tollefson, Jeff. "Senator: Income Numbers Skew Aid Eligibility." *The New Mexican* March 15, 2002.

**Exhibit 9: Environmental Justice**

9.1 Associated Press. "Lawsuit accused LANL of discrimination against women, Hispanics." *The New Mexican* August 8, 2006

9.2 CCNS comments regarding the draft EIS for the National Enrichment Facility, January 7, 2005

9.3 Smith, Brice. "Soil Cleanup at Los Alamos National Laboratory." *Science For Democratic Action* April 2006.

9.4 State of New Mexico Environment Department Office of the Secretary. "Additional Fish Consumption Advisories Announced." January 2, 2006

9.5 State of New Mexico Office of the Governor. "Executive Order 2005-056 Environmental Justice Executive Order." November 18, 2005.

**Exhibit 10: Santa Fe City Council**

10.1 Journal Staff Reports. "SF Against LANL Plutonium Work." *Albuquerque Journal* August 29, 2006.

10.2 City of Santa Fe, New Mexico. "A Resolution Objecting to Proposed Expanded Nuclear Weapons Activities, Including Plutonium Pit Production [sic], at The Los

and the accompanying guidance and manual on transport requirements. These requirements make carriers and drivers more aware of the safety requirements for the equipment and containers involved in the transport, and thereby reduce the likelihood of potential transportation accidents.

**317-142** As discussed in the response to Comment no. 317-9, NNSA announced cancellation of its proposal to build a modern pit facility in its October 2006 Notice of Intent to prepare the *Complex Transformation SPEIS* (71 FR 61731). Consequently, discussion of a modern pit facility at LANL was deleted from the SWEIS. In January 2008, NNSA issued the Draft *Complex Transformation SPEIS* (73 FR 2023); it includes alternatives in which LANL would be the site of a new consolidated plutonium center or a new consolidated nuclear production complex. The impacts from the Draft *Complex Transformation SPEIS* are included in Cumulative Impacts section of the Final SWEIS.

**317-143** Text was added to the Summary, Section S.9.1, and Chapter 5, Sections 5.4.1.3 and 5.13, to discuss the potential increase in emissions due to increased commuter traffic to LANL. The environmental justice-related implications of all potential impacts are summarized in Sections 5.11 and 5.13.

**317-144** Comments were considered and as appropriate, the Final SWEIS was revised.



**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

Alamos National Laboratory and Directing the City Clerk to Inform Federal Authorities of the Objections.”

**Exhibit 11: Receipts**

11.1 CCNS and EVEMG draft LANL SWEIS Comments, 2006

11.2 Letters Regarding the Draft LANL SWEIS, 2006

11.3 Letters Opposing Construction and Operation of a Modern Pit Facility, 2003

**Exhibit 12: Mission**

12.1 NMSEES. “New Security, New Mission, New Mexico.”

12.2 *Don't Let New Mexico Go to the Pits* Placard.

12.3 Hill, Judyth. “Wage Peace.”

12.4 Political Cartoon, “One of the Lesser Known Elvis Movies.”

12.5 Glasgow. “Join the Fun?” *Albuquerque Journal* 1997.

**Exhibit 13: Maps**

13.1 Map Showing Proximity of Los Alamos National Laboratory and Sandia National Laboratories.

13.2 Areas of the Continental United States Crossed by More Than One Nuclear Cloud from Aboveground Detonations.

**Exhibit 14: International**

14.1 Burroughs, John and Makhijani, Arjun. “Undermining Nuclear Security Agreements.”

**Exhibit 15: Cerro Grande Fire**

15.1 Question Sheet: Cerro Grande Fire

15.2 Russ, Abel. “Comments on the 2002 Risk Assessment Corporation analysis of risks from the 2000 Cerro Grande fire at Los Alamos National Laboratory.”

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**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

**Exhibit 16: Water**

**16.1** Bearzi, James P. "Notice of Violation Los Alamos National Laboratory (LANL), EPA ID NM0890010515."

**16.2** LANL WW Shared Values Statement

**Exhibit 17: Health**

**17.1** Letter, EPA, Re: Public Comment Release- Public Health Assessment of LANL, July 27, 2005

**17.2** Bernd Franke, Catherine M. Richards, M.S., Steve Wing, Ph.D., David Richardson Ph.D., and Concerned Citizens for Nuclear Safety. "New Mexico's Right to Know: The Impacts of LANL Operations on Public Health and Environment."

**Attachment 1: Figures for Exhibits 1-4**

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**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

Exhibit 1. The Complex Geologic Setting Beneath LANL Requires the Use of Drilling Methods that Mask Detection of Most Radionuclide and Chemical Contaminants in Groundwater.

1.0. Introduction. The Department of Energy (DOE) National Nuclear Security Administration (NNSA), the Los Alamos National Laboratory (LANL), and the New Mexico Environment Department (NMED) all concur that the complex geologic setting beneath the Laboratory facility requires the installation of monitoring wells with fluid-assisted drilling methods. The general agreement of the need to use the fluid-assisted drilling methods for the new network of monitoring wells installed at LANL over the past ten years by the LANL Hydrogeologic Workplan Project<sup>1</sup> (HWP) is described below in Section 2.0. The LANL HWP describes the new monitoring wells as "characterization wells."

The drilling fluids that were used for the construction of the LANL characterization wells have well known properties described below in Section 3.0 to mask the detection of the radionuclide contaminants that are generated by the manufacture of plutonium pits, a component of nuclear weapons. In fact, there are many recent LANL reports<sup>2,3,4,5,6</sup> that acknowledge the inability of the new network of characterization wells to accurately detect many radionuclide contaminants including plutonium, neptunium, and americium. Therefore, instead of expanding the production of plutonium pits at LANL, under the National Environment Protection Act (NEPA), the Final LANL SWEIS is required to choose the *Reduced Operations Alternative* described in the Draft LANL SWEIS. In fact, the emerging presence of Plutonium-238, Plutonium-239, Plutonium-240, and Neptunium-237 contamination in the regional aquifer beneath LANL and in the drinking water supplied to citizens in Los Alamos County, Santa Fe, and the San Ildefonso Pueblo is a further requirement to choose the *Reduced Operations Alternative*. The presence of plutonium and neptunium contamination in the drinking water is shown by the data presented in the Draft LANL SWEIS and are described below in Section 4.0. of this Exhibit.

The new network of LANL characterization wells were drilled with organic and bentonite clay drilling fluids that have well-known properties that mask the detection of many LANL contaminants of concern in groundwater. In particular, the long-term effects of the drilling fluids prevent accurate knowledge of the contamination of groundwater by the strongly reactive radionuclide contaminants listed in Appendix F of the Draft LANL SWEIS including Americium-241, Cesium-137, Cobalt-60, Plutonium-238, Plutonium-239, Plutonium-240, and Radium-226. The other radionuclides listed in Appendix F that the drilling fluids may mask the presence of in groundwater include Neptunium-237, Strontium-90, Uranium-234, Uranium-235, and Uranium-238.

In addition, the drilling fluids have strong properties to mask the detection of many of the chemical contaminants generated by LANL operations including solvents, semi-volatile organic compounds, high explosives, and trace metals including hexavalent chromium. A large poorly characterized plume of hexavalent chromium (the contaminant in the movie "*Erin Brockovich*") is in the regional aquifer beneath Mortandad and Sandia Canyons. The measured hexavalent chromium levels<sup>7</sup> in the plume are greater than 400 ug/L, a level 8 times higher than the NMED Drinking Water Standard.

The drilling fluids that were used for the LANL characterization wells are one of the factors responsible for the poor knowledge by DOE/NNSA and LANL for the dimensions

CCNS and EVEMG Comments about draft LANL SWEIS 9/20/06 Exhibit 1 - 1 -

317-145

317-146

317-145  
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317-147

- 317-145** Some of the groundwater data, particularly data associated with certain multi-screen Hydrogeologic Work Plan characterization wells constructed after 1999, are believed to need reassessment due to potential residual drilling fluid effects. The drilling fluid effects are quantitatively assessed in the Well-Screen Analysis Report (LANL 2005c). As described in this report, more than half (52 percent) of the well screens evaluated produce water quality samples that are not significantly impacted by residual drilling fluids. For those well screens that have been impacted by residual drilling fluids, LANL staff has initiated a program to rehabilitate the R-Wells that may be producing suspect groundwater monitoring results. This program is described in the *Workplan for R-Well Rehabilitation and Replacement* (LANL 2006e). As well quality issues are clarified and resolved through additional sampling, well rehabilitation, or well replacement, the set of groundwater data will increase in size and improve in quality to support ongoing monitoring, investigations, and decisionmaking. The monitoring program is still in the initial characterization phase, as reported in the *Interim Facility-Wide Groundwater Monitoring Plan* (LANL 2006d). As periodic watershed monitoring continues, LANL staff will continue its phased approach to determining which wells are needed and in what locations to satisfy long-term compliance monitoring needs. The process described above is established by and in compliance with the Consent Order.
- 317-146** Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding groundwater contamination and groundwater monitoring.
- 317-147** Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding chromium contamination and groundwater monitoring.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

of the plume of Hexavalent Chromium. The danger of the Hexavalent Chromium plume to the drinking water wells for Los Alamos County, for Santa Fe in the Buckman well field located near the Laboratory, and to the San Ildefonso Pueblo are described in Exhibit 3.

A recent LANL Report, the "Well Screen Analysis Report"<sup>2</sup> (WSAR) concludes that approximately 50% of the LANL characterization wells do not produce reliable and representative groundwater samples. Exhibit 2 is a comparison of the findings in the WSAR to Appendix F of the Draft LANL SWEIS to show that the majority of the LANL characterization wells cited in Appendix F were identified by the WSAR as wells that do not produce reliable and representative water samples because of the effects of drilling fluids on the chemistry of water produced from the wells. The reasons why the drilling fluids hide the presence of contaminants in the water samples produced from most of the LANL characterization wells are described below in Section 3.0.

In Section 3.0, many LANL reports, reports by regulators, and the technical literature document that the fluid-assisted drilling methods prevent the LANL characterization wells from accurately detecting the radionuclide contaminants that are generated by the production of plutonium pits at the Laboratory facility. In addition, the reports document that the LANL monitoring wells do not produce the representative groundwater samples that are required by the U.S. Environmental Protection Agency (EPA) Resource Conservation and Recovery Act (RCRA).<sup>3</sup> LANL is regulated under RCRA.

The ability to accurately monitor the groundwater contamination from all of the Laboratory operations is a fundamental requirement of the regulations of NEPA, RCRA, NMED, and DOE Orders. The demonstrated inability to monitor for the radionuclide and chemical contamination in the groundwater resource beneath LANL requires that the present production of plutonium pits at LANL be stopped.

The urgent need to stop the pit production is because the data in Appendix F of the Draft LANL SWEIS show the widespread presence of plutonium and neptunium contamination in the regional aquifer beneath LANL. Recent research<sup>4</sup> has established that the current EPA Drinking Water Standard of 15pCi/L for alpha emitting radionuclides such as plutonium and neptunium is based on decades old, obsolete science that is not protective of the danger of the alpha emitting radionuclides to public health. Accordingly, the State of Colorado<sup>5</sup> has enforced a Drinking Water Standard that plutonium levels shall not exceed 0.15 pCi/L. The data in Appendix F show that plutonium contamination is present in one of the LANL characterization wells at a level of 0.601 pCi/L and that the mean level of plutonium contamination in the new LANL characterization wells is at 0.125 pCi/L. Of course, because of the drilling additives, the water produced from the LANL characterization wells is not reliable for accurate knowledge of the levels of plutonium and the other alpha-emitting radioisotopes in the groundwater.

The alarming fact is that Appendix F of the Draft LANL SWEIS shows that the plutonium and neptunium contamination are present in the drinking water produced from the Los Alamos County Supply Wells and from the Santa Fe Supply Wells in the Buckman well field. The plutonium contamination in the Los Alamos wells is 4 times higher than the level in the Santa Fe wells as expected because of the closer location of the Los Alamos wells to LANL operations. Instead of expanding the production of plutonium pits at LANL, under NEPA the Final LANL SWEIS is required to choose the Reduced Operations Alternative described in the Draft LANL SWEIS.

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317-145  
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317-148

317-149

317-146  
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317-148 Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding well construction and groundwater monitoring.

317-149 Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding well construction, groundwater contamination, and more restrictive standards for neptunium. In addition, Appendix F was revised to distinguish between statistical analysis of monitoring data for this SWEIS and detection of contaminants in groundwater.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
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In fact, the knowledge of the contamination of groundwater by Laboratory operations that has been gained over the past ten years requires a formal reconsideration of many projects that would go forward under the Reduced Operations Alternative because they were previously approved by completed NEPA analyses that were not aware of the extent of groundwater contamination by LANL operations.

317-150

Furthermore, the Draft LANL SWEIS documents the great uncertainty in the degree of contamination of the groundwater resources beneath the Laboratory and the great uncertainty for the physical properties of the regional aquifer beneath LANL that control flow paths and travel times of contaminants to existing drinking water supply wells:

- "Data concerning the spatial distribution of anthropogenic [LANL] contaminants in the regional aquifer has been inconclusive because of the exceptionally thick and complex vadose zone which makes it impossible to define the location and timing of contaminant entry to the regional aquifer" [page 658, Keating et al., 2005<sup>15</sup>].
- "Travel times through the regional aquifer are poorly understood because of the lack of tracer tests and *in situ* measurements of effective porosity" [page 658, Keating et al., 2005<sup>15</sup>].

317-151

The poor understanding of contaminant pathways and travel times are issues that also requires the Final LANL SWEIS to choose the Reduced Operations Alternative.

In Section 2.0 of this exhibit, we have included excerpts from the DOE IG Report, the EPA National Risk Management Research Laboratory Report, the technical literature, and even LANL reports as irrefutable evidence that the LANL characterization wells impacted by the organic and bentonite clay drilling fluids do not produce representative water samples for many LANL contaminants of concern and especially the strongly sorbing radionuclide contaminants that would be produced by Expanded Operations Alternative to quadruple the production of plutonium pits and construct and operate a Modern Pit Facility, capable of producing 450 plutonium pits per year.

The contamination in the regional aquifer that was discovered by the new network of characterization/monitoring wells installed for the LANL HWP include:

- Neptunium-237 – the data presented in Appendix F of the Draft LANL SWEIS show neptunium contamination to be present in the drinking water of Los Alamos County and Santa Fe (see section 4.0 below).
- Plutonium-239 and Plutonium-240 – the widespread plutonium contamination in the regional aquifer is shown by the data presented in Appendix F of the Draft LANL SWEIS (see section 4.0 below).
- Hexavalent chromium plume beneath Mortandad and Sandia Canyons in LANL characterization wells R-28, R-15, and R-11 (see Exhibit 3).
- Perchlorate contamination that has shut down the Los Alamos County Drinking Water Supply Well Otowi-1.
- High-explosives and solvent contamination detected in characterization well R-25.
- Radionuclide and chemical contaminants in the regional aquifer beneath Area G, the Laboratory's active facility for the disposal of low-level radioactive waste (see Exhibit 4).

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**317-150** NNSA does not concur with the commentor's assertion that previous decisions on projects should be reconsidered; however, it should be noted that the environmental analyses of the alternatives for continued operation of LANL that are evaluated in the SWEIS consider both information on groundwater contamination that has been gathered in the past 10 years and the effect of this information on current operations. Contamination affecting groundwater results from past practices that would not meet today's regulations and standards for operating. Contaminated sites and associated groundwater contamination are being addressed through LANL's remediation program, which includes actions to comply with the Consent Order.

**317-151** NNSA notes the commentor's support for the Reduced Operations Alternative. The well monitoring program that NNSA is required to perform under the Consent Order, along with other programs as discussed in the response to Comment no. 317-91, will provide information that will decrease uncertainties about spatial distributions of contaminants and travel times. Decisions about environmental restoration will be made in accordance with established regulatory processes, including those of the State of New Mexico for the Consent Order. It is the intent of the SWEIS to provide environmental impact information for use in the decisionmaking process, including determination of potential remediation action options.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
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2.0. Statements by DOE/NNSA and LANL of the need to use fluid-assisted drilling methods to install monitoring wells beneath the Laboratory and the surrounding region

- Excerpts from LANL "Well Screen Analysis Report" (WSAR):

"Drilling and construction of monitoring wells within perched intermediate zones at depths greater than 100 ft or within the regional aquifer require the use of drilling fluids to ensure borehole stability and lubricity. Drilling fluids perform functions that include cleaning cuttings off of the bit and the bottom of the borehole, transporting cuttings to the surface, providing borehole stability, cooling the bit, and lubricating the drill string. Rotary drilling to these depths is not possible without the use of drilling fluids, without incurring substantial risk to the successful completion of the boreholes and installation of the wells." [page 2, WSAR]

"The earliest wells were drilled using air-rotary drilling methods with casing advance and the minimal use of fluids other than air. Because of significant problems associated with stuck casing, unstable boreholes, and lost circulation, small amounts of drilling fluids were used to improve lubricity, borehole stabilization, and cuttings circulation. Continuing drilling problems made total reliance on air-rotary drilling with casing advance impracticable for meeting drilling objectives. It became apparent that the depth of the wells and the difficult drilling environment, including substantial heterogeneity in physical rock properties, required that additional drilling techniques be employed in order to penetrate and respond to the complex hydrogeologic conditions that characterize the Pajarito Plateau." [page 8, WSAR]

"Organic fluids, primarily EZ-MUD® and QUIK-FOAM®, were used in all wells. In addition, sodium-bentonite drilling mud was used in twelve well-screen intervals. A variety of other materials were also added to many of the wells (Table B-2)." [page 8, WSAR]

- LANL Comments on EPA draft report "Impacts of Well Construction Practices" September 30, 2005

"Our attempts at drilling dry at LANL resulted in a failure rate of 65%. That is, in 65% of the well locations where this technique was employed, the drill pipe became stuck, requiring the abandonment of the borehole and the construction of a new hole at significant cost/time."

- Excerpt from LANL "Workplan for R-well Rehabilitation and Replacement"<sup>3</sup> (WRRR):

"For the wells to reach the regional aquifer in some wells (e.g., in the Santa Fe Group), fluids and additives were used during drilling and well installation to enable the advancement of the drill casing or drill bit and to prevent the collapse of open-borehole intervals during the collection of borehole geophysical data. The hydrogeologic complexity and varying degrees of competence of the stratigraphic units beneath the Laboratory also dictated the use of fluids for penetration. Bentonite drilling muds were used at nine screens in four of the wells that are shown in this workplan as requiring rehabilitation or replacement. Organic fluids, such as EZ-MUD and QUIKFOAM, were used in all of the wells. If not completely removed by subsequent development, bentonite can serve as both a source of ions to groundwater as well as a sink for sorbing cations and organic species. Similarly, residual organic drilling fluids left in situ provide nutrients for

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microorganisms, a situation that leads to reducing conditions that can dissolve naturally occurring metal oxides and hydroxides, including those of iron and manganese, thereby releasing any coprecipitated or sorbed metals. At the same time, organic fluids reduce anions such as nitrate to nitrogen gas and sulfate to sulfide. Reducing conditions also may enhance the degradation rate of some organic species in the vicinity of the screen. The combined effects of these chemical reactions create conditions leading to unrepresentative groundwater quality and the inability to determine the presence or absence of contaminants in the groundwater with confidence." [page 3, WRRR]

- LANL Description of the failure of the Air Rotary Casing Advance Drilling Method to Install Monitoring Wells in Meetings with the Public. An example of the description of the failure of the casing advance drilling method to install monitoring wells beneath LANL that was common in LANL meetings with the public is the following excerpt on page 14 of the minutes of the October 29-31, 2002 Quarterly Public Meeting of the LANL Hydrogeologic Characterization Program:

"Drilling Techniques Issue:

- Casing advance is a slow, expensive and risky drilling technique.
  - Wells such as R-25 and R-8 are examples of how costly casing advance can be.
- Drilling Techniques Issue Resolution:
- Maintaining borehole stability with fluids (stiff foam and bentonite mud) has been added as a drilling option.
  - Drilling the boreholes goes much faster using fluids."

- Meeting Notes of the July 13, 2004 Annual Meeting of LANL Groundwater Protection Program. Excerpt of discussion on page 3.

- Question from meeting attendant: "Is the plan to drill the boreholes dry?"

- Reply by Tom Whitacre (DOE/NNSA): "The plan is to drill dry. The problem with drilling dry is that it creates dust and we have to add water to control the dust. Also, when we get into the basalt we have to add foam to fill in the cracks in order to get returns."

- Question from meeting attendant: "What are the DQOs for chemistry data?"

- Reply by Mr. Whitacre: "Don't believe you can drill completely dry to these depths. Casing advance still needs fluid for lubricity and there is lots of stuck casing from using casing advance."

- Question from meeting attendant: "is it a question of time – if you drilled slower could you drill dry?"

- Reply by Mr. Whitacre: "No, if you try to drill completely dry, you will get stuck. First we try adding water and if that doesn't work, then we add foam."

- Question from meeting attendant: "What is in the foam?"

- Reply by Mr. Whitacre: "Primarily isopropyl alcohol." [The isopropyl alcohol in the drilling foam is a fuel for well known microbial chemical processes that cause the LANL characterization wells to mask the presence of radionuclide contaminants is the water produced from the wells.]

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3.0. Properties of the Drilling Fluids that Hide the Presence of Many Contaminants From LANL Operations in the Water Samples Produced From the LANL Characterization Wells.

All of the LANL characterization wells were drilled with methods that invaded the screened intervals with drilling additives that caused the development of a new mineralogy on the strata that surround the well screens. Robert H. Gilkeson, a Registered Geologist, wrote a report<sup>11</sup> in 2004 to bring attention to the many problems that prevent the characterization wells from producing representative water samples. As a result of Mr. Gilkeson's report, reports were written by the DOE Office of the Inspector General<sup>12</sup> and by the Environmental Protection Agency<sup>13</sup> (EPA) that agreed with Mr. Gilkeson's position that the drilling additives would hide the presence of contamination in the water samples produced from the wells, and also would lower the permeability of the impacted strata that surround the well screens. Besides unreliable water quality data, the wells also are not reliable for knowledge of the in situ permeability of the aquifer strata. Knowledge of the permeability of the strata is important to calculate the speed of travel of contaminated groundwater to the drinking water wells and to the Rio Grande.

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Excerpts from the DOE IG Report and the EPA Reports are included in the summary below of articles in the technical literature with reasons for not installing monitoring wells in strata that are invaded with organic drilling additives or bentonite clay drilling muds.

**Article A-1:** The Office of the Inspector General of the Department of Energy wrote a report<sup>12</sup> about the bentonite clay drilling mud and organic drilling additives that were allowed to invade the screened intervals in monitoring wells installed at the Los Alamos National Laboratory – Report DOE/IG-0703, September 2005. Excerpt from the report:

- "Muds and other drilling fluids that remained in certain wells after construction created a chemical environment that could mask the presence of radionuclide contamination and compromise the reliability of groundwater contamination data."

**Article A-2:** The EPA National Risk Management Research Laboratory published a report<sup>13</sup> in February, 2006 about the adverse impact of drilling additives on the quality of data from the monitoring wells installed at the Los Alamos National Laboratory. Excerpts from the EPA Report:

"Most of the hydrogeologic characterization wells at LANL appear to have been installed using drilling additives that have the potential to impact the quality of data obtained from the affected well screens. Some of these impacts have been documented in various LANL publications."

"In general, it is likely that many of these screens may not produce representative samples for constituents that strongly sorb to clays or whose fate in the environment is sensitive to changes in redox conditions for some period of time. In particular, the constituents of concern that may be most affected by the residual drilling additives are radionuclides (e.g., isotopes of americium, cerium, plutonium, radium, strontium, uranium), many stable metal cations, and organic compounds that may be degraded in the impacted environment near the well screen."

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"Predictions of the time frames for the impacted intervals to return to natural conditions are uncertain. The time frame for this continuing impact to the representativeness of groundwater samples may be years to decades."

"It is also likely that the inability to fully remove the additives which were used during drilling has reduced the hydraulic conductivity of many of the impacted screened zones."

"With respect to screens where bentonite-based additives were used, it is possible that even trace amounts of residual bentonite that remain following development may render groundwater samples non-representative for highly sorbing constituents. This situation would be difficult to accurately characterize. Therefore, the quality of samples for constituents such as isotopes of americium, cerium, plutonium, and radium obtained from these screens will likely remain uncertain even after re-development."

"With respect to screened intervals where organic additives were used, .... it is unlikely that the new mineral phases formed during biodegradation of the organic materials would be fully removed during redevelopment."

**Article A-3:** The text book *Aqueous Environmental Chemistry* by Langmuir (1997) describes the preferential adsorption of the LANL radionuclide contaminants listed in Appendix F of the Draft LANL SWEIS by the bentonite clay drilling muds that were allowed to invade the screened intervals in the LANL characterization wells as follows:

"Adsorption (onto bentonite clay) of a dissolved ionic species is always part of an (ion) exchange reaction that involves a competing ionic species. The desorbing species creates the vacant site to be occupied by the adsorbing one. As the trace metal (or radioactive contaminant) level drops relative to that of a competing major ion, adsorption of the trace species is increasingly favored relative to competing major species."

**Article A-4:** The text book *Aquatic Chemistry* by Stumm and Morgan (1996) describes the preferential adsorption of trace contaminants by bentonite clay as follows:

"The sorption of alkaline and earth-alkaline cations (e.g., strontium-90) on expandable three-layer clays [e.g., bentonite clays] can usually be interpreted as stoichiometric exchange of interlayer ions (ion exchange). To understand binding of trace heavy metals [e.g., also the trace radioactive contaminants such as plutonium and americium] on clays, one needs to consider – in addition to ion exchange – the surface complex formation on end-standing functional OH groups. Three layer silicates (e.g., bentonite clays) contain on the crystal edges (broken bonds) end-standing OH groups which can interact with [remove from groundwater] metal ions [and most of the radionuclide contaminants listed in Appendix F of the Draft LANL SWEIS]."

**Article A-5:** The Los Alamos National Laboratory (LANL) established a team of experts known as the External Advisory Group (EAG) to review activities to install a network of monitoring wells beneath the Laboratory facility. The EAG Semi-Annual Report (EAG, Dec. 23, 1999) lists 17 disadvantages for installing monitoring wells in boreholes that were drilled with the mud-rotary method. The EAG report contains the following summary statements concerning use of the mud rotary drilling method:

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"The use of mud-rotary drilling techniques is largely inappropriate for the goal of the LANL Hydrogeologic Workplan. Drilling with mud carries the risk of adsorbing contaminants onto the bentonite that permeates into the pore space around the well screen and is not removed by well development. Should this occur, it could result in reduced concentrations or non-detects on contaminants that are actually present in the vicinity of the well."

"The artificial entrainment of bentonite clay drilling muds in the pore space around a monitoring well is clearly not desirable. This is because these materials can remove from solution the very constituents that need to be monitored by the well. This is a significant concern for LANL since radionuclides are known to be adsorbed by these clays. That the drilling mud, i.e., bentonite, penetrates into the aquifer strata is not disputed. It is reasonable to assume that fairly extensive intrusion of the bentonite into the aquifer strata can be expected."

"It is argued that well development, via high-flow pumping, using surge blocks, etc. is sufficient to remove blockage and create adequate flow through the well screen when a well has been drilled with mud. This is generally true. However, sufficient water flow is not the only consideration here. It is extremely unlikely that such well development techniques can remove the extruded bentonite sufficiently to assure that residual clay materials are not present in the pore space around the wells and serving as an adsorptive barrier to contaminant detection and quantification."

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"Unfortunately, if no contamination is detected then there is simply no way (without drilling another well by a different technique) to determine whether the contaminant is truly absent at this point or whether it is being adsorbed by residual drilling fluids. The EAG would therefore caution LANL about using mud drilling techniques for the installation of the deep regional monitoring wells. If bentonite clay drilling mud is to be used, it should be used sparingly (e.g., as a lubricant only) and it would be best to avoid it altogether when drilling zones where the well screens will be located." [Emphasis Added]

Organic drilling fluids were allowed to invade the screened intervals in all of the LANL characterization wells. The effects of the organic fluids to reduce the permeability of the aquifer strata that surround the screened intervals and the properties of the iron precipitates formed by microbially mediated chemical processes that result from the organic drilling fluids are well known in the technical literature as shown by the articles below.

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- Article A-6: *Handbook of Ground Water Development* by Roscoe Moss (1990).
- From page 211 of the Handbook:  
"Because iron and sulfur bacteria are ubiquitous, - care should be taken in drilling and casing and screen installation so as not to introduce gross organic contamination into the aquifer."
  - From page 371 of the Handbook:  
"Excessive growth of filamentous iron bacteria results in gelatinous slimes that may seriously reduce water yield from wells. This problem is more likely to occur in a well that is inactive or intermittently operated."

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**Article A.7:** "Aqueous Environmental Geochemistry", by Donald Langmuir, 1997 by Prentice-Hall, Inc., Upper Saddle River, New Jersey.

- From page 436:  
"Crystallization of hydrous ferric oxide (HFO) takes years in waters low in iron, but may occur in a few hours or days, in the presence of several mg/kg (mg/L) of dissolved iron."
- From page 462:  
"They (iron precipitates) are especially a problem in fouling of iron pipes in water supply systems and well screens. They can cause a loss of up to 90 % in the productivity of a well."
- From Page 538:  
"Among common minerals, the strongest sorbents for most actinide cations (e.g., cations of uranium, plutonium, americium) are the ferric oxyhydroxides and especially hydrous ferric oxide."

**Article A.8:** Excerpt from the LANL "Hydrogeologic Synthesis Report"<sup>16</sup> –

- "Adsorption occurs when dissolved species interact with surfaces of aquifer material coated with hydrous ferric oxide, manganese dioxide, clay minerals or other adsorbents. Hydrous ferric oxide has a specific surface area of 600 m<sup>2</sup>/gm -- Many metals and radionuclides including barium, chromium, nickel, uranium, strontium-90, americium-241, plutonium-238, and plutonium-239, -240 typically adsorb onto hydrous ferric oxide coated particles between pH values 5 and 8." [page 3-10, *Hydrogeologic Synthesis Report*]

The LANL water quality data<sup>7</sup> for the LANL characterization wells are evidence that the organic drilling fluids have caused the formation of coatings of ferric oxyhydroxides and hydrous ferric oxides on the strata that surround the well screens.

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**Article A-9:** The article by Gibb, J.P., and K.V.B. Jennings. 1987, "How Drilling Fluids and Grouting Materials Affect the integrity of Ground Water Samples from Monitoring Wells. *Ground Water monitoring Review* 7(1): 33. describes how drilling fluids and grouting materials affect the integrity of groundwater samples from monitoring wells. The article has the following discussion concerning the drilling of boreholes for monitoring wells with the fluid-assisted rotary drilling method using organic drilling fluids and/or bentonite clay muds:

- "Rotary drilling methods using bentonite or organic based drilling fluids present serious problems in the construction of monitoring wells. Wells constructed with these drilling methods are seldom capable of providing accurate hydrologic or chemical data for a wide variety of inorganic and organic constituents. -- The amount of drilling fluids lost into formations or deposits (aquifer strata) is directly proportional to their hydraulic conductivity."
- "In geologic environments where drilling fluids are a necessity, inorganic clay muds are preferred over those containing organic materials. The introduction of substrates for microbial activity can seriously impact the integrity of water samples."
- "In addition to the migration of drilling fluids into the subsurface materials, monitoring wells normally are constructed in the borehole while it is still filled with

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the drilling fluid. The casing, screen, and gravel pack materials are placed directly into the drilling fluid. The gravel pack materials often become suspended in the drilling fluid making it extremely difficult to determine where the gravel pack materials terminate and the overlying well seal begins. It is almost impossible to document the "as built condition" of monitoring wells constructed using rotary drilling methods and drilling fluids.

- "Breaking down the mud cake and removal of all drilling fluids introduced during the drilling and construction process is extremely difficult. Groundwater velocities required to remove drilling fluids, and the colloidal size particles associated with them from the aquifer materials usually cannot be created during development of small diameter monitoring wells."

- "The potential consequences of using drilling fluids (fluids and muds) should be obvious. The use of drilling fluids and muds should be curtailed whenever possible. Migration of bentonite or even "clean water" into the aquifer materials disturbs the subsurface environment and creates chemical and biological conditions that have the potential for altering water quality in the immediate vicinity of the well and the area impregnated. Due to the limited area of influence experienced during the development of monitoring wells, drilling fluids seldom are removed to the extent that they will not cause "well trauma". ["well trauma" means the monitoring well provides groundwater samples with a chemistry that is not representative of the aquifer. Water samples over time from the majority of the LANL characterization wells exhibit "well trauma".]

- "Experience has shown that drilling muds not effectively removed from the well bore opposite the screen and gravel pack will interfere with the chemical and biological quality of samples from those wells."

*The above excerpts from the DOE IG Report, the EPA Report, the technical literature, and even LANL reports are irrefutable evidence that the LANL characterization wells impacted by the organic and bentonite clay drilling fluids do not produce representative water samples for many LANL contaminants of concern and especially the strongly sorbing radionuclide contaminants that would be produced by expanded operations to manufacture plutonium pits.*

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4.0. The Emerging Presence of Plutonium and Neptunium Contamination in the Groundwater Resources of Los Alamos County and Santa Fe.

The data in Appendix F of the Draft LANL SWEIS bring attention to the emerging presence of Neptunium-237 and Plutonium-239 and Plutonium-240 in the regional aquifer because of the nuclear weapons research over the past sixty years at the Los Alamos National Laboratory. Plutonium and neptunium do not occur naturally in the groundwater. The presence of the contaminants is due to nuclear weapons research at LANL. Colorado<sup>16</sup> has set the maximum allowable level of Pu-239 and Pu-240 in drinking water at 0.15 pCi/L for the following reasons:

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**"Basis for Commission Decision** Since the previous basic standard was set, several changes have occurred: 1) a new methodology for assessing carcinogens has become the standard practice, 2) new data have resulted in periodic updates to the slope factors used in this methodology, and 3) a more refined Commission policy on appropriate levels of protection for carcinogens has been developed. This latter risk-

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based policy also parallels a national trend towards risk-based approach to environmental cleanup standards."

"The 15 pCi/L dose-based approach was calculated using a "reference-man" and considered exposure during his working life. It was an approach designed to address questions related to occupational exposure. It did not consider sex, age and organ-specific factors over a lifetime. In contrast, the new slope factor methodology, used in EPA's 1989 Risk Assessment Guidance for Superfund Sites, is more complete, more applicable to a general population and has become the standard practice for calculating risk."

"The Commission adopted a basic standard of 0.15 pCi/L for plutonium and americium, calculated using a  $1 \times 10^{-6}$  risk level, based on residential use. This risk level is consistent with the Commission's policy for human health protection."

A recent article<sup>9</sup> by noted nuclear physicist Arjun Makhijani describes the new medical knowledge of the health impacts of the alpha-emitting radionuclides that are generated by nuclear weapons research activities at LANL that require changing the EPA Drinking Water Standard to 0.15 pCi/L:

"EPA should set a combined maximum contaminant level for alpha-emitting, long-lived transuranic radionuclides of 0.15 picocuries per liter. If only one of the radionuclides in question were present, then the limit for that radionuclide would be 0.15 picocuries per liter. The radionuclides included are: neptunium-237, plutonium-238, plutonium-239, plutonium-240, plutonium-242, americium-241, and americium-243. These changes should be made as part of the EPA's review of radionuclide standards in drinking water that is scheduled for 2006."

Section 3.0 describes the effects of the drilling additives to prevent the LANL characterization wells from producing water samples that are reliable for the detection of the alpha-emitting radionuclides generated by LANL nuclear weapons research and by the manufacture of plutonium pits at the Laboratory facility. Another important reason that DOE/NNSA and LANL do not have the required knowledge of the presence of the plutonium and neptunium radionuclides in the regional aquifer is that the necessary research on the role of colloids and nanoparticles to facilitate transport of the radionuclides has not been performed as shown by the Draft LANL SWEIS:

"The role of colloids in transport of contaminants at LANL is largely unknown and uninvestigated." [page E-27 of the Draft LANL SWEIS]

The failure of DOE/NNSA and LANL to have the required knowledge of the role of nanoparticles and colloids for contaminating the groundwater resources beneath and away from the Laboratory facility with the transuranic radionuclides is another reason that the Final LANL SWEIS is required, under NEPA, to select the Reduced Operations Alternative.

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**317-152** See Section 2.5, Water Resources, of this CRD for a discussion of programs that are expected to decrease the uncertainty of the data. The staffs at LANL and other DOE Laboratories have performed substantial research on colloidal transport of radionuclides through volcanic tuffs, including investigations following the Cerro Grande Fire and at TA-54. This research also includes colloid studies in analogous geologic materials and similar flow regimes at the Nevada Test Site. Decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the State of New Mexico for the Consent Order. It is the intent of the SWEIS to provide environmental impact information for use in the decisionmaking process, including determination of potential remediation action options.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
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4.1. Plutonium-238 and Plutonium-239 contamination in the regional aquifer is proven by the data presented in Appendix F of the Draft SWEIS. The Draft LANL SWEIS presents the level of Plutonium-238 and Plutonium-239 measured in groundwater in Appendix F. The figure below is from Appendix F.

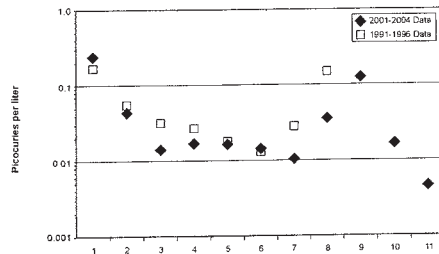


Figure F- 4 Plutonium-239 and Plutonium-240 Measured Mean Concentration Value in Groundwater [From Draft LANL SWEIS page F-4]

On Figure F- 4, the highest mean value for Pu-239 and Pu-240 are at location 1 and are in the groundwater samples from the monitoring wells installed in the alluvial sediments along the floors of the canyons that received plutonium laden waste waters from over 60 years of nuclear weapons research. The tables in Appendix F show that the maximum level of dissolved Pu-239 and Pu-240 in the shallow groundwater along the canyon bottoms is 1.78 pCi/L for a location in Mortandad Canyon. On Figure F-4 locations 9, 10, and 11 display the mean values for Pu-239 and Pu-240 in the groundwater samples from the LANL characterization wells installed in the regional aquifer, the Los Alamos County supply wells, and the City of Santa Fe wells in the Buckman well field as follows:

	Concentration of Plutonium-239 and Plutonium-240	
	mean value (pCi/L)	maximum value (pCi/L)
LANL Wells in Alluvial Sediments	0.478	1.78 (Mortandad Canyon)
LANL Characterization Wells	0.125	0.601 (Mortandad Canyon)
Los Alamos County Supply Wells	0.0167	0.0308
Santa Fe Buckman Well Field	0.00455	0.00910

Note on the above table that the highest mean values and maximum values of Pu-239 and Pu-240 are in the LANL characterization wells, followed by lower levels in the Los Alamos County supply wells, and even lower levels in the Buckman well field. This is the expected trend for contamination of the groundwater with plutonium from the Laboratory operations as the characterization wells are the closest to the source of the contamination and the wells in the Buckman well field are the most distant.

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The actual concentration of plutonium contamination in the regional aquifer at the location of the LANL characterization wells is not known because of the impact of the drilling additives and other factors to reduce the level of plutonium in the unreliable and nonrepresentative water samples produced from the characterization wells.

Nevertheless, the mean value of 0.125 pCi/L with a maximum value of 0.601 pCi/L measured in the regional aquifer in the water produced from a LANL characterization well at a location below Mortandad Canyon (note that Appendix F in the Draft LANL SWEIS shows the highest plutonium contamination at 1.78 pCi/L in the shallow groundwater in the alluvial sediments in Mortandad Canyon) are alarming because of recent reports<sup>9,10</sup> that recognize the need to set the drinking water standard for the combined concentration of Plutonium-239 and Plutonium-240 at 0.15 pCi/L.

In addition, the Draft LANL SWEIS acknowledges that the plutonium contamination in settings such as Mortandad Canyon may travel through the vadose zone to contaminate the regional aquifer:

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"Finally, local recharge does occur along canyons that cross the LANL property – this recharge has important water quality implication in locations where contaminant effluent discharges have been released" [page 668, Keating et al., 2005].

**4.2. Neptunium-237 contamination in the drinking water of Los Alamos County and Santa Fe is proven by the data presented in Appendix F of the Draft LANL SWEIS**

Neptunium-237 is an alpha-emitting radionuclide that does not occur naturally. The contaminant was produced by the nuclear weapons research at LANL. The emerging presence of Neptunium-237 in the regional aquifer beneath LANL is alarming because the radionuclide is much more mobile in groundwater<sup>14</sup> than the plutonium isotopes and is also much more of a danger to public health.<sup>9</sup> Of course, the actual concentration of Neptunium-237 contamination in the regional aquifer at the location of the LANL characterization wells is not known because of the impact of the drilling additives and other factors to reduce the level of the radionuclide contaminant in the unreliable and nonrepresentative water samples<sup>2</sup> produced from the monitoring wells.

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The table below displays the data in Appendix F in the Draft LANL SWEIS for the mean and maximum values for Neptunium-237 in the groundwater samples from the LANL characterization wells installed in the regional aquifer, the LANL Old Test Wells installed in the regional aquifer, the Los Alamos County supply wells, and the City of Santa Fe wells in the Buckman well field as follows:

	Concentration of Neptunium-237	
	mean value (pCi/L)	maximum value (pCi/L)
LANL Characterization Wells	5.4	30.1 (Sandia Canyon)
LANL Old Test Wells	14.9	21.2 (Mortandad Canyon)
Los Alamos County Supply Wells	10.6	15.6
Santa Fe Buckman Well Field	10.3	10.8

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The above table shows that the mean value of Neptunium-237 measured in the LANL characterization wells and old test wells is at the EPA maximum contaminant level (MCL) of 15 pCi/L that is allowed for drinking water. The maximum level measured in the set of LANL characterization wells in Appendix F of the Draft LANL SWEIS is double the EPA MCL.

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More alarming is the high level of Neptunium-237 in the drinking water produced from the supply wells for Los Alamos County and Santa Fe. Note that the maximum level measured in a Los Alamos County supply well exceeds the EPA MCL of 15 pCi/L and the recent research<sup>9</sup> and action by the Colorado Water Commission<sup>10</sup> establish the need for the New Mexico Environment Department to change the New Mexico Drinking Water Standard to 0.15 pCi/L. The mean value in the drinking water produced from the supply wells for Los Alamos County and for Santa Fe from the supply wells in the Buckman well field are above 10 pCi/L and far above the necessary drinking water standard of 0.15 pCi/L to protect public health.

**4.3. Neptunium-237 and Strontium-90 Contamination in Groundwater From the "Other Springs."**

Table F-14 in the Draft LANL SWEIS lists a very high concentration of Strontium-90 in groundwater that discharges from unidentified "other springs". The mean and maximum levels of Strontium-90 in Table F-14 are 45.6 and 115 pCi/L, respectively, compared to the EPA MCL for Strontium-90 in drinking water of 8 pCi/L. It is unconscionable that the Draft LANL SWEIS does not inform the reviewers of the number and the locations of the "other springs" that produce the very high levels of Strontium-90.

**317-12  
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In addition, Table F-14 in the Draft LANL SWEIS lists a mean value of 12.7 pCi/L for Neptunium-237 in groundwater samples collected from the "other springs". Unfortunately, the table does not list the maximum value for Neptunium-237 in the groundwater samples collected from the "other springs".

**4.4. Immediate Need for Accurate Knowledge of the LANL Contamination That is Present in Drinking Water and in groundwater discharging from the "other springs"**

A major deficiency in the Draft LANL SWEIS is the failure to bring attention to the widespread contamination of the groundwater resources in Los Alamos and Santa Fe Counties that has already occurred because of the 60 year history of nuclear weapons research and production at the Los Alamos National Laboratory. Indeed, the data in the Draft LANL SWEIS show the presence of Plutonium-239, Plutonium-240, Neptunium-237, and Strontium-90 in the water resources at levels that the Federal Law and experts recognize as a danger to public health. The above listed contaminants are not natural in the environment. Instead, they are unique to nuclear weapons research and manufacture of plutonium pits.

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There is an immediate need to sample all of the water supply wells of Los Alamos County and Santa Fe (in the Buckman well field) for a complete suite of LANL produced radionuclide and hazardous wastes on a quarterly schedule to validate the measured values of Neptunium-237, Plutonium-239, and Plutonium-240 that are listed in Appendix F of the Draft LANL SWEIS and to identify the impacted supply wells. In Appendix F of the Draft LANL SWEIS, the presence of Neptunium-237

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**317-153** Refer to Section 2.5, Water Resources, of this CRD for a response to comments regarding groundwater contamination.

**317-154** The data in Appendix F referred to by the commentor was developed for purposes of comparison to similar data in the 1999 SWEIS and for use in the SWEIS analyses. Detections of contaminants in the environment are reported in the annual LANL environmental surveillance reports. Appendix F has been modified to explain the purpose of the data and the difference between these data and those reported in the LANL environmental surveillance reports regarding detection of contaminants in the environment. The current suggesting sampling of these locations is accommodated through the LANL environmental surveillance program. Results of the sampling and analysis of springs and groundwater, as well as other environmental media, are reported in annual environmental surveillance reports ([www.lanl.gov/environment/all/esr.shtml](http://www.lanl.gov/environment/all/esr.shtml)). See Section 2.5, Water Resources, of this CRD and Appendix F of the SWEIS for additional information.



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contamination in the Santa Fe drinking water was based on only the analysis of 3 water samples from the Santa Fe Supply Wells in the Buckman well field. There is an immediate need to collect water samples from all of the wells for analysis of LANL contaminants, and to identify the necessary Corrective Action.

In Appendix F of the Draft LANL SWEIS, the presence of Neptunium-237 contamination in the Los Alamos County drinking water was based on the analysis of 13 water samples from the Los Alamos County Supply Wells. The Neptunium-237 contamination was detected in 4 of the water samples. However, the impacted wells are not identified in the Draft LANL SWEIS. There is an immediate need to collect water samples from all of the Los Alamos County Supply Wells for analysis of LANL contaminants and to address the needed Corrective Action.

The high levels of Strontium-90 and Neptunium-237 reported for the "other springs" requires the immediate collection of water samples for a complete suite of the radionuclide and hazardous waste analytes on a quarterly schedule. If the comprehensive study validates the high levels of Strontium-90 and possibly other LANL contaminants including Neptunium-237, then a Corrective Action is required to clean up the contaminated water.

**References.**

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Exhibit 2. Deficiencies in the Draft LANL SWEIS for the Water Quality Data Produced From the LANL Monitoring Wells

1.0. Introduction. During the past ten years, approximately 40 characterization wells were installed in the regional aquifer and in the perched zones of saturation beneath the Los Alamos National Laboratory (LANL). Exhibit 1 documents that the new monitoring wells were drilled with methods that cause the majority of the wells to produce water samples that are not reliable for detection of many of the radionuclide and hazardous contaminants that are generated by the present LANL nuclear weapons research operations. The purpose of this Exhibit is to show that DOE/NNSA and LANL have not installed the required network of monitoring wells at LANL to meet the monitoring requirements for expanded operations to manufacture plutonium pits, a major component of nuclear weapons.

This exhibit will show that the groundwater data presented in the Draft LANL SWEIS are from LANL monitoring wells that do not produce reliable and representative water samples for the detection of contaminants produced by operations to manufacture plutonium pits. LANL is regulated under the Resource Conservation and Recovery Act (RCRA). However, LANL does not have the groundwater monitoring program that is required under RCRA. The noncompliance with RCRA demonstrates noncompliance with the National Environment Protection Act (NEPA), and requires the Final LANL SWEIS to select the Reduced Operations Alternative that is described in the Draft LANL SWEIS.

The Draft LANL SWEIS gives the appearance of presenting the knowledge gained from the large number of new characterization wells. More than 30 of the wells are displayed on Figure E-1 in Appendix E of the Draft SWEIS and in Figure 1-1 of the attachment to this Exhibit. However, the references for Appendix F – “*Environmental Sample Data*” in the Draft LANL SWEIS reveal that the data in Appendix F are from only a small number of the new wells in the regional aquifer and in the perched zones of saturation. The references to Appendix F of the Draft LANL SWEIS show that the water quality data in Appendix F are from only the four LANL *Surveillance Reports* that present analytical data on water samples collected from only a small number of the new characterization wells during the years of 2001 to 2004. For the regional aquifer, the discrete wells that were sampled are as follows:

Year 2001 – no characterization wells were sampled  
 Year 2002 – Wells R-5, R-7, R-9, R-12, R-13, R-15, R-19, R-22, R-25  
 Year 2003 – Wells R-5, R-7, R-9, R-12, R-13, R-15, R-19, R-22, R-25  
 Year 2004 – Wells R-7, R-9, R-12, R-13, R-15, R-19, R-22, R-25 (Wells POI-4 and LOIS(a)-1.1 in perched zones of saturation)

The nine R-series wells in the above list represent only approximately 25% of the total number of characterization wells installed in the regional aquifer beneath LANL. However, a recent LANL Report, the “*Well Screen Analysis Report*” (WSAR) identified that the majority of the wells in the above list do not produce reliable and representative water samples. Furthermore, because of a limited scope, the WSAR did not identify that practically all of the LANL monitoring wells in the Draft LANL SWEIS do not produce reliable and representative water samples and are not in compliance with RCRA.

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**317-155** LANL staff is still in the initial characterization phase of the monitoring program, as reported in the *Interim Facility-Wide Groundwater Monitoring Plan* (LANL 2006d). As periodic watershed monitoring continues, LANL staff will continue its phased approach to determining which wells are needed and in what locations to satisfy long-term compliance monitoring needs. The process described above is established by, and in compliance with, the Consent Order. Appendix F summarizes the monitoring data provided in the annual site environmental reports, including monitoring data collected from the alluvial groundwater, perched groundwater, regional aquifer springs, other springs, regional aquifer hydrogeologic characterization wells, test wells, and water supply wells. Chapter 4, Section 4.3, and Appendix F in the Final SWEIS were revised to include results from the *2005 Annual Site Environmental Report* (LANL 2006g), *Well Screen Analysis Report* (LANL 2005c), and *Workplan for R-Well Rehabilitation and Replacement* (LANL 2006e), as well as additional discussion and interpretation of the monitoring results. Refer to the annual site environmental reports for detailed information on the monitoring results.

As discussed in the response to Comment no. 317-145, more than half (52 percent) of the well screens evaluated in the Well Screen Analysis Report (LANL 2005c) produce water quality samples that are not significantly impacted by residual drilling fluids. For those well screens that have been impacted by residual drilling fluids, LANL staff initiated a program to better evaluate the wells and to rehabilitate the R-Well screens that may be producing suspect groundwater monitoring results. This program is described in the *Workplan for R-Well Rehabilitation and Replacement* (LANL 2006e). Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding well construction, groundwater contamination, and groundwater monitoring.

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2.0. Nonrepresentative water quality from the LANL characterization wells. All of the LANL characterization wells were drilled with fluid-assisted drilling methods using drilling fluids with well known properties to mask the detection of many LANL contaminants in the water produced from the wells. The effects of the drilling fluids to hide groundwater contamination are described in Exhibit 1. Because of concerns raised in reports by Registered Geologist Robert H. Gilkeson<sup>1</sup>, the DOE Office of the Inspector General<sup>2</sup>, and by the Environmental Protection Agency<sup>3</sup>, the DOE/NNSA required LANL to prepare a report that identified the well screens that did not produce representative water samples because of the drilling additives and because of other factors. This report, the LANL *Well Screen Analysis Report*<sup>4</sup> (WSAR) identified that approximately 50% of the well screens do not produce representative water samples because of the drilling additives.

An important deficiency is that the Draft LANL SWEIS does not acknowledge the LANL reports, the DOE report, and the EPA reports that describe the problems with the new network of characterization wells to detect radionuclide contaminants produced from the current LANL nuclear weapons research operations, and produced from expanded operations to manufacture plutonium pits.

The findings in the LANL WSAR were from an automated statistical analysis of only the most recent water sample collected from each screened interval. Figure 1-2 (from the WSAR) presents the results of the statistical study of the water quality data for a single sampling event of 64 discrete screened intervals. Figure 1-2 presents grades for each discrete screen from Poor to Very Good. RCRA does not recognize the scheme used in the WSAR to assign grades to the water quality data. Furthermore, the WSAR made the arbitrary decision that screens with grades of Good and Very Good produced representative water samples and screens with grades of Fair and Poor did not. A LANL report<sup>5</sup> summarizes the grading scheme in the WSAR as follows:

*"The WSAR results indicated that for 64 screens analyzed, 16 of the wells had [31] screens that were in Fair or Poor condition and could not be relied upon to provide representative data or to detect contaminants in groundwater."*

The limited statistical analysis in the WSAR did not identify all of the wells that could not be relied upon to provide representative data or to detect contaminants in groundwater. Two EPA reports<sup>6</sup> describe the problems with the LANL characterization wells and the deficiencies in the WSAR. A review of readily available data in the large set of LANL well completion reports shows that when all factors are considered, the total number of screened intervals in the LANL characterization wells that do not produce representative groundwater samples under RCRA is possibly greater than 90%.

The existing monitoring well network at LANL does not meet the regulatory requirements of NEPA, RCRA, the NMED LANL Consent Order, and DOE Orders 435.1 and 450.1. Therefore, under NEPA, the Final LANL SWEIS must institute the *"Reduced Operations Alternative."*

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317-156 Refer to Section 2.5, Water Resources, of this CRD for a response to comments regarding well construction.

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2.1. Water quality data in the LANL Draft SWEIS for water samples collected from LANL characterization wells installed in the regional aquifer.

The table below describes the capability of each screened interval in Appendix F of the Draft LANL SWEIS Report to produce reliable water samples.

Table. 1. Regional Aquifer Characterization Wells in Appendix F of the SWEIS

Well/ Screen no.	WSAR Grade	Screen Length <sup>5A</sup>	Comment
R-5, #3	Very Good	60 ft	<sup>b</sup> Westbay, <sup>c</sup> screen crosses water table
R-7 #3	Poor	67 ft	Westbay, screen crosses water table
R-9	Very Good	60 ft	screen crosses water table
R-12 #3	Poor	63 ft	Westbay, screen crosses water table
R-13	Good	60 ft	screen too deep below water table
R-15	Very Good	60 ft	well is spreading contamination
R-19 #3	Fair	90 ft	Westbay, screen crosses water table
R-19 #4	Good	65 ft	Westbay, screen too deep
R-19 #5	Poor	50 ft	Westbay, screen too deep
R-19 #6	Poor	105 ft	Westbay, screen too deep
R-19 #7	Fair	20 ft	Westbay, screen too deep
R-22 #1	Poor	60 ft	critical location at Area G, new well needed
R-22 #2	Very Good	70 ft	strata with very low permeability do not meet RCRA requirements, Westbay
R-22 #3	Good	40 ft	strata contaminated with bentonite clay graft
R-22 #4	Poor	20 ft	Westbay, screen too deep
R-22 #5	Poor	40 ft	Westbay, screen too deep
R-25 #4	Very Good	11 ft	cross-contamination, Westbay
R-25 #5	Fair	17 ft	cross-contamination, Westbay
R-25 #6	Very Good	17 ft	cross-contamination, Westbay
R-25 #7	Very Good	18 ft	cross-contamination, Westbay
R-25 #8	Good	19 ft	cross-contamination, Westbay

<sup>A</sup> EPA and NMED recommend a maximum screen length of 10 feet. See Section 6.0.

<sup>B</sup> Westbay. Stagnant water samples are collected with a Westbay<sup>R</sup> No-Purge water sampling system. See the discussion of the Westbay sampling of well R-5 #3 on the next page.

<sup>C</sup> Screens installed across water table create a pathway for atmospheric pressure changes to "pump" oxygen into the groundwater and therefore, to change groundwater chemistry.

317-157

**317-157** Under normal aquifer conditions, the Westbay System allows sampling at an in-situ pressure without purging before a sample is collected. Groundwater samples collected using this system represent the saturated zone within a given interval of the hydrogeologic system and, discounting drilling artifacts, potentially represent the aquifer in which the well is installed. As described in the *Workplan for R-Well Rehabilitation and Replacement* (LANL 2006e), no acceptable sampling system currently exists as an alternative to Westbay for situations where more than two screens per well are needed for the monitoring system. Therefore, for many wells, LANL will opt to convert wells with three or more screens to single- or dual-screen completions by plugging and abandoning some of the deeper screens, taking into consideration the technical needs for monitoring and characterization. This option will allow purging of water from the well before sampling.

Well screen depths are selected in consultation with the New Mexico Environment Department. In some cases, well screens are purposefully set in low permeability strata to collect information on the hydrologic properties of the confining layers. In addition, water levels can change over time, resulting in well screens that are now partially above the water table. As discussed in the response to Comment no. 317-145, more than half (52 percent) of the well screens evaluated in the *Well Screen Analysis Report* (LANL 2005c) produce water quality samples that are not significantly impacted by residual drilling fluids. For those well screens that have been impacted by residual drilling fluids, LANL has initiated a program to better evaluate the wells and to rehabilitate the R-Wells that may be producing suspect groundwater monitoring results. This program is described in the *Workplan for R-Well Rehabilitation and Replacement* (LANL 2006e).

LANL is still in the initial characterization phase of the monitoring program, as reported in the *Interim Facility-Wide Groundwater Monitoring Plan* (LANL 2006d). As periodic watershed monitoring continues, LANL will continue its phased approach to determine which wells are needed and in what locations to satisfy long-term compliance monitoring needs. The process described above is established by and in compliance with the Consent Order. Chapter 4, Section 4.3, and Appendix F in the Final SWEIS were revised to include additional discussion and interpretation of the monitoring results.

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For the 21 screened intervals in the 9 characterization wells represented in Appendix F of the Draft LANL SWEIS to monitor water quality in the regional aquifer, the WSAR assigns only 11 of the screens as producing representative water samples. However, when all of the factors are considered, none of the 21 screens produce representative water samples. The reasons the 11 screened intervals graded as Good or Very Good do not produce representative water samples are described below:

Well R-5 #3. Very Good. The well does not produce representative water quality samples for the following reasons. The long well screen may cause dilution of contamination. In addition, the screen straddles the water table and therefore, allows "atmospheric pumping" to change the chemistry of the water produced from the well by the introduction of oxygen. Water samples are collected with the Westbay<sup>7</sup> no-purge sampling system that does not purge any volume of water from the screened interval before water samples are collected for the analytical suite. The no-purge sampling methodology collects "stagnant water" that was in contact for a long period of time with the new mineralogy created by the drilling additives that have properties to mask detection of contaminants, and altered chemistry because the water samples are affected by the "atmospheric pumping".

Well R-9. Very Good. Early water chemistry data<sup>7</sup> show residual effects of drilling additives. Dilution by long screen and top of well screen is above water table. Water samples are affected by the new mineralogy and by "atmospheric pumping".

Well R-13. Good. Water chemistry<sup>7</sup> is affected by the new mineralogy formed by organic drilling additives. Top of 60-ft long screen is 125 feet below water table. Important permeable strata near water table are not monitored.<sup>8</sup> See Exhibit 3.

Well R-15. Very Good. 60-ft long screen is installed across the water table and also has breached a confining bed and is spreading contamination to greater depth in the regional aquifer.<sup>19</sup> The pump installed at the bottom of the long screen ensures dilution of contamination at the water table. There is an immediate need to rehabilitate or replace well R-15. Contaminants<sup>7</sup> detected in the well include hexavalent chromium, perchlorate, tritium, and nitrate. Other contaminants such as 1,4-dioxane may be present but are not detected because of the dilution or because of the effects of "atmospheric pumping".

Well R-19 #4. Good. Representativeness of water samples cannot be certain because of the no-purge water sampling methodology, the dilution because of the 65-ft long screened interval, and the screen is located over 200 feet below the water table.<sup>6</sup>

Well R-22 #2. Very Good. The very low permeability of the screened interval of 0.04 ft/day<sup>10</sup> does not meet the requirements of the RCRA Statute<sup>14</sup> to collect water samples from the strata with high permeability. Strata with high permeability<sup>11</sup> are present both above and below the low permeability strata that are monitored by screen #2.

Well R-22 #3. Good. A LANL report<sup>11</sup> documents that screen #3 is contaminated by bentonite clay grout materials that were misplaced during well construction. In addition, the screened interval has a relatively low permeability of 0.2 ft/day<sup>10</sup> compared with strata above the screen that may have a permeability greater than 50 ft/day.

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Well R-25 #4, #6, #7. Very Good, #8. Good. Mistakes in the construction of well R-25 allowed cross-contamination of the water in the regional aquifer with solvent and high-explosives contaminated water from a perched zone of saturation above the regional aquifer for a period of time of greater than one year.<sup>12</sup> Because of the long period of cross-contamination, the no-purge water samples collected from the well with the Westbay<sup>®</sup> sampling equipment cannot ensure that representative water samples are collected.

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**2.2. Water quality data in the Draft LANL SWEIS for water samples collected from LANL characterization wells installed in the perched zones of saturation**

Tables F-11, F-15, and F-16 in Appendix F of the Draft LANL SWEIS present a statistical analysis of analytical data for water samples collected from wells installed in perched zones of saturation. The tables do not identify the discrete wells that are sampled. The tables do not identify the total number of wells that are sampled. The source of the analytical data for the tables in the Draft LANL SWEIS are the LANL Surveillance Reports and the data represent water samples collected over the years of 2001 through 2004.

The LANL *Surveillance Reports* for water samples collected over the four year period of 2001 to 2004 include analytical data from only eight LANL characterization wells with screens installed in the perched zones of saturation. Six of the eight wells are multiple-screen designs with water samples collected by the Westbay<sup>®</sup> no-purge sampling system. There are a total of 13 screened intervals in the multiple-screen wells. However, the LANL *Well Screen Analysis Report (WSAR)* identified that 5 of the 13 screens were dry and did not produce water samples. Furthermore, a later LANL report<sup>6</sup> identified that an additional screened interval did not produce water samples for a total of 6 "dry screens." The available information indicates that most of the "dry screens" are the result of the plugging action of the drilling additives that were used to drill the boreholes for the wells. Table 2 identifies the discrete wells and the Grades in the WSAR.

**317-158**

**317-158** Chapter 4, Section 4.3, and Appendix F in the Final SWEIS were revised to include results from the 2005 *Annual Site Environmental Report* (LANL 2006g), *Well Screen Analysis Report* (LANL 2005a), and *Workplan for R-Well Rehabilitation and Replacement* (LANL 2006e), as well as additional discussion and interpretation of the monitoring results. Appendix F summarizes the voluminous monitoring data provided in the annual site environmental reports. Please refer to the annual site environmental reports for detailed information on the monitoring results. Refer to the responses to Comment nos. 317-155 and 317-157 for additional information related to this comment.

Table 2. Perched Zone Characterization Wells in Appendix F of the SWEIS

Well/ Screen no.	WSAR Grade	Comment
R-5 #1	dry –not graded	
R-5 #2	Very Good	A LANL report <sup>6</sup> identified the screened interval as incapable of producing water samples
R-7 #1	dry – not graded	
R-7 #2	dry – not graded	
R-9i #1	Fair	
R-9i #2	Fair	
R-12 #1	Poor	
R-12 #2	dry – not graded	

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Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

Table 2 (cont.)  
Perched Zone Characterization Wells in Appendix F of the SWEIS

Well/ Screen no.	WSAR Grade	Comment
R-19 #1	dry – not graded	
R-19 #2	Fair	
R-19 #3	Fair	
R-25 #1	Fair	
R-25 #2	Fair	

Well LOI(a)-1.1 – This single-screen well was not graded in the WSAR. However, a review of the LANL water quality data website<sup>7</sup> reveals that the analytical results for dissolved iron, manganese, nickel, and zinc were at anomalously high levels in the first water samples collected from the well, and trended to lower values in the more recent samples. The trend in the dissolved concentrations of the metals is evidence of chemical processes that form a new mineralogy on the strata surrounding the well screen with properties to remove contaminants from the water samples collected from the well i.e., the well does not produce representative water samples.

Well POI-4. This single screen well was not graded in the WSAR. However, a review of the LANL water quality data<sup>7</sup> is an indication that the well may produce reliable and representative water quality data. A study of all available information on drilling, well construction, and sampling methodology should be done to make a finding that the well produces reliable and representative water quality data.

The available information show that only one of the perched zone wells included in Appendix F of the Draft LANL SWEIS may produce representative water samples. It is essential for the Final LANL SWEIS to accurately present the inability of the LANL monitoring wells to produce scientifically sound and technically defensible data under RCRA for the detection of contamination in the perched zones of saturation beneath LANL. Accurate knowledge of contaminants in the perched zones is essential information for the early detection of contaminants that are traveling down through the vadose zone to the regional aquifer.

3.0. Nonrepresentative water quality from the old LANL Test Wells. Appendix F of the Draft LANL SWEIS places an unacceptable reliance on water quality data from the old LANL test wells for the radionuclide contaminants Americium-241, Cesium-137, Cobalt-60, Neptunium-237, Plutonium-238, Plutonium-239 and -240, Potassium-40, Radium-226, Sodium-22, Strontium-90, Tritium, Uranium-234, Uranium, 235 and-236, and Uranium-238. In fact, none of the old LANL test wells produce water samples that are representative under DOE Orders, the NMED Consent Order, or RCRA for any of the contaminants of concern in the groundwater beneath LANL.

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317-159

**317-159** The old test wells were not evaluated for the *Well Screen Analysis Report* (LANL 2005c). LANL staff recognizes the problems with TW-8 and has placed this well on the list of wells to be plugged and abandoned. The SWEIS does not rely solely on monitoring data from the test wells. Appendix F also presents monitoring data collected from alluvial groundwater, perched groundwater, regional aquifer springs, other springs, regional aquifer hydrogeologic characterization wells, and water supply wells.



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The well construction features<sup>13</sup> that prevent the old test wells from producing representative water samples were general knowledge in the monitoring well industry for more than the past twenty years. They include

- 1) the dilution of contaminants by the long well screens,
- 2) the installation of the long well screens across the water table to allow the change in water chemistry that results from invasion of oxygen from "atmospheric pumping",
- 3) the use of common iron well screens and casing that hide the presence of radionuclide and hazardous contaminants, and
- 4) the use of the mud-rotary drilling methods that hide the presence of contaminants.

The environmental sampling data in Appendix F of the Draft LANL SWEIS include the spurious analytical data from the old LANL test wells TW-1, TW-2, TW-3, TW-4, TW-8, DT-5A, DT-9, and DT-10. The old test wells should have been plugged and abandoned twenty five years ago. The presentation of the spurious water quality data from the old test wells in the LANL *Surveillance Reports* from first publication up to the present time are a misrepresentation of having factual knowledge that the groundwater was not contaminated by LANL wastes.

The routine long-term collection of spurious water samples from the old test wells for LANL contaminants is one of many examples of the failure over decades of time of DOE/NNSA, LANL, and NMED to follow good scientific practices. The Final LANL SWEIS should stop the disingenuous presentation of the spurious contaminant data from the old test wells.

3.1. The dilution of contamination by the long screens in the old test wells  
- Test Well TW-8. Well TW-8 is an example of the long length of the well screens in the old test wells. The well was drilled in 1960 with carbon steel casing installed in an unsealed borehole over the depth interval of 64 to 1065 feet below the land surface.<sup>13</sup> The well screen was formed by cutting slots in the bottom 112 feet of the carbon steel well casing. The long length of the slotted casing ensures dilution of contamination at the water table; an important concern at the location of the well is the detection of contaminants including hexavalent chromium at the water table. Instead of providing reliable analytical data on the presence of contamination, the long screen in test well TW-8 is a pathway for spreading contamination at the water table to a greater depth in the regional aquifer. Indeed, there is data to show that the unsealed borehole for well TW-8 is allowing contaminated water in a perched zone of saturation to contaminate the regional aquifer. There is an immediate need to plug and abandon old test well TW-8, and all of the other old test wells.

The concern of EPA<sup>14</sup> for long well screens is described below:

"To avoid dilution, the Agency prefers that well screens be kept to the minimum length appropriate for intercepting a contaminant plume, especially in a high-yielding aquifer. The screen length should generally not exceed 10 feet."

The NMED Consent Order<sup>15</sup> for LANL requires the monitoring wells to meet the above RCRA guidance for screen length. In addition, the NMED Consent Order requires the monitoring wells to meet the requirements of the NMED Hazardous Waste Bureau Position Paper "Use of Low-Flow and Other Non-Traditional Sampling Techniques for

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RCRA Compliant Groundwater Monitoring," October 30, 2001. Below is an excerpt from the NMED Position Paper:

"The screened interval of the monitoring well should be short. Optimal screen length should be less than 10 feet (USEPA, March 1998). Low-flow purging and sampling may be approved for use in wells with screen lengths greater than 10 feet, provided pump intake placement is demonstrated to be appropriate. Wells with screened intervals connecting intervals of different head and/or hydraulic conductivity may act as conduits for vertical flow within the screened interval" [From page 6 of NMED Position Paper].

**3.2. The spurious water quality data from the old test wells because of the common steel casing and screens.**

An example of the poor quality of groundwater samples collected from the old test wells is the discussion in the minutes of the Jan. 28, 2004 LANL Groundwater Protection Committee Public Meeting:

Comment of meeting attendant: "Water samples from TW-3 had the appearance of iced tea. Believe TW-3 should be plugged and abandoned."

Reply by LANL: "The color of the water was due to corrosion of the metal casing."

- Old test well TW-3 was replaced by LANL characterization well R-6 according to the following statement in the well R-6 completion Report:

*"R-6 will serve as a replacement well for the obsolete monitoring well TW-3 and as an upgradient monitoring point for municipal water supply well Otowi-4"* [Emphasis Added]. [LANL well R-6 Completion Report, Kleinfelder Project No. 37151].

*Why does the Draft LANL SWEIS present analytical data from an old test well that a LANL report describes as an obsolete monitoring well?*

- The properties of the corrosion products to prevent water samples from being representative of hexavalent chromium, other trace metals, and most radionuclide contaminants are well understood in the technical literature. From page 6-30 in "RCRA GROUNDWATER MONITORING: DRAFT TECHNICAL GUIDANCE" – The EPA RCRA Manual for Monitoring Wells, EPA, November 1992.<sup>14</sup>

"The presence of corrosion products represents a high potential for the alteration of ground-water sample chemical quality. The surfaces where corrosion occurs also present potential sites for a variety of chemical reactions and adsorption. These surface interactions can cause significant changes in dissolved metal or organic compounds in ground-water samples (Marsh and Lloyd, 1980)."

"According to Barcelona et al. (1983), even purging the well prior to sampling may not be sufficient to minimize this source of sample bias because the effects of the disturbance of surface coatings or accumulated corrosion products in the bottom of the well are difficult, if not impossible, to predict. On the basis of these observations, the use of carbon steel, low-carbon steel, and galvanized steel in monitoring well construction is not recommended in most natural geochemical environments."

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- The features described above in the construction of well TW-8 and the presence of corrosion products in the water samples may mask the detection of hexavalent chromium and other contamination in the regional aquifer. The features of well TW-8 and TW-3 are common to all of the old LANL test wells. The wells have no value for knowledge of the presence of contaminants. Instead, the wells are a danger as pathways for contamination to reach the regional aquifer.

4.0. Summary. The mandate for DOE/NNSA to demonstrate Environmental Stewardship requires that all of the old test wells are plugged and abandoned and the reports that presented findings based on the spurious contaminant data produced over the decades be retracted. An example of an important report in the Draft LANL SWEIS that DOE/NNSA is required to take action for retraction is the ATSDR (Agency for Toxic Substances Disease Registry) "Draft Public Health Assessment of the Los Alamos National Laboratory," released for public comment in June, 2005. Note that the Draft LANL SWEIS presented the Draft ATSDR report as a published report and a basis for a "clean bill of health" for LANL operations. It was disingenuous of the Draft LANL SWEIS to present the Draft ATSDR report. Because of the large number of concerns for the poor quality of the ATSDR Draft report by the public and by EPA, the final report was never released. A reason for DOE/NNSA to demand retraction of the ATSDR Draft Report is that similar to the Draft LANL SWEIS, the ATSDR review of public health from LANL operations was from the spurious data produced by the old LANL test wells.

In fact, DOE/NNSA and LANL have not installed a reliable network of monitoring wells that are capable of producing the data required for the ATSDR to perform a public health assessment. This is another reason that requires, under NEPA, for the Final LANL SWEIS to make a finding that LANL is unsuited for expanded operations to manufacture plutonium pits and for the Final LANL SWEIS to institute the "Reduced Operations Alternative."

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3. *Impacts of Hydrogeologic Characterization Well Construction Practices*, Final Report of EPA National Risk Management Research Laboratory, Ground Water and Ecosystems Restoration Division, EPA Report 05RC06-001, February 10, 2006.
4. LANL, 2006. *Well Screen Analysis Report*: LA-UR-05-8615, November 2005
5. Memorandum - EPA Review of LANL Well Screen Analysis Report (LA-UR-05-8615), EPA National Risk Management Research Laboratory, Ground Water and Ecosystems Restoration Division, EPA Report 05RC06-001, February 16, 2006.

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6. LANL, 2006. Workplan for R-well Rehabilitation and Replacement: LA-UR-03-3687, June 2006.
7. Los Alamos National Laboratory Water Quality Data Website, <http://wqdbworld.lanl.gov>.
8. LANL, 2003. *Characterization Well R-13 Completion Report*, LA-UR-02-1309.
9. LANL, 2002. *Characterization Well R-15 Completion Report*, LA-13749-MS.
10. LANL, 2004. "Hydrologic Tests at Characterization Wells R-9i, R-13, R-19, R-22, and R-31, Revision 1", LANL Report LA-14121-MS, June 2004.
11. LANL, 2004. Figure 5 in "Response to Concerns About Selected Regional Aquifer Wells at Los Alamos National Laboratory", LANL Report LA-UR-04-6777, September 2004.
12. LANL, 2003. *Characterization Well R-25 Completion Report*,
13. LANL, 1995. "Geologic and Hydrologic Records of Observation Wells, Test Holes, Test Wells, Supply Wells, Springs, and Surface Water Stations in the Los Alamos Area," LANL Report LA-12883-MS.
14. US EPA RCRA Groundwater Monitoring: Draft Technical Guidance, November 1992. EPA/530-R-93-001.
15. New Mexico Environment Department, 2005. NMED LANL COMPLIANCE ORDER ON CONSENT. March 1, 2005. 276 pages.

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Exhibit 3. Failure of Draft LANL SWEIS to Address the Environmental Impact From the Hexavalent Chromium Plume in the Regional Aquifer

1.0. Introduction. The Final LANL SWEIS must reconcile the misrepresentation in the Draft LANL SWEIS that LANL operations will not cause significant contamination to the regional aquifer. From page 4-63 in the Draft LANL SWEIS:

*"As a result, little contamination reaches the regional aquifer from the shallow perched groundwater bodies and water quality impacts on the regional aquifer, though present, are low."*

The record shows that the above statement is not true and that LANL operations have caused a large impact on water quality in the regional aquifer. Exhibit 1 describes the emerging presence of plutonium and neptunium in the drinking water supply wells for Los Alamos County and Santa Fe. One of the Los Alamos County supply wells has been shut down because of perchlorate contamination from LANL operations.

In addition, LANL was aware in January of 2004 of the hexavalent chromium contamination in the regional aquifer at the location of characterization well R-28 that exceeds the Federal and State drinking water standards. The hexavalent chromium contamination<sup>1</sup> in well R-28 has increased over time and was greater than 400 ug/L for water samples collected in 2006. This is more than 4 times greater than the Federal Drinking Water Standard and 8 times greater than the State Water Quality Standard.

The Final LANL SWEIS must address

- 1) the uncertainty in the knowledge of the dimensions of the hexavalent chromium plume in the regional aquifer,
- 2) the uncertainty in the speed of travel of the plume, and
- 3) the uncertainty in the danger of the hexavalent chromium plume
  - a) to the drinking water wells of Los Alamos County,
  - b) to the drinking water wells in the Buckman well field, an important water resource for the City of Santa Fe,
  - c) to the Rio Grande, and
  - d) to the groundwater resources of the San Ildefonso Pueblo.

Figure 1-1 shows the locations of well R-28, the Los Alamos County drinking water wells (wells PM-3 and O-4 are most threatened by the chromium plume), the Buckman well field, and the property of the San Ildefonso Pueblo.

2.0. The poor understanding of the dimensions of the chromium plume and the speed of groundwater travel. The Final LANL SWEIS must address the impact that the poor knowledge of the dimensions of the hexavalent chromium plume has on LANL operations at the present time and in the future. Presently, the proximity of the plume to the Los Alamos County drinking water wells, to the groundwater resources of the San Ildefonso Pueblo, and to the Buckman well field are not known. There is a concern for a great rise in the levels of chromium that are reported in the most recent Santa Fe Water Department Annual Report for water quality in the Buckman well field. Presently, the cause for the increase in chromium is not understood by Concerned Citizens for Nuclear Safety (CCNS). We are seeking a meeting with the Santa Fe Water Department.

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317-160 Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding groundwater contamination and monitoring.

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Because of the close proximity of well R-28 to the property of the San Ildefonso Pueblo, it is very probable that the hexavalent chromium contamination from LANL operations has already contaminated the groundwater resources of the Pueblo. Indeed, the chromium contamination in the groundwater resources of the San Ildefonso Pueblo may be at higher levels than at well R-28.

The mistakes that were made in the installation of LANL characterization wells R-13 and R-34 confound knowledge of the dimensions of the chromium plume. The locations of the LANL property boundary with the San Ildefonso Pueblo, well R-28, and the downgradient wells R-13 and R-34 are shown on Figure 1-1.

The chromium plume at well R-28 is in aquifer strata with very high permeability<sup>2</sup> in the upper part of the regional aquifer. The borehole data from wells R-28,<sup>2</sup> R-13,<sup>3</sup> and R-34<sup>4</sup> indicate that the high permeability strata at well R-28 are continuous across the landscape from well R-28 to well R-34. The high permeability strata are a fast pathway for the horizontal travel of the chromium plume. Presently, there is poor understanding of the speed of groundwater travel in the regional aquifer of the chromium plume because the necessary studies have not been performed as shown by the following excerpts from a LANL report by Keating et al.<sup>5</sup>

*"Travel times through the regional aquifer are poorly understood because of the lack of tracer tests and in situ measurements of effective porosity."  
"The implication of this work for contaminant transport issues is that because of parameter uncertainty, predicted fluxes and velocities are quite uncertain.  
Uncertainties in permeability and porosity values lead to additional model uncertainty"* [page 668, Keating et al., 2005].

It is of critical importance for the Final LANL SWEIS to acknowledge the poor understanding by LANL and DOE/NNSA for the danger of the chromium plume to the water resources. Figure 1-1 shows the large region between the chromium plume at well R-28 and the Buckman well field where there are no monitoring wells.

The perspective in LANL reports is that the chromium plume at well R-28 is of limited size because contamination is not detected in wells R-13 and R-34. However, the screens in wells R-13<sup>3</sup> and R-34<sup>4</sup> are located deep below the water table of the regional aquifer and below a layer of clay strata that have very low permeability. The layer of clay strata are a hydraulic barrier between the chromium plume and the aquifer strata where the two screens are installed.

The hydrostratigraphy for wells R-28 and R-13 are displayed on Figure 1-3. The water quality data from well R-13 are not reliable for the presence of the chromium plume at the location of well R-13 because of the layer of clay strata located above the screen. It is very probable that the chromium plume is present in the aquifer strata above the clay barrier but the contamination goes unnoticed in the water samples collected from well R-13.

Figure 1-4 displays the Schlumberger borehole geophysics for wells R-28 and R-34. Well R-34 is located downgradient of well R-28 in the direction of groundwater flow at a location on the San Ildefonso Pueblo. As with well R-13, the screen in well R-34 is located deep below the water table and below a layer of clay strata that form a hydraulic barrier between the groundwater above and below the clay layer. The water quality data

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from well R-34 are not reliable for knowledge of the presence of the chromium plume in the highly permeable aquifer strata above the layer of clay.

There is a pressing need for the installation of additional monitoring wells to investigate the dimensions of the hexavalent chromium plume in the strata with high permeability to the south of well R-28 on the property of the San Ildefonso Pueblo, at the location of well R-34, and between well R-34 and the Buckman well field to address the uncertainty about the presence of the chromium plume, and to address the uncertainty about travel times through the regional aquifer for the chromium plume to reach the drinking water wells.

The report by Keating et al. identified that the Buckman well field is producing water from beneath the Pajarito Plateau to the west of the Rio Grande:

*"Simulations suggest that flow beneath the Rio Grande (west to east) has been induced by production at the Buckman well field. Our calculations show that this flux may have increased from zero (pre1980) to approximately 45 kg s<sup>-1</sup> at present, or about 20% of the total annual production at Buckman"* [page 658, Keating et al., 2005].

Furthermore, Keating et al. identify the need to install monitoring wells at appropriate locations between LANL operations and the Buckman well field for multi-well pumping tests and tracer tests to acquire the necessary knowledge concerning contaminant transport issues:

*"The implication of this work for contaminant transport issues is that because of parameter uncertainty, predicted fluxes and velocities are quite uncertain. Uncertainties in permeability and porosity values lead to additional model uncertainty. These uncertainties can be reduced meaningfully with more data collection, including multiwell pumping and tracer tests"* [ page 668, Keating et al., 2005].

**3.0. Misrepresentation in LANL Reports of the high permeability of the aquifer strata beneath the San Ildefonso Pueblo**

A serious mistake in the LANL *Synthesis Report*<sup>6</sup> is the statement that "no high permeability zones occur east of well R-13". Well R-13 is located immediately north of the San Ildefonso Pueblo in Mortandad Canyon. Figure 1-5 is a map from the LANL *Synthesis Report* that portrays the regional aquifer to the west and south of well R-13 beneath the Pueblo property to have a permeability lower than 3.4 meters per day. Quite the opposite is true.

In fact, over a large part of the San Ildefonso Pueblo property, the regional aquifer has a permeability much greater than 3.4 meters per day. The available information from the LANL Hydrogeologic Workplan Project is that thick intervals of aquifer strata with a permeability greater than 20 meters per day occur over much and probably all of the Pueblo property to the west of the Rio Grande across the landscape to the south of well R-13. At the locations of wells R-34, R-22, and possibly well R-21, there are thick intervals of aquifer strata with a permeability greater than 40 meters per day. The LANL *Synthesis Report* is hiding the very large and very valuable groundwater resource on the San Ildefonso Pueblo.

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**317-161**

**317-161** Groundwater is not traveling at 131 feet (40 meters) per day in the regional aquifer beneath LANL. The calculated hydraulic conductivity of a hydrogeologic unit is not the same as the actual groundwater velocity. The hydraulic conductivity is the movement of groundwater in the unit under a hydraulic gradient that is usually much greater than the natural gradient in the aquifer. As described in Appendix E, Section E.8.3, the groundwater from springs in White Rock Canyon is probably somewhere between 3,000 and 10,000 years old. If the groundwater in the regional aquifer beneath LANL were flowing at a velocity of 131 feet (40 meters) per day, it would have traveled 27,216 miles (43,800 kilometers) in 3,000 years to reach these springs, which is not the case.

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3.1. The High Permeability of the Regional Aquifer at Well R-34. Figure 1-1 shows the location of characterization well R-34 in Cedro Canyon on the San Ildefonso Pueblo. The LANL *Synthesis Report* makes the mistake to describe the regional aquifer at well R-34 as having a low permeability of 1.07 meters per day. The spurious low permeability was measured by a pumping test that was affected by residual foam drilling fluids, and because of the mistakes that were made in the construction of the well. As described below, the available information show the regional aquifer at well R-34 to have a permeability greater than 40 meters per day.

The open borehole for the single-screen well (23-ft long screen) was drilled with fluid-assisted air rotary drilling methods that invaded the strata surrounding the borehole with organic drilling foam that contained drill air.<sup>4</sup> The pumping test in well R-34 did not provide reliable information on the permeability of the aquifer strata because of the outgassing of the drill air and foam. From the LANL well R-34 pumping test report:<sup>4</sup>

- "The presence of air in the formation water interfered with pump operation, resulting in either erratic discharge rate fluctuations or no flow at all."
- "Furthermore, the presence of the gas phase would be expected to significantly reduce the formation hydraulic conductivity."

The LANL report documented the problems that prevented the pumping test from providing reliable measurement of the aquifer permeability. Nevertheless, the LANL *Synthesis Report*<sup>5</sup> published the obviously spurious low permeability value of 1.07 m/day.

The low permeability value in the *Synthesis Report* is also contradicted by the description of the coarse strata at the screened interval in Well R-34 and by the results of the Schlumberger borehole geophysics. Table 2-5 in the *Synthesis Report*<sup>6</sup> describes the aquifer strata at well R-34 as "fairly coarse gravels with some cobble beds". Table 2-5 has a similar description of the aquifer strata at the wells R-11 and R-28 where pumping tests measured permeability values of 35.51<sup>7</sup> and 45.52 m/day,<sup>3</sup> respectively.

In addition, the Schlumberger geophysics logs are similar for wells R-11,<sup>7</sup> R-28,<sup>2</sup> and R-34.<sup>4</sup> Figure 1-4 is a comparison of the permeability of the aquifer strata at wells R-28 and R-34 from the Schlumberger borehole geophysics that were performed in the boreholes for the two wells. The geophysics data show the presence of a 64-ft thick section of aquifer strata immediately below the water table at the location of well R-34 that warrant a permeability of greater than 40 m/day.

It is important to note that the Schlumberger Geophysics logs identify that the screened interval in well R-34 was not installed in the aquifer strata with highest permeability. In fact, the Schlumberger logs identify clay sediments to be present across the top 6 ft and in a thin zone in the middle of the screened interval. Greater than 30 % of the screened interval is surrounded by clay strata with low permeability. The clay strata had an important effect to lower the permeability measured by the pumping test in well R-34.

The drilling record and geophysics record for the well R-34 borehole document that the regional aquifer in the western region of the San Ildefonso Pueblo has a total thickness of aquifer strata with high permeability of greater than 250-ft thick and probably greater than 500-ft thick from interpretation of regional information.

317-162

317-162 See the response to Comment no. 317-161.



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The Final LANL SWEIS must identify and reconcile the wrong information that is presented in the LANL reports. The high permeability of the aquifer strata beneath the San Ildefonso Pueblo greatly increase the danger of LANL waste to contaminate the valuable groundwater resource of the Pueblo and for the contamination to reach the Rio Grande and the Buckman well field.

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**4.0. The poor reliability of LANL characterization well R-16 to identify the danger of LANL operations to the Buckman well field.**

The danger of the hexavalent chromium plume to contaminate the groundwater at the Buckman well field is increased because of the mistakes that were made in the construction of well R-16, the LANL sentry well for LANL groundwater contamination traveling to the Buckman well field. Figure 1-7 displays the as-built construction of the multiple-screen well R-16. Screen #1 is blocked off by the retractable drill casing that was abandoned in the borehole. Screen #4 is surrounded by bentonite clay slough sediments<sup>8</sup> that were not removed from the borehole before installing the backfill materials. The bentonite clay have well known properties to mask the detection of contaminants in the water produced from the well. The borehole for the well was drilled with the mud-rotary drilling method that caused the screened intervals to be invaded with bentonite clay drilling mud and organic drilling additives. The LANL *Well Screen Analysis Report*<sup>9</sup> identified that screen #2 and #4 in well R-16 do not produce reliable and representative groundwater samples (see Figure 1-2).

**317-163**

An additional mistake with the construction of well R-16 is that the Schlumberger borehole geophysics reveal that screen #4 was installed in a layer of strata with very low permeability and that layers of strata with markedly higher permeability are located above and below the strata that surround screen #4. The Schlumberger geophysics is displayed on Figure 1-8. Well R-16 is one of the monitoring wells for monitoring the release of contaminants from the RCRA regulated waste disposal sites at TA-54. The RCRA regulations require installation of well screens in the strata with highest permeability and the collection of representative groundwater samples. Well R-16 is not in compliance with RCRA 40 CFR §§ 264.90-100 (referred to as RCRA §264 Subpart F). Well R-16 is not a reliable sentry well for contamination traveling to the Buckman well field. There is a pressing need to replace well R-16 and to install additional monitoring wells for the detection of LANL waste upgradient of the San Ildefonso Pueblo, the Buckman well field and the supply well of Los Alamos County.

NEPA required recognition of the deficiencies of the existing LANL monitoring well network and a finding in the Final LANL SWEIS to institute the "Reduced Operations Alternative" that was described as one of the alternatives in the Draft LANL SWEIS.

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**317-163** As discussed in the response to Comment no. 317-157, LANL staff initiated a program to rehabilitate the R-Wells that may be producing suspect groundwater monitoring results. This program is described in the *Workplan for R-Well Rehabilitation and Replacement* (LANL 2006e). Well R-16 is one of two wells included in the pilot well rehabilitation program that was completed in 2006. Rehabilitation has been partially successful, and Well R-16 is now producing more representative water samples. Well screen depths are selected in consultation with the New Mexico Environment Department. In some cases, well screens are purposefully set in low permeability strata to collect information on the hydrologic properties of the confining layers.

LANL staff is still in the initial characterization phase of the monitoring program, as reported in the *Interim Facility-Wide Groundwater Monitoring Plan* (LANL 2006d). As periodic watershed monitoring continues, LANL staff will continue its phased approach to determining which wells are needed and in what locations to satisfy long-term compliance monitoring needs. The process described above is established by and in compliance with the Consent Order. Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding well construction, groundwater contamination, and groundwater monitoring.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

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**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

Exhibit 4. Failure of the Draft LANL SWEIS to Address Environmental Impact Because of Groundwater Contamination From the RCRA Regulated Disposal Sites at Technical Area 54.

1.0 Introduction. The RCRA regulated units at Technical Area 54 (TA-54) of the Los Alamos National Laboratory (LANL) are MDA G, MDA H, and MDA L. The regulated units are on Figure 1-6. The Final LANL SWEIS must address the environmental impact of the legacy wastes disposed of at the three MDAs to contaminate the regional aquifer. The Draft LANL SWEIS did not acknowledge the groundwater contamination beneath MDA G that was detected at statistically significant levels in water samples collected from LANL characterization well R-22 (Table 1). The Final LANL SWEIS must acknowledge the uncertainty of the groundwater contamination in the regional aquifer because of the failure of DOE/NNSA, LANL, and the New Mexico Environment Department (NMED) to install the network of monitoring wells at the three MDAs that are required for compliance with RCRA 40 CFR §§ 264.90-100 (referred to as RCRA § 264 Subpart F). The groundwater monitoring program at the three regulated units is not in compliance with RCRA, and for that reason, the Final LANL SWEIS cannot present a finding that LANL meets requirements for expanded manufacturing of plutonium pits. Instead, the Final LANL SWEIS must institute the "Reduced Operations Alternative" that was described in the Draft LANL SWEIS.

MDA G is the legacy mixed wastes that are disposed of at Area G, the active LANL landfill for the disposal of low-level radioactive waste. Area G has a size of 65 acres. MDA L is the legacy hazardous wastes disposed of at a 2.6 acre facility that is now permitted for surface storage of hazardous waste. MDA H is a small inactive legacy waste disposal site where disposal of mixed waste was into a set of disposal shafts.

The six LANL characterization wells that are intended to meet the RCRA requirements for monitoring the three MDAs are the characterization wells R-16, R-20, R-21, R-22, R-23, and R-32. The six wells are displayed on Figure 1-6. None of the six wells meet the RCRA § 264 Subpart F requirements for monitoring the regulated units. Exhibit 1 describes the the properties of the drilling additives to mask the detection of LANL contaminants in the water samples produced from the 6 wells.

In addition, A fundamental deficiency is that RCRA 40 CFR § 264.95 requires for monitoring wells to be located at the immediate boundary of the regulated units to monitor the groundwater flowing from beneath the regulated units. Figure 1-6 shows that there are no monitoring wells located close to the downgradient boundaries of the three MDAs. The closest well to the downgradient boundary of a discrete regulated unit is well R-22 located approximately 500 feet east from the downgradient boundary of MDA G.

The Draft LANL SWEIS identified the need to install a set of monitoring wells at appropriate locations at the three MDAs to investigate the presence of groundwater contamination at the present time and in the future. From page 1-230 of the Draft LANL SWEIS:

*Uncertainty about the long-term infiltration rates at MDAs leads to uncertainty about the long-term performance of the MDAs. The result is uncertainty about possible future human risk from groundwater contamination assuming nothing is done to reduce long-term infiltration into the MDAs.*

CCNS and EVEMG Comments about the draft LANL SWEIS 9/20/06 Exhibit 4 - 1 -

317-164

317-164  
cont'd

**317-164** The potential environmental impacts associated with wastes in MDAs G, H, and L that are subject to the Consent Order are being addressed in accordance with Consent Order requirements. Background information about these sites is in Appendix I, Sections I.2.5.5.1, I.2.5.5.2, and I.2.5.5.3. As cited in Section I.2.5.5.2, for MDA H DOE has completed a RCRA investigation program and has prepared a corrective measures evaluation as well as an environmental assessment. The corrective remedy for MDA H was selected by the New Mexico Environment Department in November 2007. The Consent Order also requires collection and analysis of subsurface vapor samples and monitoring of groundwater in canyons potentially affected by MDA H. Corrective measure evaluations for MDAs G and L are being prepared and will be submitted to the New Mexico Environment Department in 2007. The New Mexico Environment Department will select the final closure remedy for each MDA, considering possible impacts to groundwater and other resources. The current schedule for the Consent Order requires submittal of remedy completion reports to the New Mexico Environment Department by July 9, 2011, for MDA L and by December 6, 2015, for MDA G. As described in the *Well Screen Analysis Report* (LANL 2005c), Well R-21; Well R-22, screens 2 and 3; and Well R-32 screen 1 produce water quality samples that are not significantly impacted by residual drilling fluids. Well screen depths are selected in consultation with the New Mexico Environment Department. LANL staff is still in the initial characterization phase of the monitoring program, as reported in the *Interim Facility-Wide Groundwater Monitoring Plan* (LANL 2006d). As periodic watershed monitoring continues, LANL staff will continue its phased approach to determining which wells are needed and in what locations to satisfy long-term compliance monitoring needs. The process described above is established by and in compliance with the Consent Order (for example, refer to Sections IV and IX of the Consent Order).

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
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The draft LANL SWEIS is correct about the uncertainty for groundwater contamination due to long-term infiltration into the MDAs. However, more important for MDA L and MDA G is the uncertainty of groundwater contamination that has already occurred because of the waste disposal operations over a thirty year period from the late 1950s until the late 1980s.

2.0. The nature of waste buried at MDA G. MDA G occupies 65 acres and has been an active landfill since 1957. There are plans to expand MDA G by an additional 30 acres. At this time, the waste disposed of at MDA G are described as low-level radioactive waste. The term "low-level" does not mean the waste have low radioactivity. In fact, the "low-level waste" disposed of at MDA G may have a very high level of radioactivity. In addition, a LANL report<sup>4</sup> documents that "high level" transuranic (TRU) radioactive waste was routinely disposed of in pits at MDA G from 1957 through 1970, with disposal of small amounts of TRU waste continuing through 1979. Furthermore, LANL reports<sup>5</sup> document that prior to 1986, most of the Laboratory's "mixed low-level waste" was disposed of at MDA G. The mixed waste contains both radioactive waste and hazardous waste (toxic chemical waste). The large plumes of solvent chemicals<sup>2</sup> that are present in the unsaturated strata beneath MDA G are evidence of the large amount of hazardous waste that were disposed of in the unlined pits at MDA G. The radioactive and chemical contamination in the regional aquifer beneath MDA G that were detected in water samples produced from well R-22<sup>1</sup> are listed below in Table 1.

3.0. The nature of waste buried at MDA L. MDA L occupies 2.6 acres and was an active disposal site for hazardous chemical waste since the late 1950's until 1985. An unlined pit (Pit A) located along the northern side of MDA L received all waste until 1975. Chemical waste were disposed of in Pit A from the late 1950's through December, 1978. A large quantity of liquid toxic chemical waste were disposed of in Pit A.<sup>2</sup> In addition, two surface impoundments at MDA L were used for the disposal of a large quantity of liquid waste from the late 1970's through 1986.<sup>2</sup>

Thirty four unlined disposal shafts were drilled at MDA L between 1975 and 1985. They range in diameter from 3 to 8 feet and are each approximately 60-feet deep. Much of the waste disposed of in the shafts are toxic liquids (solvents) contained in 55-gallon steel drums.<sup>2</sup> Liquids were disposed of in drums or other containers without adding absorbents.<sup>2</sup> Smaller containers were frequently simply dropped into the shafts.<sup>2</sup> Noncontainerized waste were also disposed of in these shafts.

A large vapor plume of solvent contamination is present in the subsurface beneath MDA L. The existence of the plume has been known for over 25 years.<sup>2</sup> The primary solvents in the plume include the toxic contaminants 1,1,1-trichloroethane (TCA), trichloroethylene (TCE), and perchloroethylene (PCE).<sup>2</sup> It is not known if the solvent contamination or other chemical contamination released from MDA L have contaminated the regional aquifer beneath MDA L or if contaminants released from MDA L have contaminated the groundwater beneath the San Ildefonso Pueblo because no reliable monitoring wells have been installed at appropriate locations immediately at MDA L and between MDA L and the Pueblo (see Figure 1-6). The only well between MDA L and the San Ildefonso Pueblo is well R-21. This well does not meet requirements of RCRA §264 Subpart F because of the great distance away from MDA L, the nonrepresentative water chemistry because of the effects of the drilling additives,<sup>3,9</sup> and the great depth of the well screen below the water table of the regional aquifer.<sup>4</sup>

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317-165

**317-165** As described in the *Well Screen Analysis Report* (LANL 2005c), Well R-21 produces water quality samples that are not significantly impacted by residual drilling fluids. LANL staff is still in the initial characterization phase of the monitoring program, as reported in the *Interim Facility-Wide Groundwater Monitoring Plan* (LANL 2006d). As periodic watershed monitoring continues, LANL staff will continue its phased approach to determining which wells are needed and in what locations to satisfy long-term compliance monitoring needs. The process described above is established by and in compliance with the Consent Order (for example, refer to Sections IV and IX of the Consent Order). In addition, please note that well screen depths are selected in consultation with the New Mexico Environment Department, as discussed in response to Comment no. 317-163.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
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The detection of chemical contamination in the regional aquifer beneath MDA G<sup>1,7</sup> is evidence that it is very likely that the liquid wastes released from MDA L have contaminated the regional aquifer. The disposal of a very large but unknown quantity of liquid chemical waste at MDA L over a time period of greater than 25 years presents a great danger to contamination of the groundwater resources. It is a violation of RCRA § 264 Subpart F that DOE/NNSA and NMED have not required the installation of a network of monitoring wells in the immediate vicinity of MDA L (and MDA G) for monitoring contamination in the regional aquifer.

**317-165  
cont'd**

**3.0. Mistakes in the Construction of LANL Characterization Well R-22.**

Well R-22 is located atop Mesita del Buey east of MDA G along the direction of groundwater travel from beneath MDA G to the property of the San Ildefonso Pueblo, the Rio Grande, and the Buckman well field, an important groundwater resource to Santa Fe. Figure 1-6 shows the location of MDA G, well R-22, and the southern property line of the Pueblo. The location of the Rio Grande and the Buckman well field are on Figure 1-1. Well R-22 is a multiple-screen well with 5 separate screened intervals at different depths in the regional aquifer. The mistakes in the construction of well R-22 that prevent the well from being in compliance with RCRA § 264 Subpart F for the detection of groundwater contamination from Area G are described below.

**3.1. The strata surrounding the screens in well R-22 are invaded with organic drilling additives that were not removed by the well development activities.** The LANL water quality data show that the drilling additives have caused a large change to the chemistry<sup>1,9</sup> of the water produced from screen #1. Indeed, a LANL report<sup>3</sup> predicts that screen #1 will not produce representative water samples for the next ten years.

Screen #1 is located in strata with high permeability at the water table of the regional aquifer. Screen #1 is the most important screen in well R-22 for the detection of the release of contamination from Area G to the regional aquifer. The LANL "*Well Screen Analysis Report*" identifies that screen #1 in well R-22 does not produce representative water samples. The scheme in the LANL Workplan for R-well Rehabilitation and Replacement<sup>5</sup> is to seal off screen #1 and use screen #2 as the uppermost screen for monitoring groundwater contamination beneath MDA G. This scheme is unacceptable because of the very low permeability of 0.04 ft/day<sup>8</sup> that was measured for the strata that surround screen #2. RCRA § 264 Subpart F requires that well screens are installed in the aquifer strata with high permeability that are located near the water table and strata with high permeability are above screen #2 at the location of screen #1.

**317-166**

There is an immediate need to install a cluster of new monitoring wells immediately east of the boundary of MDA G that are installed in the aquifer strata with high permeability at a shallow depth below the water table of the regional aquifer, and in the deeper intervals of aquifer strata with high permeability that are located in the depth interval between screen #2 and screen #3 (see Figure 1-9).

**317-164  
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Some of the hazardous and radionuclide contaminants that were detected in screen #1 of well R-22 are listed in Table 1. The nature of contamination in the strata at the top of the regional aquifer beneath Area G are not accurately known because of the properties of the organic drilling additives to mask the detection of contamination. A LANL Report<sup>7</sup> acknowledges the large number of chemical contaminants that were detected in the groundwater samples from well R-22 during the first year of collecting samples.

**317-166** The *Workplan for R-Well Rehabilitation and Replacement* (LANL 2006e) states that Well R-22 has five screens. The top screen straddles the water table and the other four screens are within the regional aquifer. The top screen is rated "Poor." Screen 2 is rated "Very Good." Since there are only approximately 33 feet between Screens 1 and 2, they probably sample the same. Screen 3 is rated "Good," Screens 4 and 5 are rated "Poor." After rehabilitation, R-22 will become a dual-screen well and a candidate for conversion to an alternative sampling system. Well screen depths are selected in consultation with the New Mexico Environment Department. In some cases, well screens are purposefully set in low permeability strata to collect information on the hydrologic properties of the confining layers. As described in the *Workplan for R-Well Rehabilitation and Replacement* (LANL 2006e), no acceptable sampling system currently exists as an alternative to Westbay for situations where more than two screens per well are needed for the monitoring system. Therefore, LANL staff will opt for conversion of wells with three or more screens to single- or dual-screen completions by plugging and abandoning some of the screens, taking into consideration technical needs for monitoring and characterization. This option will allow purging of water from the well before sampling.

LANL staff is still in the initial characterization phase of the monitoring program, as reported in the *Interim Facility-Wide Groundwater Monitoring Plan* (LANL 2006d). As periodic watershed monitoring continues, LANL staff will continue its phased approach to determining which wells are needed and in what locations to satisfy long-term compliance monitoring needs. The process described above is established by and in compliance with the Consent Order.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
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"Thirty-one volatile and semi-volatile organic compounds have also been detected in water from well R-22. Only two of these, pentachlorophenol (1 detection, 6.2 ppb, MCL = 1 ppb) and benzo(a)pyrene (2 detections, 0.24 ppb, MCL = 0.2 ppb) were present at concentrations above the MCL. Monitoring for organic compounds at well R-22 will continue." [MCL means EPA Drinking Water Standard]

Table 1. Contaminants<sup>1</sup> detected in water samples collected from Well R-22.

- \*tritium (109 picocuries per liter (pCi/L) for a sample collected at the water table),
- \*technetium-99 (4.3 and 4.9 pCi/L),
- \*pentachlorophenol (6.2 micrograms per liter (ug/L)),
- \*chloroform (0.94 ug/L),
- \*phenol (19 and 32 ug/L),
- \*4-methylphenol (44 to 210 ug/L),
- \*2-butanone (6.9 to 8.9 ug/L),
- \*diethylphthalate (1.3 ug/L),
- benzoic acid (3 to 12.5 ug/L),
- butyl benzyl phthalate (9.8 ug/L),
- toluene (0.2 to 0.76 ug/L),
- methylene chloride (0.62 and 2.2 ug/L),
- bis(2-ethylhexyl)phthalate (1.0 and 3.9 ug/L),
- several substituted benzene compounds including isopropylbenzene (0.16 to 0.54 ug/L), and 1,4-dichlorobenzene (0.16 to 0.23 ug/L).

• **Mobile Contaminants.** Tritium, Technetium-99, and the six chemical contaminants with asterisks in the above list are highly mobile in groundwater. The six chemical contaminants are commonly found in groundwater beneath toxic waste landfills studied by the Superfund activities of EPA.

• **Pentachlorophenol.** Pentachlorophenol was detected in a groundwater sample from well R-22 at a concentration more than six times greater than the maximum contaminant level (MCL) allowed by the Federal Drinking Water Standard. In addition, EPA has assigned a maximum contaminant level goal (MCLG) of zero for this chemical contaminant because of the serious health issues. The health issues include 1). damage to the central nervous system, 2). reproductive effects, 3). damage to liver and kidneys, and 4). cancer.

• **Radioactive Tritium and Technetium-99.** A tritium level of 109 pCi/L was measured in a water sample collected from the water table of the regional aquifer during the drilling of the borehole for well R-22. The fluid-assisted drilling methods diluted the actual level of tritium in the groundwater. The anomalously high levels of tritium and the presence of technetium-99 are direct evidence that contamination from MDA G has reached the regional aquifer. Other radionuclide contaminants may have traveled from MDA G to the regional aquifer, but are not noticed because of the mistakes in the installation of well R-22 and the other characterization wells that surround MDA G.

The plan by DOE to continue monitoring for chemical and radioactive contaminants in the water produced from well R-22 is irresponsible because LANL reports acknowledge that it may be as long as ten years before the well produces reliable water samples. In fact,

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**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
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it is very probable that screen #1 in well R-22 will never produce reliable and representative water samples because of the new mineralogy of iron coatings on the strata that surround the well screen.

3.2. The Westbay<sup>®</sup> Sampling System Collects Stagnant Water From Well R-22. The poor quality of the water samples collected from well R-22 are compounded because no attempt is made to purge the stagnant water from the well before samples are collected for the analytical suite. Water is not pumped from the screened intervals in well R-22. Instead a small Westbay<sup>®</sup> sampler collects stagnant water samples that were in contact for a long period of time with the new chemistry introduced by the organic drilling additives.

3.3. The screened intervals in well R-22 are not installed in the aquifer strata with high permeability. An additional problem with well R-22 is that except for screen #1 the screened intervals are not installed in the aquifer strata with high permeability. The strata with high permeability are the strata where the highest levels of contamination are expected and are the strata for fast horizontal travel of contamination away from MDA G. From the text book *Applied Hydrogeology* by Fetter (1994):

"Heterogeneities in the aquifer can cause the pattern of the solute movement to vary from what one might expect in homogeneous beds. Because flowing groundwater always follows the most permeable pathways, those pathways will also have the most contaminant."

The regional aquifer strata beneath MDA G and the San Ildefonso Pueblo have high heterogeneity. The regional aquifer is a "layer cake" of strata with very high and very low permeability. Figure 1-9 shows the "layer-cake" strata and the location of well screens in Well R-22. Figure 1-9 is a comparison of the permeability of the aquifer strata from the Schlumberger borehole geophysics to the location of the screened intervals in well R-22.

The figure shows that screens were not installed in two thick intervals of basalt strata that have high permeability, possibly greater than 125 feet per day. Instead, screen #2 is installed in basalt strata that the borehole geophysics show to have very low permeability. The low permeability was confirmed by aquifer tests<sup>9</sup> that measured a permeability of 0.04 feet per day for the basalt strata that surround screen #2.

It is both puzzling and troubling that

- 1). screened intervals in well R-22 were not installed in the strata with high permeability that were identified by the drilling activities and the borehole geophysics (Figure 1-9), and
- 2). the LANL Reports<sup>6,10</sup> misrepresent the regional aquifer strata beneath Area G and the San Ildefonso Pueblo as having low permeability – see Figure 1-5.

The presence of strata with high permeability were proven by both the borehole geophysics<sup>7</sup> and the drilling record<sup>11</sup> for well R-22. There was knowledge of the strata with high permeability before well R-22 was constructed and before the LANL Reports were written. DOE must reconcile the failure to monitor the "fast pathways" for the travel of contaminants in groundwater laterally away from Area G and the misrepresentation of the danger of Area G and Area L to the groundwater of the San Ildefonso Pueblo, the Rio Grande, and the Buckman well field, an important water resource to Santa Fe.

CCNS and EVEMG Comments about the draft LANL SWEIS 9/20/06 Exhibit 4 - 5 -

317-166  
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**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

The report by Keating et al<sup>12</sup> brings attention to the great uncertainty in the direction and speed of travel of groundwater in the basalt strata beneath MDA G and MDA L as follows:

*"As shown in Table 3, a significant proportion of uncertainty in fluxes downgradient of LANL results from uncertainty in the permeability of the basalts. Basalt units are very important for potential contaminant transport because of their expected low effective porosity. Therefore, we can expect at least a factor of 3 uncertainty in the associated travel times resulting in uncertainty in the flow equation"* [page 666, Keating et al., 2005].

*"The current understanding of hydrostratigraphy, as implemented in the numerical models, is sufficient to explain general trends in heads (spatial and temporal) but is lacking in a few key areas such as in the vicinity of R-9, R-12, R-22, and R-16. Detailed transport calculations in the vicinity of these wells would benefit from a refinement of the hydrostratigraphic framework model"* [page 667 to 668, Keating et al., 2005]

*"The implication of this work for contaminant transport issues is that because of parameter uncertainty, predicted fluxes and velocities are quite uncertain. Uncertainties in permeability and porosity values lead to additional model uncertainty"* [page 668, Keating et al., 2005].

*"These uncertainties can be reduced meaningfully with more data collection, including multiwell pumping and tracer tests"* [ Keating et al., 2005].

The uncertainty in the Keating et al report for the impact of Area G on the water resources is an issue that must be resolved by the installation of the needed network of monitoring wells immediately at MDA G, MDA L, and MDA H as required to meet the requirements of RCRA § 264 Subpart F. There is a need to characterize the flow of groundwater away from TA-54 to the San Ildefonso Pueblo, the Rio Grande, and the Buckman well field. This characterization requires the installation of monitoring wells at appropriate locations for multi-well pumping tests and tracer tests as this need was identified in the report by Keating et al.

The demonstrated failure of DOE/NNSA, LANL, and NMED to comply with RCRA § 264 Subpart F and DOE Orders to have accurate knowledge of the impact of the Laboratory's RCRA regulated mixed waste and chemical waste disposal facilities on the groundwater resources leaves no recourse for the Final LANL SWEIS but to institute the **"Reduced Operations Alternative"** for the future operations at the Los Alamos National Laboratory

**317-167**

**317-167** As discussed in the response to Comment no. 317-145, LANL staff is still in the initial characterization phase of the monitoring program, as reported in the *Interim Facility-Wide Groundwater Monitoring Plan* (LANL 2006d). As periodic watershed monitoring continues, LANL staff will continue its phased approach to determining which wells are needed and in what locations to satisfy long-term compliance monitoring needs.



**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

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Exhibit 5

George Rice, September 18, 2006

**Remediation of MDAs**

The *Draft Site-Wide Environmental Impact Statement* (SWEIS) considers three alternatives: 1) No Action, 2) Reduced Operations, and 3) Expanded Operations.<sup>1</sup> However, DOE is proposing to remediate major Material Disposal Areas (MDAs) only under the Expanded Operations alternative.<sup>2</sup> This does not make sense. The potential for contamination at the MDAs is not a function of the alternative that is chosen.

The following is from the draft SWEIS:

*Uncertainty about the long-term infiltration rates at MDAs leads to uncertainty about the long-term performance of the MDAs. The result is uncertainty about possible future human risk from groundwater contamination, assuming nothing is done to reduce long-term infiltration into the MDAs.<sup>3</sup>*

The MDAs should be remediated under all of the alternatives.

Under any alternative, DOE should determine whether any contaminant excursions<sup>4</sup> have occurred at any MDAs or other facilities where wastes have been stored or disposed. If any excursions have occurred, DOE should determine the extent and nature of the excursion, and develop a remediation plan.

All waste disposal facilities should include a monitoring system capable of detecting excursions before contaminants reach the environment. Such a system might consist of dual low permeability liners with instruments for detecting excursions installed between the liners.

**Lateral flow into wastes**

Any proposed remediation plan should consider the possibility of lateral movement of water into the wastes. Lateral flow may occur episodically in response to rainfall or snowmelt. Rogers (1977) reported lateral flows into waste disposal pits at MDA G. The water flowed into the pits through fractures and along the soil-bedrock interface.<sup>5</sup>

<sup>1</sup> DOE, 2006a, pages S-5 and S-39.

<sup>2</sup> DOE, 2006a, page S-39. Under the Expanded Operations alternative, the MDAs may be capped (wastes left in place), or excavated (wastes removed and disposed in another facility) (DOE, 2006a, page 3-61).

<sup>3</sup> DOE, 2006a, page I-230.

<sup>4</sup> Excursion: migration of contaminants across the boundary of a disposal facility.

<sup>5</sup> Rogers, 1977, pages G-36, G-70, and G-71.

317-168

317-168  
cont'd

317-169

**317-168** As stated in Chapter 1, Section 1.4, of the SWEIS, NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS.

**317-169** Decisions about cleanup of legacy waste sites and other contaminated areas will be made in accordance with established regulatory standards and processes, including those of DOE and the New Mexico Environment Department as related to the March 2005 Consent Order. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Appendix I of the SWEIS presents options and environmental analyses related to future remediation activities at LANL that are primarily concerned with the requirements of the March 2005 Consent Order. Section I.3 in Appendix I addresses the types of site investigation measures that will be implemented, including those for detecting and quantifying the possible movement of contaminants from former storage and disposal areas, as well as possible remediation techniques such as capping, removal, or installation of hydraulic barriers (for example, see Sections I.3.2.2, I.3.3.1, I.3.3.2.2.3, and I.3.4.1).

The future use of lined rather than unlined pits for low-level radioactive waste disposal is under evaluation through the Area G Performance Assessment and Composite Analysis that is required by DOE Order 435.1 and is periodically reviewed and updated. The Performance Assessment and Composite Analysis will guide decisions regarding operational procedures and waste disposal. This SWEIS considers impacts from the use of unlined pits as its No Action Alternative baseline, (see Appendix I, Section I.5.3.1.2); this impact analysis thereby bounds the long-term environmental consequences that could result from the use of lined disposal pits. Refer to Sections 2.7, Waste Management, and 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

All proposed remedial options should include features to prevent the lateral flow of water into the wastes. Those features could consist of impermeable barriers or capillary breaks.

**317-169  
cont'd**

**Tritium in White Rock Canyon**

The SWEIS states:

*"However, groundwater from springs in White Rock Canyon has no tritium and probably ranges in age somewhere between 3,000 to 10,000 years (LANL 2005a)."*<sup>6</sup>

**317-170**

This is incorrect. A number of springs in White Rock Canyon discharge water that contains tritium (e.g., CCNS Spring (2B); springs 4, 4A, 4B, and 4C; and Doe Spring).<sup>7</sup> The presence of tritium at these springs shows that at least a portion of the water is recent. That is, the water was recharged since LANL was established in 1943.

**Definition of background groundwater quality**

DOE claims that the discharges from a number of springs in White Rock Canyon represent background groundwater quality for the Pajarito Plateau<sup>8</sup>. However, one of them, La Mesita Spring, is east of the Rio Grande<sup>9</sup> and flows from a point 20 m above the river.<sup>10</sup> Therefore, groundwater discharging from this spring may originate in the mountains to the east of the Rio Grande. If this is the case, samples from La Mesita Spring do not represent background for the Pajarito Plateau.

**317-171**

Unless DOE can show that the discharge from La Mesita Spring originates on the Pajarito Plateau, samples from spring should not be used to define background quality for the Pajarito Plateau.

**Contaminants in Regional Aquifer**

The SWEIS states:

*"As a result, little contamination reaches the regional aquifer from the shallow perched groundwater bodies and water quality impacts on the regional aquifer, though present, are low."*<sup>11</sup>

<sup>6</sup> DOE, 2006a, page E-33.

<sup>7</sup> CCNS, 2004, table 8-1.

<sup>8</sup> DOE, 2006a, figure E-9.

<sup>9</sup> Purtyman, 1995, figure XXII-B.

<sup>10</sup> LANL, 2005a, page E-2.

<sup>11</sup> DOE, 2006a, page 4-63.

- 317-170** The report that the commentor is using as a reference (George Rice's report on groundwater contaminants) states after the commentor's quote: "However, the tritium data do not necessarily support the conclusion that the groundwater contains LANL-derived wastes." Rice assumes that flow is through the Otowi Member of the Bandelier Tuff. This unit does not extend to the Rio Grande in any large capacity. Furthermore, his estimates do not consider that the recharge to the springs may be close to the point of discharge.
- 317-171** The Rio Grande is not necessarily a boundary between the Sangre de Cristo uplift rocks and the Jemez volcanics. There are rocks on both sides of the river that are contemporaneous. Groundwater passing through these rocks is likely to have similar characteristics.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

This is incorrect. Chromium concentrations as high as 404 µg/L have been detected in regional aquifer well R-28. This is more than four times higher than the Federal drinking water standard and eight times higher than the State drinking water standard.<sup>12</sup>

**References**

Concerned Citizens for Nuclear Safety (CCNS), 2004, *New Mexico's Right to Know: The Potential for Groundwater Contaminants from Los Alamos National Laboratory to Reach the Rio Grande*, July 2004.

Department of Energy (DOE), 2006a, *Draft Site-Wide Environmental Impact Statement for Continued Operation of Los Alamos National Laboratory, Los Alamos New Mexico*, DOE/EIS-0380D, June 2006.

Los Alamos National Laboratory (LANL), 2005a, *Groundwater Background Investigation Report*, LA-UR-05-2295, June 2005.

Purtyman, W.D., 1995, *Geologic and Hydrologic Records of Observation Wells, Test Holes, Test Wells, Supply Wells, Springs, and Surface Water Stations in the Los Alamos Area*, January 1995, LA-12883-MS, UC-903 and UC-940.

Rogers, M.A., 1977, *History and Environmental Setting of LASL Near-Surface Land Disposal Facilities for Radioactive Wastes (Areas A, B, C, D, E, F, G, and T), A Source Document*, June, 1977, LA-6848-MS, Vol. 1, Informal Report.

*Comment side of this page intentionally left blank.*

<sup>12</sup> DOE, 2006a, page 4-65.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

Exhibit 6.1

Where Do the Children Play?  
CCNS and EVEMG draft LANL SWEIS Comment Mix  
Song Selection Made By Kalliroi Matsakis and Leah McLeroy

The following is a track list for the enclosed music mix compact disk (Mix CD). This Mix CD is intended to compliment our comments, by providing emotional undertone, which our specific, and even general, comments cannot convey. It is also intended for your enjoyment while reviewing the public comments regarding the draft LANL SWEIS.

As stated above, CCNS and EVEMG request a response, in kind, to this Mix CD. The remarks following the title and artist for each track are intended to aid you in preparing such a response. If you have any questions or would like to schedule a meeting to discuss our request further, please contact Kalliroi Matsakis, Media Network Coordinator, Concerned Citizens for Nuclear Safety, by phone at 986-1973, or email at kmatsakis@nuclearactive.org.

**Track 1:** *Where Do the Children Play*, Cat Stevens  
An evolving family of nuclear weapons, which has come a long way from Fat Man and Little Boy, and is changing day to day, is all well and good, but we ask you "Where do the children play?"

One answer is on baseball fields next to Area G, the legacy and low-level nuclear waste dump. Another is in *Acid Canyon*, which is as safe as an extended backyard so long as they don't eat the dirt (please see Exhibit 9.3 and/or <http://www.ieer.org/reports/lanl/cleanup.pdf>).

**Track 2:** *The Battle Is Over, But the War Goes On*, Sonny Terry and Brownie MaGhee  
"Its only through love, this ol' world can stay alive"

**Track 3:** *River*, Joni Mitchell  
We wish we had a river which was not contaminated with elevated levels of PCBs, to the extent that you cannot eat the channel catfish caught in White Rock Canyon. Please see Exhibit 6.2.11.

**Track 4:** *Imagine*, John Lennon  
Imagine the first verse went a little something like this:

Imagine incorporating our comments  
It's easy if you try  
No DU Burned

CCNS and EVEMG Comments about draft LANL SWEIS \* September 20, 2006 \*  
Exhibit 6.1 Page 1

**Note:** Comments on the LANL SWEIS associated with the cited tracks are addressed elsewhere in the responses to these commentor's comments.

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

Openly in our sky  
Imagine all the people  
Breathing clean air

Imagine there's no new nukes  
It isn't hard to do  
Nothing to kill or die for  
No more waste TRU  
Imagine all the people  
Living life in peace

You may say that we are dreamers  
But we are not the only ones  
We hope someday that you will join us  
And the world will live as one

**Track 5: *I Wanna Be An Engineer*, Pete Seeger**  
Please see above comments regarding employment discrimination at LANL.  
Solidarity Forever.

**Track 6: *Talking about a Revolution* Tracy Chapman**  
Los Alamos County is the richest county in the country and surrounded by some  
of the most impoverished counties in the nation. Please See Exhibit 8 and 9.1

317-172

**317-172** As more LANL employees move into adjoining counties, as has happened  
in recent years, these counties are expected to receive a greater share of  
the benefits from LANL operations.

**Track 7: *A Hard Rain is Gonna Fall*, Bob Dylan**  
Data presented in the draft LANL SWEIS shows that there are very high levels of  
plutonium in storm water run off, as well as in the regional aquifer as reported in  
Appendix F of the draft LANL SWEIS. Please see comments from the Institute  
for Energy and Environmental Research for more details.

**Track 8: *Eve of Destruction*, Barry Mc Guire**  
When you are singing along to this track please pay close attention to the line  
that says "I can't twist the truth, it knows no regulation" and please consider  
using this line instead "I will twist the truth, because I forgot the regulations" or  
maybe "I always the twist the truth, because I don't care about the regulations"  
or on a more uplifting note "I won't twist the truth anymore, because I respect  
and love the regulations".

Please see CCNS and EVEMG water comments and Exhibits 1-4 for further  
discussion of DOE/NNSA's use of regulations in the draft LANL SWEIS.

**Track 9: *Ball of Confusion (That's What the World is Today)*, The Temptations**  
"Oh, great googalooga, can't you hear me talking to ya?"

CCNS and EVEMG Comments about draft LANL SWEIS \* September 20, 2006 \*  
Exhibit 6.1 Page 2

**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

**Track 10:** *War*, Edwin Star  
'Nuff said.

**Track 11:** *Wade in the Water* Big Mama Thornton  
All people that live downstream and downwind from LANL require and have a right to clean water for drinking, sacred ceremony, growing food, raising animals, recreating, and overall wellbeing. Please see the Los Alamos National Laboratory Water Watch Shared Values Statement, Exhibit 16.2.

**Track 12:** *Bad to the Bone*, George Thorogood  
This is a shout out to the Institute for Energy and Environmental Research, and their report, 'Bad To the Bone: Plutonium and Drinking Water Standards.'  
DOE/LANL must check out the report and the proposal to lower the standard for plutonium and other actinides in drinking water by 100 times based on new understanding of plutonium in the human body. These findings must be incorporated into the reanalysis for a new draft LANL SWEIS. Please see: <http://www.ieer.org/reports/badtothebone/fullrpt.pdf>

**Track 13:** *Man in Black*, Johnny Cash  
And why do our comments have a somber tone? Well there's a reason for the things we've put down. . .

**Track 14:** *Lies*, Violent Femmes  
The draft LANL SWEIS relies on conclusions made in the **draft** Agency for Toxic Substances and Disease Registry (ATSDR) Public Health Assessment for its statement that there is no health impact from existing and proposed operations. The draft report was released for public comment last summer. In comments about the draft assessment, the Environmental Protection Agency (EPA) stated, "**Blanket statements** are made regarding the conservatism of this public health assessment **without supporting documentation**. In general, a risk assessment is revised to reflect more appropriate site-specific exposures or exposure point concentrations to rather than rely upon defaults and **declare** that the risk assessment is conservative." (Emphasis added) p.1 Exhibit 17.1. Further, this ATSDR public health assessment was shelved without response to comments due to lack of funding as stated in an ATSDR letter dated December 8, 2006. The ATSDR report has not been finalized, yet DOE/NNSA relied upon its conclusions in the draft LANL SWEIS.

**Track 15:** *Trash*, New York Dolls  
Let us clarify the lyrics, "TRASH, go pick it up, don't take your life away." CCNS and EVEMG state that the MDA removal option is the only way to protect surface water, ground water and existing and future drinking water supplies.

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**Commentor No. 317 (cont'd): Joni Arends, Executive Director,  
Concerned Citizens for Nuclear Safety,  
Sheri Kotowski, Embudo Valley Environmental Monitoring Group**

**Track 16: 'Godzilla', Blue Oyster Cult**

Godzilla was a Japanese pop culture response to the United States dropping atomic bombs on two Japanese cities, Hiroshima and Nagasaki. The bombings occurred only three days apart, on August 6<sup>th</sup> and 9<sup>th</sup>, 1945. These bombings killed over 70,000 people instantly and many, many more over time. Please see the photos of Hibakusha and Hiroshima Shadows in Exhibit 6.2.

Please recall that August 9<sup>th</sup> was also the date of the second Public Comment Hearing from the draft LANL SWEIS, held in Española, NM. Ms. Withers described this scheduling choice as "ironic." We would say 'telling,' but perhaps we should quote Blue Oyster Cult and say, "history shows again and again, how nature points out the folly of man."

**Track 17: Human Behavior, Bjork**

There is no way to determine the future land use because there is definitely, definitely, definitely no logic to human behavior. Therefore all cleanup must be done to a level which would allow a future pregnant subsistence farmer and her children and grandchildren to live there for their entire lives.

**Track 18: Atomic, Blondie**

Despite how sexy this song may be, nuclear weapons are not hot, well, not figuratively at any rate.

**Track 19: Party Like Its 1999, Prince**

Although the millennium didn't bring the apocalypse, relying so heavily on the analysis in the 1999 LANL SWEIS just might. Especially when it is applied as a substitute for a true No Action Alternative in the draft LANL 2006 SWEIS.

**Track 20: Respect, Aretha Franklin**

The draft LANL SWEIS is misleading, incomplete, inadequate and technically indefensible. DOE/NNSA must withdraw it and issue a new . . . you read our comments, we don't need to repeat ourselves yet again. All we are asking for is a little R-E-S-P-E-C-T.

317-173

**317-173** NNSA prepared this SWEIS in accordance with Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and DOE NEPA implementing procedures (10 CFR Part 1021). As appropriate, the SWEIS was revised in response to comments on the Draft SWEIS.



Campaign A

Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office  
National Nuclear Security Administration  
U.S. Department of Energy  
528 35th Street  
Los Alamos, New Mexico, 87544-2201

Dear Ms. Withers,

I do not support any increases in nuclear weapons research, development or production. For this reason, I oppose the proposed expanded operations alternative in the draft 2006 Site-Wide Environmental Impact Statement (SWEIS) for Los Alamos National Laboratory (LANL). This alternative will generate more radioactive and chemical waste as well as increase dangerous air emissions and wastewater discharges into the canyons that flow to the Río Grande.

A-1

The draft SWEIS makes many references to a modern pit facility (MPF) capable of producing 450 plutonium pits per year, despite widespread opposition to a MPF by New Mexicans in 2003. These activities have dire local, national and international implications. The draft SWEIS lacks a discussion of how a MPF or increase pit production would not violate the Nuclear Nonproliferation Treaty. There should be no reference made to a MPF at LANL in the final SWEIS.

A-2

I object to the foundation and the methodology of the draft SWEIS, as the document is not founded on accepted science and based on studies that also have not been finalized. The analysis of risks to human health relies on the draft Agency for Toxic Substances and Disease Registry (ATSDR) public health assessment for health impacts analysis. This assessment was rejected by the Environmental Protection Agency (EPA) and never finalized. Furthermore, the draft SWEIS was released before either the risk assessment for LANL's low-level waste dump at Area G or the 2006 seismic hazard study were completed. It is impossible to accurately determine the environmental and health impacts for future operations at LANL based on incomplete analysis. The SWEIS must include a reanalysis based on the findings in the 2006 Area G risk assessment and seismic hazard study. The ATSDR assessment must be rewritten with public oversight and review and only then can it be used in any analysis regarding LANL activities.

A-3

A-4

A-3  
cont'd

The draft SWEIS does not have appropriate or adequate discussion of clean up, environmental justice, the impacts of air and water emissions and waste disposal. Contrary to my belief and wishes it rejects even the possibility that the mission of LANL could be changed toward peaceful and life-affirming research.

A-5

A-1

NNSA notes the commentors' opposition to activities related to nuclear weapons production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. The various sections of Chapter 5 of the SWEIS analyze the environmental impacts of the Expanded Operations Alternative, including management of radioactive and chemical waste, monitoring of air emissions, and treatment or monitoring of wastewater discharged through National Pollutant Discharge Elimination System-permitted outfalls. The commentor is correct that the Expanded Operations Alternative would result in greater amounts of radioactive and chemical waste as well as increased air emissions and wastewater discharges but as demonstrated in the SWEIS, these increases can be safely managed. It should be noted that treated effluents do not normally flow directly into the Rio Grande; surface waters may reach the river a few times a year during large precipitation events. Refer to Section 2.6, Offsite Contamination, of this CRD for more information.

A-2

Reference to a modern pit facility in the Draft LANL SWEIS was in the context of ensuring that reasonably foreseeable future actions were addressed in accordance with the Council on Environmental Quality NEPA regulations regarding cumulative impacts. The LANL SWEIS alternatives addressing operational levels for the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative). In October 2006, NNSA issued a Notice of Intent (71 FR 61731) to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (DOE/EIS-0236-S4). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2) (71 FR 61731). The Final LANL SWEIS does not include reference to a modern pit facility. In discharging its responsibilities for nuclear stockpile management, NNSA is not violating the Nuclear Nonproliferation Treaty. Refer to Section 2.1,

Campaign A (cont'd)

I object to the fact that increased cleanup was only included in the Expanded Operations and not part of the No Action and Reduced Operations Alternatives. Compliance with the New Mexico Environment Department (NMED)/LANL Consent Order for cleanup at LANL by 2015 is not optional nor should it be tied to activities which threaten public health and the environment. Increased Consent Order cleanup analysis should be included in all three alternatives.

A-6

When implementing cleanup, LANL must do so to the fullest extent possible. Lands must be cleaned up to the level that allows for a future pregnant subsistence farmer and her children to live on the land, grow food, raise animals and drink the water for their entire lives with good health. All waste must be removed during cleanup.

A-7

LANL currently has approximately 40,000 drums of transuranic waste sitting above ground in fabric tents awaiting shipment to WIPP. However, the proposed expanded operations focuses on a vast expansion of waste generation and removing drums that are currently buried in Area G. DOE should address permanent disposal of existing waste before further waste generation is even considered.

A-8

LANL activities jeopardize both water quality and quantity. New Mexicans rely on this water for drinking and farming. Contaminants exceeding accepted levels for health have already been found in surface water and the regional aquifer. DOE did not use the most current water quality standards or consider contaminants that are moved in running canyons when analyzing the impacts to our water. DOE finds no problem with increasing LANL's water usage above the amount allotted to it from the regional aquifer while proposing to dump 268 million gallons of treated wastewater into the canyons which flow to the Río Grande. It is unacceptable that LANL blatantly disregards laws regulating water quality and quantity.

A-9

LANL must be required to reevaluate and broaden their air sampling programs. Toxic and radioactive air emissions do have a detrimental impact on the surrounding area and people. The draft SWEIS allows for processing 87,000 pounds of high explosives and up to 6,900 pounds of depleted uranium (DU) to be blown up in "dynamic experiments" annually. DOE must monitor and implement comprehensive sampling programs at all open burning and open detonation sites and for all activities using high explosives and DU. Beyond that, DOE must institute a program to stop all toxic air pollutant emissions from LANL facilities and activities.

A-10

The Expanded Operations Alternative will result in higher demands for electricity, water and natural gas, which will impact the environment as well as increased car emissions from commuters. These impacts must be considered in the cumulative impacts of the Expanded Operations Alternative.

A-11

Opposition to Nuclear Weapons and Pit Production, Section 2.2, National Environmental Policy Act (NEPA) Process, and Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

A-3

The SWEIS uses current, accepted, and well-documented scientific models and data that have been, and continue to be used widely to analyze environmental impacts for the purpose of compliance with NEPA. The analysis methods used are essentially the same as were used in preparation of several DOE Environmental Impact Statements that have recently been published in final form or have been reviewed, in draft, by the public. No Federal, State or private agency or institution with scientific standing has challenged any of the fundamental scientific and technical foundations of those recent analyses. In general, the data, models, assumptions, and other information used in the SWEIS are drawn from published sources and have been subjected to scientific peer review. Chapter 7 of the SWEIS and each of the Appendices lists the documented sources of information and models used in the analyses. All SWEIS data sources and references are available to the public.

The SWEIS presents an independent assessment of public health impacts from contaminants in the LANL environment. The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry Public Health Assessment in any specific way for its conclusions. The Agency for Toxic Substances and Disease Registry is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting Public Health Assessments at each site on the EPA National Priorities List. It is appropriate for the SWEIS to acknowledge the conclusions of the LANL Public Health Assessment because the Public Health Assessment is a relevant Federal agency study.

The EPA did not reject the draft Public Health Assessment. The EPA provided comments on the draft Public Health Assessment which were addressed by the Agency for Toxic Substances and Disease Registry in the final assessment. The Public Health Assessment was finalized and released August 31, 2006 (ATSDR 2006).

The Agency for Toxic Substances and Disease Registry Public Health Assessment for LANL was prepared with public oversight and review. The agency released the draft Public Health Assessment for public

*Campaign A (cont'd)*

Operations at LANL are a major violation of environmental justice. New Mexico has the second highest minority population in the country. It is not possible that LANL activities would have no effect on these populations. The analysis uses six-year-old information and does not account for undocumented residents nor low-income individuals above the poverty level. In addition, there are 15 Pueblos within the 50-mile radius of LANL, and yet the public hearings are to take place during Pueblo feast days which assures in large part that many will be unable to participate. I request a reanalysis in the final SWEIS, with public input and review.

A-12

My recommendation is that Congress change the mission of LANL to focus on research and development into renewable energy, such as solar, wind and biomass, and clean up technologies that support the environmental and public health. The SWEIS must include a fourth alternative that focuses on these activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

A-13

Sincerely,

Selma Harwell  
pobox 86  
Embudo, NM 87531

SELMA HARWELL  
GLOBAL WELLNESS BY 2020  
USANA HEALTH SCIENCES  
#5 on Forbes Top 200 Companies  
#3 on Business Week's Top 100 Companies

comment on April 26, 2005 with the public comment period ending August 8, 2005. In response to public requests, the Agency for Toxic Substances and Disease Registry extended the public comment period to December 1, 2005. Appendix I to the final Public Health Assessment lists the comments on the draft that were received from members of the public and other Federal agencies and describes how those comments were addressed in the final Public Health Assessment. The Public Health Assessment document states that the Agency for Toxic Substances and Disease Registry conducted its evaluations in accordance with guidance provided in the Public Health Assessment Guidance Manual, which is available at [www.atsdr.cdc.gov/HAC/PHAManual/index.html](http://www.atsdr.cdc.gov/HAC/PHAManual/index.html).

A-4

To the extent possible, the most recent technical documents, including an update to the seismic hazard analysis, completed in June 2007, are considered in the Final SWEIS analyses. Information under development that is not available for use in the Final SWEIS, such as the updated Area G performance assessment, will be considered as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

A-5

NNSA notes the commentors' desires regarding the mission of LANL. LANL scientists currently conduct research in areas such as renewable energy and global climate change, and support nonproliferation programs in addition to their efforts in support of LANL's Stockpile Stewardship mission. Refer to Section 2.3 of this CRD, Alternative Missions, for more information. NNSA has prepared project-specific analyses in the appendices and Chapter 5 of the SWEIS that present

Campaign A (cont'd)

appropriate and adequate analyses of LANL impacts. Appendix I provides an extensive discussion of actions to comply with the Consent Order for cleanup of LANL. The impacts of air and water emissions, and waste disposal, and the potential for environmental justice impacts are addressed, as appropriate, in Chapter 5 and the appendices; the results of the analyses are summarized in both Chapter 3 and the Summary.

- A-6** NNSA does not consider compliance with the Consent Order to be optional, and is not linking Consent Order compliance with decisions about pit production; proposed new projects or activities; increased operational levels; or waste generated from other LANL activities. Chapter 1, Section 1.3, of the SWEIS defines the three alternatives and explains why activities to comply with the Consent Order are included only in the Expanded Operations Alternative. Section 1.4 states that NNSA could choose to implement the alternatives either in whole or in part, and that NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.
- A-7** Although Appendix I of the SWEIS evaluates the environmental impacts associated with potential remedial action alternatives, decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the State of New Mexico for the Consent Order. To arrive at a decision about remediating a contaminated site, several alternative remedies such as containment in place, treatment, or removal may be considered. Any remedy selected for a site requiring environmental restoration must meet several criteria including protection of human health and the environment, and attainment of applicable cleanup standards including those for ground and surface waters and soil. If the site is to remain under DOE ownership, cleanup standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted access by the public, the site would need to meet cleanup standards for unrestricted access. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the State of New Mexico using cleanup criteria documented in Section VIII of the Consent Order. Refer to Section 2.9,

Campaign A (cont'd)

- Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.
- A-8** Although a pollution prevention and waste minimization program has been instituted at LANL (see Chapter 4, Section 4.9, of the SWEIS), operation of LANL in support of NNSA's core missions will cause the generation of waste that NNSA intends to safely manage while it continues to address existing waste in storage. Nearly all of the stored waste at LANL consists of legacy transuranic waste that is stored above ground within domes in TA-54. Most of this waste was originally stored below ground, but was retrieved and placed in an above ground, inspectable configuration as required by the State of New Mexico. NNSA is working to prepare all stored and newly generated transuranic waste for shipment to WIPP. Shipment rates for 2006 have increased significantly over past years. Refer to Section 2.7, Waste Management, of this CRD for more information.
- A-9** Chapter 4, Tables 4-7 and 4-9, of the SWEIS, have been updated to reflect water quality standards recently issued by the New Mexico Water Quality Control Commission. The new standards have not yet been approved by the U.S. Environmental Protection Agency; nevertheless, they are used in the 2005 Environmental Surveillance Report and the SWEIS in evaluating water quality data. As shown in Table 4-7, surface water data are compared to a variety of standards that legally apply, in order to identify contaminants and data trends that could indicate the need for corrective actions. DOE and Los Alamos County have combined water rights of 1,806 million gallons (6,836 million liters) per year, of which 542 million gallons (2,050 million liters) per year are allocated to DOE. The largest amount of water used by DOE and the county in recent years was the 1,515 million gallons (5,735 million liters) used in 2000, the year of the Cerro Grande Fire. As shown in Table 4-39 and discussed in Section 5.8.2, LANL water usage has been and is expected to remain below its 542 million gallons (2,050 million liters) per year allotment. Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Section 4.3.1.2, over the last 6 years, LANL has had a very good record of complying with permit conditions. LANL would be expected to continue to meet permit conditions designed to protect water

Campaign A (cont'd)

resources under all alternatives. Treated effluents do not normally flow directly into the Rio Grande; surface waters may reach the river a few times a year during large precipitation events.

**A-10** Current air sampling programs at LANL include ambient non-radiological air monitoring, an ambient radiological air sampling network, AIRNET, and stack sampling for radionuclides, as described in Chapter 4, Sections 4.4.2.3 and 4.4.3.1. The Clean Air Act, Title V operating permit includes requirements for monitoring emissions from sources at LANL and recordkeeping concerning those sources. Although toxic and radioactive air emissions can potentially have detrimental impacts, the past emission levels analyzed and those projected for LANL would not be expected to cause unacceptable impacts on human health or the environment, as shown in Chapter 4, Sections 4.6.1.3, 5.4.1.1, and Chapter 5, Section 5.6.2. NNSA has revised Chapter 6, Section 6.4 to reflect that the open burning permits have been withdrawn at LANL's request and the associated activities have ceased. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information on high explosives and depleted uranium activities.

**A-11** The cumulative impacts of the Expanded Operations Alternative for electricity, water, and natural gas demands were evaluated and are discussed in Chapter 5, Section 5.13. Although not anticipated, future expansion of the LANL infrastructure to supply additional electricity, water, or natural gas, would be preceded by appropriate environmental documentation. Changes made to the offsite infrastructure to meet LANL demands would be required to meet applicable State and Federal environmental regulations. Sections 5.4.1.3 and 5.13 and the Summary have been revised to discuss the potential increase in emissions from increases in commuter traffic to LANL. Increased employment of 2.2 percent per year under the Expanded Operations Alternative could result in similar increases in LANL commuter-specific vehicle emissions from additional employee vehicles commuting from Santa Fe and Rio Arriba Counties and other locations. The actual change in overall traffic emissions would be much less since LANL-specific traffic is only a portion of the overall regional traffic volume.

Campaign A (cont'd)

**A-12** As discussed in Section 5.11, no disproportionately high and adverse environmental impacts on minority and low-income populations would be expected to result from LANL operations. The analyses presented in the SWEIS use the latest Census data available. In collecting data for the Census, the Census Bureau does not ask about the citizenship of respondents. The Census Bureau expects, however, that undocumented residents are among those included in the population counts given the success of the Census in counting nearly every person residing in the United States. DOE and by extension NNSA define low-income populations in terms of the Census Bureau's statistical poverty level. This is the definition used in the SWEIS and it is also consistent with EPA's approach as discussed in the April 1998 "Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analysis" (EPA 1998). Since the Draft SWEIS was published, the Census Bureau has released revised projections through mid-2005 for select counties in New Mexico, including Santa Fe County. This information was compared to the data for 2000 and these more recent projections would not change any of the analysis presented in the SWEIS since the level of minority or low-income populations in the available counties did not change substantially from the levels reported in 2000.

NNSA planned and implemented its public participation activities for the Draft SWEIS consistent with past practices for other NEPA documents prepared for LANL. Meetings were held on a number of different days in Los Alamos, Espanola, and Santa Fe. For people who were unable to attend the meetings, NNSA provided a number of other ways to comment on the SWEIS. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information about scheduling the public meetings and opportunities to comment on the SWEIS.

**A-13** NNSA notes the commentors' recommendation that the Congress change LANL's mission. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3,

Campaign A (cont'd)

Alternative Missions, of this CRD for more information. Regarding a fourth alternative, Section 2.3 also addresses the need to incorporate a "Greener Alternative." A "Greener Alternative" was not included in this SWEIS because it does not support the nuclear weapons mission; aspects of this alternative are incorporated into the No Action Alternative.



Campaign A (cont'd)**Individuals also submitting this campaign:**

Calilah Ananda	Steven D. Maison	Tish Wilson
Levi Armlovich	Marilyn Mars	Evelyn M. Witt
Mary Lou Bender	Felicia Martinez	Nancy Kay Yankura
Mark Bremer	Linda Martinez	Jonah Zimmerberg-Helms
Ralph Bruening	Ronald Martinez	Adele E. Zimmerman
Kenneth F. Buermoet	Barbara Masket	
Dorelen Bunting	Kenneth E. Mayers	
Patrick Burns	Michael McKittrick	
John Carpenter	Rosemary McKittrick	
Alea Cdebaca	Leah McLeroy	
Mike Chapman	Joan P. Meeske	
Prentiss Childs	John Melcher	
Ciaran A. Clark	A. Mendiola	
Victoria S. Clark	Basia Miller	
Craig Conley	Nathan Moore	
Sansi G. Coonan	Philippe Morin	
Kenneth Coutant	Stevie Nichols	
David J. Cuellar	Bill Palmer	
Stephen J. Cummings	Jim Palmer	
Libero A. DiZinno	Linda Palmer	
Aleta Drumm	Nicholas Peñalosa	
Sky Fabin	Craig Quintana	
Emily Fedman	Michael J. Quintana, Jr.	
Eliza T. Garcia	Josh Riebsomer	
Shane Gassaway	Ronald E. Rinker	
Rick Gee	John Rodke	
Julia Geffroy	Emily Romero	
Rev. Pamela Gilchrist	Lauren Sachs	
Virginia Gilstrap	Jessica SanFilippo	
Robert Greeney	Sallie Shatz	
Nona Lee Gregg	Stacie Shiffler	
Sherie C. Hartle	Elliott Skinner	
Selma Harwell	Sandra Solomon	
Grant Hayvnga	Barbara Stein	
Lito Hernandez	David A. Stephenson	
Eddie Holguin	Dwight Stephenson	
Danielle Holyk	Michael Stewart	
Stephanie E. Johnson	John Veltman	
Irene Joyce	Joost Verbouen	
Emily Khan	Jerry Wellman	
Daniel Kiphart	Amy Westphal	
Kendra Lauman	Paul White	
Matt Lovato	John William	
Michael Lujan	Natalie Willis	

**Campaign A (cont'd)**

**Individuals submitting "Campaign A Letter" with additional comments**

and public health. The SWEIS must... alternative that focuses on these activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely, *Sansi G. Coonan*  
Print Name *Sansi G. Coonan*  
Address *732 Los Lovatos Rd*  
Additional Comments:

*We all have a sacred duty to consider our children and all those other children who will live and breathe here in years to come. We have no right to leave them cancer and suffering.*

**AI-1**

**AI-1**

NNSA notes the commentor's concern regarding the potential health impacts of LANL operations. Chapter 4, Section 4.6.1, of the SWEIS provides information on current cancer mortality and incidence rates in New Mexico and counties surrounding LANL. Table 4-26 shows that some cancer rates in the Los Alamos vicinity are lower than the national average and some are higher, which is typical of any area. This section also presents information from the final LANL Public Health Assessment, issued on August 31, 2006 by the U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry which determined that, "...there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "...overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006).

Chapter 5 of the SWEIS describes the environmental impacts of each of the three alternatives for continuing to operate LANL and includes the effects on surface waters, groundwater, and air. Section 5.13 states that contamination from LANL or changes in Rio Grande flows are not likely to affect water quality. In addition, a drinking water pathway analysis has been added to Appendix C to address concerns expressed regarding contamination of the Rio Grande. The analysis shows that drinking Rio Grande water that could potentially be impacted by LANL activities is comparable to drinking water from the Jemez River, which is not downstream of LANL. The health impacts analysis uses air monitoring data to estimate dose to the population within a 50-mile (80-kilometer) radius of LANL. The maximum projected annual population dose would be 36 person-rem under the Expanded Operations Alternative. This dose would not be expected to result in any additional latent cancer fatalities in the affected population.

**Campaign A (cont'd)**

**Individuals submitting "Campaign A Letter" with additional comments**

activities. The DOE does think that... is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely,  
Print Name **Elliott Skinner**

Address **903 Don Miguel Place,  
Santa Fe, N.M. 87505**

Although you will consider the following points irrelevant (i.e., "outside the scope"), I insist that the development and production of nuclear weapons is an immoral act, which will only increase the lack of security in the world. Nuclear weapons work at LANL damages the moral fibre of our region. The blazing lights of TA 55, so visible from my home, mark a place of evil activity, compounding the hypocrisy of our country's claims to be a moral leader in our world. LANL's two-billion dollar per year budget is obscene. The laboratory should be closed, since it seems unable to devote its explosives technology to useful, humane, positive goals. It is well known that the level of "science" at the bomb factory is very low, since it is shielded from peer review. Bomb-making is a shameful activity. It should be stopped. Elliott Skinner

Page 3 of 3

**A2-1**

**A2-1**

NNSA notes the commentor's opposition to nuclear weapons production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**A2-2**

**A2-2**

NNSA notes the commentor's opinion that LANL should be closed. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President, and is therefore not being considered in the SWEIS. These activities are supported by some of the top scientists in the world who have well-known credentials. Many of LANL's scientists have published peer-reviewed technical papers and DOE procedures require reviews to promote quality control of activities. Activities associated with safety and health have oversight from external organizations such as the Defense Nuclear Facilities Safety Board.

**A2-1  
cont'd**

**Campaign A (cont'd)**

**Individuals submitting "Campaign A Letter" with additional comments**

and p... While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely,

Print Name  
Address  
Additional Comments:  
*Julia Geffroy*

*Julia Geffroy  
Picuris Pueblo  
PO Box 703  
Penasco, NM  
87553*

*Nuclear weapons research is  
unacceptable - Native American  
and poor minority groups live  
below LANL and won't leave  
because it is their home. We have  
been here before LANL and will  
be there after. Stop supporting this  
effort because pollution knows no  
boundaries. We are all affected - GLOBALLY*

A3-1

A3-1

NNSA notes the commentor's opposition to nuclear weapons research. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, and Section 2.11, Environmental Justice, of this CRD for more information regarding LANL's national security mission and impacts to minorities and Native Americans.

A3-2

A3-2

Chapter 5 of the SWEIS evaluates the potential environmental and health and safety impacts of continued operation of LANL under the three proposed alternatives. These analyses demonstrate that LANL can continue to operate safely under any of the three alternatives in a manner that complies with all environmental laws and regulations designed to protect public health and the environment. These potential impacts are summarized in Chapter 3, Table 3-19, and Summary Table S-5, of the SWEIS. Refer to Section 2.6, Offsite Contamination, of this CRD for more information on the potential impacts to the air, water, and other environmental media from continued LANL operation. These impacts are within applicable environmental standards.

and p... While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely,

Print Name  
Address  
Additional Comments:  
*Mary Lou Bender*  
*73 Arroyo Seco Circle, Espanola, NM 87532*

*I'm so thankful for those who did the  
research and identified the above problems,  
that are serious in nature. I am opposed  
to more manufacturing of atomic weapons, in  
fact, any atomic weapons. They are inhuman!*

A4-1

A4-1

NNSA notes the commentor's opposition to the manufacture of nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**Campaign A (cont'd)**

**Individuals submitting "Campaign A Letter" with additional comments**

and the SWP alternative that is activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely,

*Evelyn M Witt*

Print Name Evelyn M Witt  
Address 48 County RD 126, Española NM 87532

Additional Comments:

*I feel the direction LANL is going has serious implications, not only for this area, but for this country and the world. Also, the Bechtel Group states very publicly, "We are in the business of making money. When money is the primary objective, most often, that is not, all sensible and reasonable objections are either ignored or in some way thwarted. Their past record is not a shining example of ethical business practices!" I think all good people at LANL need to be concerned, including yourself.*

A5-1

A5-1

NNSA notes the commentor's statement regarding activities at LANL. Refer to Section 2.1 of this CRD, Opposition to Nuclear Weapons and Pit Production, for more information. NNSA expects all of its contractors to comply with applicable laws and regulations and abide by standards of ethical conduct. The selection of the LANL contractor was made after consideration of many factors, including past performance.

***Campaign A (cont'd)***

***Individuals submitting "Campaign A Letter" with additional comments***

Ms. Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office  
National Nuclear Security Administration  
U.S. Department of Energy  
528 35th Street  
Los Alamos, New Mexico, 87544-2201

Dear Ms. Withers,  
I wish I had more time to send you an extensive and detailed letter instead of this form letter, however the form letter represents my sentiments exactly. I would like to suggest you do some legwork, go out to the community and do a poll, my guess is that 99% of the community would not want this insane proliferation of weapons (the 1% in favor no doubt might include scientists whose jobs will benefit).

When Los Alamos went up in flames a few years ago I was building my house and one day there was black smoke from the fire here in our valley 20 miles away (so now I know that the prevailing wind is in this direction). It did not smell like trees burning, it had a chemical quality to it. God only knows what I was breathing in that day or what is now in the ground here where I have a garden.

I have heard about the ground water pollution in Los Alamos and as you might know this percolates to the Rio Grande. Both Santa Fe and Albuquerque have plans for surface water diversions, and residents will be drinking that water. Then you have the silvery minnow, how will the undoubted pollution affect the minnow? I thought there were laws about if nothing else about other endangered species.

I am hoping you will be taking the public's concerns seriously,

Paul White  
94 Camino Chupadero  
Santa Fe, NM  
87506

I do not support any increases in nuclear weapons research, development or production. For this reason, I oppose the proposed expanded operations alternative in the draft Supplemental Environmental Impact Statement (SEIS) for the proposed expansion of the Los Alamos National Laboratory.

A6-1

A6-2

A6-3

**A6-1**

Smoke from all forest fires contains hundreds of organic and inorganic combustion products. Carbon monoxide, formaldehyde, acrolein, furfural, and benzene have been identified as potential health threats to wildland firefighters. Concentrations of these chemicals in smoke are extremely variable and depend on the type of fuel, weather conditions, efficiency of combustion, and other factors. However, chemical monitoring by the U.S. Environmental Protection Agency during and after the Cerro Grande Fire suggest that these chemicals were probably not present in high enough concentrations to pose a health threat to most people.

As noted in Chapter 4, Section 4.6.1.3, of the SWEIS, an independent assessment of public health risk associated with LANL area air contamination as a result of the fire was conducted by Risk Assessment Corporation at the request of the New Mexico Environment Department (RAC 2002). The study examined data on contaminants that were measured in air, on smoke particles, and in soil from the potential release sites and concluded that exposure to LANL-derived chemicals and radionuclides released to the air during the Cerro Grande Fire did not result in a significant increase in health risk over the risk from the fire itself. In fact, the cancer risk from exposure to radionuclides and metals released from vegetation that burned was shown to be much greater than the risk from radionuclides released from contaminated sites at LANL. Even using conservative (high) estimates of the chemical releases from LANL, the cancer risk from LANL-derived chemicals was estimated to be somewhat less than the risk from metals released from burning vegetation.

The New Mexico Environment Department collected produce and soil samples from farms and communities after the fire. Many of the metals measured were higher in predominantly upwind communities or communities out of the main smoke plume, such as Santa Fe, Peña Blanca, and Abiquiu, than in downwind communities like Embudo, Española, and Dixon. Levels measured in soil from the Jemez Mountains were similar or greater than those measured in locations downwind of the fire. Metals that have been used and disposed of at the site, such as barium, copper, beryllium, mercury, and silver, were either not increased or below detection limits. The influence of fallout from the smoke plume was not discernible in the soil samples taken and

*Campaign A (cont'd)*

*Individuals submitting "Campaign A Letter" with additional comments*

the New Mexico Environment Department concluded that air pollution, background soil levels, and fertilizer application could have been responsible for the levels measured.

- A6-2** Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, over the past 6 years, LANL has had a very good record of complying with permit conditions. It is expected that LANL will continue to meet permit conditions designed to protect water resources under all alternatives. In addition, NNSA operates a monitoring program (described in Chapter 4, Section 4.3.1.5) to detect contamination that has resulted from past practices. In accordance with applicable regulations and agreements, LANL staff evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters.
- A6-3** Critical habitat for the Rio Grande silvery minnow (*Hybognathus amarus*) was established by the U.S. Fish and Wildlife Service in 2003 (68 FR 8087-8135). The critical habitat designation in the Rio Grande extends from Cochiti Dam, Sandoval County, New Mexico, downstream to the utility line crossing the Rio Grande, a permanent identified landmark in Socorro County, New Mexico, and is approximately 157 miles (252 kilometers). This stretch of the Rio Grande begins more than 12 miles (19.3 kilometers) downstream from LANL. The concentration of radioisotopes present in surface water in the Rio Grande River at Cochida measured during surveillance in 2005 was indistinguishable from expected natural background values and would therefore not be expected to have any impact on the health of the silvery minnow.

Campaign A (cont'd)

Individuals submitting "Campaign A Letter" with additional comments

...ould have no  
... does not account  
... income individuals above the poverty level. In addition,  
there are 15 Pueblos within the 50-mile radius of LANL, and yet the public hearings are to take  
place during Pueblo feast days which assures in large part that many will be unable to  
participate. I request a reanalysis in the final SWEIS, with public input and review.

My recommendation is that Congress change the mission of LANL to focus on research and  
develop-ment into renewable energy, such as solar, wind and biomass, and clean up  
technologies that support the environmental and public health. The SWEIS must include a  
fourth alternative that focuses on these activities. While DOE does think that such a shift is  
possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely,

*Dorelen Bunting*

Print Name

*Dorelen Bunting*

Address

*1940 Poplar WSW Abq 87105*

Additional Comments:

*Above all, I am greatly  
disturbed by the abrogation of the  
Nuclear Non Proliferation Treaty!*

A7-1

A7-1

Operations at LANL that support NNSA's mission to ensure a safe and reliable nuclear stockpile are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.



Campaign A (cont'd)Individuals submitting "Campaign A Letter" with additional comments

does... shift to... at LANL... eral and sustainable  
research.

Sincerely, *Basia Miller*  
Print Name Basia Miller  
Address 2348 Vereda de Pueblo SF, NM 87507

## Additional Comments:

It's tragic to see such disregard for legal stipulations, for health & environmental problems, and for old promises regarding clean-up in the planning for expansion at Los Alamos. It would be good to give long thought to the impact of LANL's activities on the local populations and the long-term record that documents LANL's intentions. What does LANL see for the future, realistically?  
Thanks for reading.

A8-1

A8-1

NNSA is committed to operating LANL in accordance with applicable laws and regulations and to managing activities to be protective of public and worker health and the environment. The appendices and Chapter 5 of the SWEIS present projected environmental impacts associated with implementing the described projects and the continued operation of LANL. In addition to the projections in the SWEIS, the LANL contractor reports environmental releases and their estimated impacts in annual Environmental Surveillance Reports, providing the public with a clear picture of LANL's actual impacts. NNSA and the LANL contractor continue to remediate environmental releases from past LANL operations. As discussed in Chapter 1 and Appendix I of the SWEIS, this includes implementation of the Consent Order signed in March 2005 by NNSA, the LANL contractor, and the New Mexico Environment Department. The Consent Order establishes the process and schedule for a cleanup of LANL.

On January 11, 2008, NNSA issued the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (Complex Transformation SPEIS)* (DOE/EIS-0236-S4) (73 FR 2023), which analyzes the environmental impacts from the continued transformation of the nuclear weapons complex by implementing NNSA's vision of the complex. Thus, the role of LANL may change in the future.

technologies that support the... and public health. The SWEIS must include a fourth alternative that focuses on these activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely, *Prentiss Childs*  
Print Name PRENTISS CHILDS  
Address 812 HIGHLAND DRIVE  
LAS VEGAS, N.M. 87701

## Additional Comments:

*The last thing our world needs is additional nuclear weapons on their parts.*

A9-1

A9-1

NNSA notes the commentor's opposition to the production of nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**Campaign A (cont'd)**

**Individuals submitting "Campaign A Letter" with additional comments**

and public health. The SWEIS must... alternative that focuses on these activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely, *Dona Lee Gregg*  
 Print Name: DONA LEE GREGG  
 Address: 3471 CEBRIIUS RD #69  
 Additional Comments: SANTA FE, NM 87507

*No more nuclear weapons!!*

**A10-1**

**A10-1**

NNSA notes the commentor's opposition to nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

and public health. The SWEIS must... alternative that focuses on these activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely,  
 Print Name: MICHAEL MCKISTRICK  
 Address: 40 CALLE DEBRO SANTA FE, NM 87507  
 Additional Comments:

*PIT PRODUCTION HAS ADVERSE EFFECTS ON THE CITIZENS OF NEW MEXICO. WE HAVE NO WAY TO DEAL WITH THE TOXIC WASTE.*

**A11-1**

**A11-1**

NNSA notes the commentors' opinion that pit production would have adverse effects on the citizens of New Mexico. See the response to Comment no. A1-1.

**A11-2**

**A11-2**

All wastes are stored onsite, primarily at TA-54, and managed protectively until disposed of. The disposal methods and facility are determined based on the type of waste. At LANL, some low-level radioactive waste is disposed of onsite at TA-54. Other radioactive wastes are transported offsite for disposal. For example, transuranic waste is disposed of at WIPP, which is regulated by both the New Mexico Environment Department and the Environmental Protection Agency. Hazardous waste is sent to offsite commercial facilities for treatment and disposal.

### Campaign A (cont'd)

#### Individuals submitting "Campaign A Letter" with additional comments

and clean up activities support the environmental and public health. The SWEIS must include a fourth alternative that focuses on these activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely,

Print Name

Rosemary McKittuck

Address

40 Calle Debra

Additional Comments:

NO MORE PIT  
PRODUCTION.

A12-1

A12-1

NNSA notes the commentor's opposition to pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

and clean up activities support the environmental and public health. The SWEIS must include a fourth alternative that focuses on these activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely,

Print Name

Leah McHenry

Address

3911 Edgewood Dr. Austin, TX 78731

Additional Comments:

It is unacceptable that the draft SWEIS only considers a fifty mile radius. We will all be affected by these activities.

A13-1

A13-1

The LANL SWEIS considers impacts out to a 50-mile (80-kilometer) radius for radiological doses from normal operations at LANL and potential accidents. This same radius is used for the environmental justice analysis to allow a determination of whether minority or low-income populations are disproportionately impacted relative to the general population for the same area. The reasons for using a 50-mile (80-kilometer) radius in the SWEIS analysis are discussed in Section 2.6, Offsite Contamination, of this CRD.

Campaign A (cont'd)

Individuals submitting "Campaign A Letter" with additional comments

and public health. The SWEIS must... fourth alternative that focuses on these activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely,  
Print Name *Steve Nichols*  
Address *Albuquerque, NM*  
Additional Comments:

*Albuquerque and the surrounding region that is not considered in this should be given a voice and their own public hearing. Thank you.*

A14-1

A14-1

NNSA notes the commentor's desire that citizens of Albuquerque and the surrounding region have an opportunity to comment on the Draft SWEIS and to have a public hearing. NNSA did not schedule public hearings in Albuquerque, but other means of providing comment on the Draft SWEIS were provided, such as U.S. mail, e-mail, a toll-free telephone line, and a toll-free fax line. It should be noted that all comments, whether written or provided orally, are given equal weight and consideration. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

and public health. The SWEIS must... fourth alternative that focuses on these activities. While DOE does think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

Sincerely, *Juan Salgado*  
Print Name *Jessica Salgado*  
Address *3540 Paseo de Tolaresca*  
Additional Comments:

*more nuclear weapons here encourages more nuclear weapons everywhere... not desirable*

A15-1

A15-1

NNSA notes the commentor's opposition to nuclear weapons production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Campaign A (cont'd)

Individuals submitting "Campaign A Letter" with additional comments

and the SWEIS alternative that focuses on the environmental... activities. While DOE does think that such a shift is possible, ... belief that LANL must transition to peaceful and sustainable research.

Sincerely,

Print Name *Jonah Zimmerberg-Helms*

Address *1 Moya Lane*

Additional Comments:



*\*I was unable to attend because the conferences were in the evening, but nonetheless I strongly oppose the actions taken place by the Department of Energy and hope that those in power take into consideration the views of the public.*

**A16-1**

**A16-1**

NNSA has considered all public comments on the Draft SWEIS and has made changes to the Final SWEIS where appropriate. Those changes are identified in the SWEIS and summarized in Section 1.4, Changes from the Draft Environmental Impact Statement, of this CRD. Chapter 1, Section 1.4, of the SWEIS explains that in addition to the SWEIS analyses, other considerations that are not evaluated through the NEPA compliance process will influence NNSA's final project decisions, and elaborates on those considerations.

**Campaign B**

August 8, 2006

Elizabeth Withers, EIS Document Manager  
Los Alamos Site Office  
National Nuclear Security Administration  
U.S. Department of Energy  
538 35th Street  
Los Alamos, NM 87544-2201

Re: Request for an Extension of Time to Comment on Draft Site-Wide Environmental Impact Statement for Los Alamos National Laboratory, DOE/EIS-0380D, June 2006

Dear Ms. Withers,

I feel the Department of Energy (DOE) is serving a grave injustice on the people of Northern New Mexico. The people are being asked to comment on a complex and lengthy document during a time of summer vacations, harvests, getting children ready for school and preparations for Market, Feast and Fiesta Days. I am concerned about the lack of time allowed for the public to thoroughly review the draft Site-Wide Environmental Impact Statement for Los Alamos National Laboratory (draft LANL SWEIS).

Also, many documents referenced in the draft LANL SWEIS are not readily available to the public other than through the DOE reading room. Many documents are not available electronically. Many who are interested in providing comments work during the day when the reading rooms are open.

I am also concerned that the draft LANL SWEIS relies on conclusions made in a draft Agency for Toxic Substances and Disease Registry public health assessment that concluded "that there was no data to link environmental factors with the observed incidence of any cancer in Los Alamos County" and "that no harmful exposures due to chemical or radioactive contamination detected in groundwater, surface soil, surface water and sediment, or biota are occurring or expected to occur in the future." In comments about the draft assessment, the Environmental Protection Agency stated, "ATSDR may have been overly conservative in their risk assessment approach and makes a blanket statement that there is no problem. ATSDR should redo their risk assessment to reduce conservatism and not assume that there is no risk." An inaccurate, incomplete and inadequate public health assessment misdirects policy, undermines pollution prevention and thereby increases the risk to human health. The draft LANL SWEIS should be pulled until a technically defensible public health assessment is written and made available for public review.

Furthermore, two important documents have not been completed prior to the release of the draft LANL SWEIS. These reports are the earthquake report and the risk assessment for LANL's low-level radioactive waste dump at Area G. The deadline for commenting on the draft LANL SWEIS should be delayed until after the public has had an adequate opportunity to review the earthquake report and the Area G risk assessment first.

Therefore, I request that the comment period remain open until such time as the new public health assessment, the earthquake report and the risk assessment for Area G are released for public review. Under the circumstances, I request a written response within five days. Thank you for your consideration of my request.

Sincerely,

*Joseph C. Adella*  
Box - 100 -  
DIXON - NM 87577

B-1

B-2

B-3

B-4

**B-1** NNSA notes the commentor's concern that there was insufficient time to comment on the Draft LANL SWEIS. Responding to requests for additional review time, NNSA extended the comment period from the original 60 days to 75 days.

**B-2** As the commentor notes, references for the LANL SWEIS were available in DOE Public Reading Rooms. Making references available in regional reading rooms is consistent with past practices. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

**B-3** The SWEIS presents an independent assessment of public health impacts from contaminants in the LANL environment. The SWEIS uses current, accepted, and well-documented scientific models and data that have been, and continue to be used widely to analyze environmental impacts for the purpose of compliance with NEPA. The analytical methods used are essentially the same as were used in preparation of several DOE environmental impact statements that have recently been published in final form or have been reviewed, in draft, by the public. No Federal, state or private agency or institution with scientific standing has challenged any of the fundamental scientific and technical foundations of those recent analyses. In general, the data, models, assumptions, and other information used in the SWEIS are drawn from published sources and have been subjected to scientific peer review.

The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry Public Health Assessment in any specific way for its conclusions. The Agency for Toxic Substances and Disease Registry is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting Public Health Assessments at each site on the EPA National Priorities List. The Public Health Assessment is a relevant Federal agency study and it is therefore appropriate that the SWEIS acknowledge its conclusions. EPA comments on the draft Public Health Assessment were addressed by the Agency for Toxic Substances and Disease Registry in the final assessment, which was released August 31, 2006 (ATSDR 2006). Appendix I to the final Public Health Assessment lists the comments that were received and describes how those comments were addressed in the final report. The conclusions stated in the final Public Health Assessment are essentially unchanged

*Campaign B (cont'd)*

from those presented in the draft. The Public Health Assessment document states that the Agency for Toxic Substances and Disease Registry conducted its evaluations in accordance with guidance provided in the Public Health Assessment Guidance Manual, which is available to the public at [www.atsdr.cdc.gov/HAC/PHAManual/index.html](http://www.atsdr.cdc.gov/HAC/PHAManual/index.html).

- B-4** To the extent possible, the most recent technical documents, including an update to the seismic hazard analysis, completed in June 2007, are considered in the Final SWEIS analyses. Information under development that is not available for use in the Final SWEIS, such as the updated Area G performance assessment, will be considered as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3 and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12 and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

*Campaign B (cont'd)*

**Individuals also submitting this campaign:**

Hildegard Adams	Kit Johnson	Astrid Webster
Robert Anderson	Stephanie E. Johnson	Skip Wecksung
Mary L. Archuleta	Irene Joyce	John William
Levi Armlovich	Charles Kading	Tish Wilson
Floy Barrett	Judith Kidd	Evelyn Witt
Carol Benson	Lisa Law	Nancy Kay Yankura
Alicia T. Bettran	Shawn G. Ludwig	Suzanne Ziglar
Matthew Bishop	John Martinez	Jonah Zimmerberg-Helms
Heron Boyce	Kenneth E. Mayers	10 Signatures Illegible
Joan Brown	D. Mazeaud	
Kate Brown	Bryan McCullah	
Patrick Burns	Carol McDonald	
Lynne Cabral	Eric McEuen	
Alice Champion	Michael McKittrick	
Mike Chapman	Rosemary McKittrick	
Joseph Ciddio	Leah McLeroy	
Ciaran Clark	Penelope McMullen	
Victoria Clark	John Melcher	
David Coblentz	Celeste Miller	
Kirstie Coblentz	Jeanne Pahls	
Robin Collier	Bill Palmer	
Kenneth Coutant	Elizabeth Pappalardo	
Stephen J. Cummings	Nicholas Peñalosa	
Shane S. Darma	Sara Pere	
Libero A. DiZinno	Mike Quintana, Jr.	
Aleta Drumm	Josh Riebsomer	
Ana Easter	Elena Rodriguez	
Eric Evenson	Emily Romero	
Dee Finney	Liz Rutherford	
Dr. Auerlia T. Fule	Bob Sander	
Shane Gassaway	Jessica SanFilippo	
Rick Gee	May M. Santos	
Virginia Gilstrap	Sallie Shatz	
Diane Gledhill	Stacie Shiffler	
Dina M. Gonzales	Lee Sims	
Miriam Gordon	Carl A. Smith	
Janet Greenwald	Shannyn Sollitt	
Sherie C. Hartle	Barbara Stein	
Grant Hayes	Pinu Stout	
Ann Hendrie	Sally-Alice Thompson	
Lito Hernandez	Penny Truitt	
Kelly Higgins	John Veltman	
Pat John	Eleanore Voutselas	
Joshua Johnson	Steve Waterstut	



### Campaign C

Dear DOE and LANL:

I absolutely oppose expanded plutonium pit production at the Los Alamos National Laboratory. Quadrupling pit production will turn the lab into a nuclear materials storage and radioactive waste dump facility, and a NUCLEAR BOMB FACTORY. Additionally:

- \* I oppose the increased toxic and radioactive waste generated by expanded operations.
- \* I oppose LANL's continuing pollution of our precious water resources.
- \* I oppose the Lab's continuing burial of radioactive and chemical wastes in unlined dumps.
- \* I oppose the construction of new nuclear weapons facilities near earthquake fault lines.

- \* LANL's long history of safety violations compromises worker and public protection and should be corrected before the Lab even considers expanded nuclear weapons operations.
- \* The Lab should prioritize cleanup and the development of improved cleanup technologies.
- \* The Lab should prioritize renewable energy programs such as wind and solar energy, instead of building MORE nuclear weapons.
- \* The U.S. should lead by example in the global elimination of weapons of mass destruction.

**Los Alamos should support that need instead of designing and producing new nuclear weapons.**

C-1

C-2

C-1 NNSA notes the commentors' opposition to pit production at LANL for the reasons enumerated. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President, and is therefore not being considered in the SWEIS. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

The environmental impacts of waste generation and disposal are addressed in Chapter 5 of the SWEIS. While increased waste generation would occur as a result of expanded pit production, not all waste would be disposed of at LANL. Chemical waste and low-level radioactive mixed waste from LANL operations are sent offsite for treatment and disposal, transuranic waste is stored until shipped to WIPP for disposal, and low-level radioactive waste is either disposed of onsite at Area G or shipped offsite for disposal. The future use of lined rather than unlined pits for low-level radioactive waste disposal is under evaluation through the Area G Performance Assessment and Composite Analysis required by DOE Order 435.1, which is periodically reviewed and updated. The Performance Assessment and Composite Analysis will guide decisions regarding operational procedures and waste disposal. This SWEIS considers impacts from the use of unlined pits as its No Action Alternative baseline; this impact analysis therefore bounds the long-term environmental consequences that could result from the use of lined disposal pits. Refer to Section 2.7, Waste Management, of this CRD for more information.

Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, of the SWEIS, over the past 6 years, LANL has had a very good record of complying with permit conditions. It is expected that LANL would continue to meet permit conditions designed to protect water resources under all alternatives. As described in Chapter 4, Section 4.3.2, past waste disposal practices at LANL (conducted in a manner consistent with standards in effect at that time) have contaminated the shallow groundwater, which in turn has the potential to contaminate portions of the regional aquifer under the Pajarito Plateau. As standards have evolved, waste disposal

Campaign C (cont'd)

practices have also evolved to be more protective of the environment. As described in Chapter 5, Section 5.3.2.1, groundwater modeling performed for the Area G performance assessment indicates that groundwater ingestion doses 330 feet (100 meters) down gradient from Area G at 4,000 years and in Pajarito Canyon at 700 years would be a very small fraction of the 4 millirem per year standard for groundwater protection. NNSA is required to follow the Consent Order that stipulates that groundwater will be protected and that groundwater cleanup levels will be protective of human health. In addition, NNSA operates a monitoring program (described in Section 4.3.1.5) to detect contamination that has resulted from past practices. LANL staff evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters in accordance with applicable regulations and agreements. NNSA intends to continue to safely manage waste and conduct environmental restoration activities at LANL as it carries out its missions. Refer to Section 2.5, Water Resources, of this CRD for more information.

No new nuclear weapons facilities are proposed under any of the alternatives evaluated in the SWEIS. NNSA completed the *Final Environmental Impact Statement for the Chemistry and Metallurgy Research Building Replacement Project at Los Alamos National Laboratory, Los Alamos, New Mexico* (DOE/EIS-0350) (DOE 2003c) in November 2003 and in February 2004 issued a Record of Decision announcing its decision to construct a new facility (69 FR 6967). This decision is included in the No Action Alternative and the Expanded Operations Alternative of this SWEIS. On January 11, 2008, NNSA issued the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]* (DOE/EIS-0236-S4), which evaluates environmental impacts from the continued transformation of the nuclear weapons complex, referred to as Complex Transformation. The Reduced Operations Alternative in the Final SWEIS was revised to reflect continued use of the existing Chemistry and Metallurgy Research Building in the event that NNSA, in conjunction with its plans for Complex Transformation, decides not to construct the nuclear facility portion of the Chemistry and Metallurgy Research Replacement Facility. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

Campaign C (cont'd)

New construction at LANL is subject to existing DOE orders and standards for seismic concerns. Different construction requirements are imposed for new structures in accordance with site locations relative to known fault lines, and in accordance with the planned future use of the structure.

Internal NNSA and contractor organizations are dedicated to safe operation of their nuclear facilities. DOE has issued regulations, standards, and guidance for nuclear facility operations including requirements for performance of safety evaluations and risk assessments which become the basis for facility operating parameters. The NNSA goal is to eliminate accidents. These regulations and standards of operations reduce the likelihood of accidents, but cannot eliminate them completely. Chapter 4, Section 4.6.3 contains a discussion of accidents and safety at LANL facilities. The LANL contractor applies lessons learned from past accidents to improve overall safety performance. LANL staff takes actions in the areas of procedures, training, inspection, and component upgrading and replacement in order to address the root causes of accidents and to preclude their recurrence.

**C-2**

NNSA notes the commentors' preference that activities at LANL be focused on cleanup of the site and areas other than nuclear weapons technology. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor, including nuclear nonproliferation. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

For many years, DOE has been working to implement and improve technologies for environmental restoration. Chapter 2, Section 2.2.6, of the SWEIS describes the progress that NNSA has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be

*Campaign C (cont'd)*

addressed. Appendix I presents options and environmental analyses for conducting remediation activities at LANL, primarily related to the Consent Order that was entered into in March 2005. Appendix I also summarizes several technologies for cleanup of soil, water, and air, and references additional information about existing and emerging cleanup technologies. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

Campaign C (cont'd)**Individuals also submitting this campaign:**

Peggy Abbott	Douglas Conwell	Todd Gillmore	Gerald Levine	Whitney M. Nieman	Marilyn Sullivan
Edith Adams	Judy Crawford	Zoe M. Godshalk	Joyce Levine	Nancy Ziegler Nodelman	Anne Summers
Susan Addy	Gary Cronin	T. O. Gorman	Shannon Lewis	William P. Nutima	Marie Sutton
Lenore Alarid	Victoria Cross	Catherine E. Graham	Wyn Lewis, MA, MPH	Kay Oliver	Tony Sutton
Elvira Apodaca	Virginia T. Cross	Lorraine Graham	Carol Licini	Juan B. Ortega	Karin Syversen
E. Joseph Armbruster	S. R. Crutchfield, Ph.D.	Sarah Grant	Alan B. Lieberman	Alan C. Osborne	Mara Taub
Loretta G. Armer	David Cunningham	Stephanie Greene	Mekah Gordon Lieberman,	Jane Otten	Evelyne Taylor
George M. Arrietta	Richard G. Davis	Patricia M. Greer	Ph.D., L.E.	Terry Otten	Truman Temple
Richard H. Arthure	Shirley G. Davis	Jennet Grover	Clarice Lighton	Sorrel Page	Simon J. Teolis
Susan L. Bardes	Deborah Day	Saul Grover	Lucy R. Lippard	Eva Paloheimo	T. Terzis
Elizabeth Barnes	Elaine Delvalle	Herb Haas	Raquel Llamas	Helen R. Parolla	Grace Thada
Pat L. Bellairs	Emily Derr	Marion Haas	Florence Lloyd	Liz Paterson	Judy J. Thompson
Heather Bennett	Dianne Duenzl	Opal Hammond	Robert K. Lloyd	Fran Paul	Beverly Timm
Ena Berglund	Carolyn Dukeminier	Rev. Marion Hammond	Wanda Lobito	Melinda Peine	Ernest E. Valdez
Elaine Berkowitz	Connie Durand	Katherine Hanscom	Colleen Lopez	Lisa Pelletier	Marcia Valdez
Daniel Bethune	Virginia Ellenberg	Palmira P. Hay	Larry Lopez	Lisa Pence	M. T. Van Dyke
Helen Binkley	Don Ellis	Steve Hay	Sabine Lucas, Ph.D.	Ulla Pendersen	Sylvia Vergara
John Binkley	Karlene Ellis	Yvonne Hayes	Carrie Lujan	Catherine E. Perrodin	J. Viallet
Judith A. Blaise	Jane Ervin	Jeri Lynn Heald	Ernesto Lujan	Mary Pickett	Gail Vivino
Nan J. Blake	Dianne Eschman	Donna Hebrand	Jennifer Lynch	Dale Pontius	Barbara Wadleigh
Kathleen Brandenburg	Gary Eschman	Dorothy Lee Hill	Aaron Williams Lyons	Donna Quasthoff, AIA	Rita Walker
Margarita M. Brandes	Bernard Ewell	Brian Honeycutt	Sister Mary Josephine Maes	Daniel Quat	David Walther
Elizabeth Brejcha	Melinda Ewell	Lynne Hough	Esther Martinez	Elizabeth M. Reed	Linda Epton Wenrick
Thomas Brejcha	Lucinda Ewing	Hildegard Howden	Michael A. Martinez	Robin Reindle	Cynthia West
Andrew G. Brokmeyer	Gail Factor	Mimi Hurd	Susanna Maslak	Anders Richter	Virginia Westray
Julie L. Brokmeyer	Mary Lou Falion	Ian Ingram	Juanita Mauer	Paul Rieger	Carolyn Wheaton
Lura M. Brookins	Stephanie J. Fauber	Meg Jackson	Mr. and Mrs. R. D. McCarthy	Philip M. Sachs	Pauline M. Whitcomb
Peter E. Buehner	Gary Ferguson	Jean Jarvis	Jeannelle McIntyre	Aurora Sanchez	John White
Nick Buffington	Patricia Ferguson	Kristin Jette	Celeste McKelvey	Claudia L. Sanchez	Ron and Karen Whitmore
Pamela Buffington	Jim Finney	Ray Jette	E. Medina	Lara Sanchez	Jane S. Wilken
Patricia E. Burger	Mary Finney	Mark Kaltenbach	Elizabeth Rast Mendoza	Greeta Schneider	Paul Wilken
Sheila Burns	Lynn Freeman	Susie Kanefield	Jenn Messier	Marian M. Schulz	Keith Wilkinson
Janet Burstein	Loralee Freilich	Charlotte Karotkin	Dana Middleton	Michael Scofield	E. C. Williams
Art Burton	Louis E. Frosh	Susan Kazmierski	Jack L. Miller	Alice Sealey	Donald J. Wilson
Patricia Butka	Lindsay Gaffner	Kay Kenton	Michael Miller	Adrian Serra	Hal Wingo
Leslie Callarman	Nancy Gaffner	Satguro Khalsa	Rima Miller	Colleen Shanahan	Paula Wingo
Robin Carlson	Barbara Gagel	Michael Kolman	Virginia J. Miller	Carol Sky	Frieda Wirick
Mr. and Mrs. H. L.	Greta Gallagher	Paul LaBeaume	Catherine Molland	G. Sloman	Lynda Yager
Celebcigil	Bernadette Garcia	Dennis H. Lacoss	Rev. Augustine J. Moore,	Janet Snowden	Cairn Catherine Yomson
Judith Chase	JoAnn H. Garges	Eleanor B. Lacoss	Ph.D.	Jesse Andrea Sosa	Richard Young
Bernice Chavez	Ann Gati	Leslie E. Lakind, D.D.S.	Terri Moore	Madeline Stark	Susan Young
Jose Chavez	Georgiana Geerds	Carolyn Lamb	Mark Myerson	Barbara Stein	Jet Zarkadas
Pamela Christie	Abigail Gergasko	David LaPlantz	Ethel L. Nachlinger	Arthur Steindl	Renata Zimmermann
Michelle Ciani	Peggy Gilchrist	M. J. Lemmer	Shel Neymark	Elana Sue St. Pierre	

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

----- cut here and mail to the Los Alamos address above -----

- \* LANL's long history of safety violations compromises worker and public protection and should be corrected before the Lab even considers expanded nuclear weapons operations.
- \* The Lab should prioritize cleanup and the development of improved cleanup technologies.
- \* The Lab should prioritize renewable energy programs such as wind and solar energy, instead of building MORE nuclear weapons.
- \* The U.S. should lead by example in the global elimination of weapons of mass destruction.

Los Alamos should support that need instead of designing and producing new nuclear weapons.

*The LANL SWK-15 proposal is illegal, violating the Non-Proliferation Treaty calling for all nuclear states to work for global nuclear disarmament now!*

Name: *Virginia J. Miller*  
 Address: *125 Calle Don Jose Santa Fe, NM 87501*  
 Signature: *Virginia J. Miller*

*The Lab can help prevent and curb the serious consequences of global warming, our most urgent national security threat.*

486732

CI-1

CI-1

Operations at LANL that support NNSA's mission to ensure a safe and reliable nuclear stockpile are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. Research on global warming and other issues not related to nuclear weapons production is conducted at LANL. Refer to Sections 2.1, Opposition to Nuclear Weapons and Pit Production, and 2.3, Alternative Missions, of this CRD for more information.

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

It is my understanding that our nuclear capacity is already at such a high level that no other nation is anywhere near being a threat to us - not probably ever will be.

C2-1

I have heard nothing that convinces me that waste is or will be handled in a safe way.

C2-2

I am deeply discouraged that this country is not giving renewable energy a priority - and setting the right

C2-3

example for the world. Instead we force an arms race - when we should be saving this planet. POST CARD

PLACE  
STAMP  
HERE

*Alan Gurgis*

C2-1

NNSA notes the commentor's concerns regarding the size of the nuclear stockpile. The United States is currently reducing the size of the nuclear weapons stockpile. LANL is responsible for assisting with maintaining a safe, secure, and reliable stockpile. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

C2-2

As discussed in Chapter 4, Section 4.9.3, of the SWEIS, radioactive and chemical wastes are regulated under a number of state and Federal regulations that are applicable to specific waste classifications. At LANL, institutional requirements for waste management activities are determined and documented by the Laboratory Implementation Requirements Program. Program requirements provide details on proper management of all process wastes and contaminated environmental media. The waste management operation tracks waste generating process, quantity, chemical and physical characteristics, regulatory status, applicable treatment and disposal standards, and final disposition of the waste. Refer to Section 2.7, Waste Management, of this CRD for more information.

C2-3

While not the primary mission of LANL, research on renewable energy is conducted at LANL. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

- \* LANL's long history of safety violations compromises worker and public protection and should be corrected before the Lab even considers expanded nuclear weapons operations.
  - \* The Lab should prioritize cleanup and the development of improved cleanup technologies.
  - \* The Lab should prioritize renewable energy programs such as wind and solar energy, instead of building MORE nuclear weapons.
  - \* The U.S. should lead by example in the global elimination of weapons of mass destruction..!!
- Los Alamos should support that need instead of designing and producing new nuclear weapons.

Name: Dale Pontius

Address: 1005 Camino San Acacio Santa Fe NM 87505

Signature: Dale Pontius

I consider this proposed action to be the worst environmental + health threat to the citizens of New Mexico ever. DP

C3-1

C3-1

NNSA notes the commentor's opinion regarding the environmental and health effects of the proposed action. Chapter 4, Section 4.6.1 provides information on cancer mortality and incidence rates in New Mexico and all counties surrounding the LANL site. Chapter 4, Table 4-26 shows that some cancer rates in Los Alamos County are lower than the national average and some are higher, which is typical of any area. These data, along with the final LANL Public Health Assessment, issued on August 31, 2006 by the U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry, show that, "...there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "...overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006). Chapter 5 of the SWEIS describes the environmental impacts of each of the three alternatives for continuing to operate LANL and includes the effects on surface waters, groundwater, and air. Section 5.13 states that contamination from LANL or changes in Rio Grande flows are not likely to affect water quality. The health impacts analysis uses projected air emissions data to estimate dose to the population within a 50-mile (80-kilometer) radius of LANL. The maximum projected annual population dose would be 36 person-rem under the Expanded Operations Alternative, which would not be expected to result in any additional latent cancer fatalities in the affected population.



Campaign C (cont'd)Individuals submitting "Campaign C Letter" with additional comments

To: DOE + LANL, 9.15.06

Thanks to LANL, so many NM locals contract + suffer from cancer. Are you really interested in perpetuating this global backwards behavior?

C4-1

The answer is: Yes, you are.

So, I oppose all activities occurring @ LANL that damage people, animals + nature.

Why can't LANL + the U.S. Gov't take risks FOR our health + environment, rather than ones that risk everything's well-being?

C4-1  
cont'd

I care. I vote. And some day flaccid + poisonous govts and corporations won't be ruling the world.

Tria R

C4-1

NNSA notes the commentor's opposition to LANL activities she perceives as damaging to people, animals, and nature. See the response to Comment no. C3-1.

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

September 15, 2006

Dear Ms. Withers, DoE and LANL,

I earnestly support all the points here set forth. Who could possibly want in their backyard,

1) nuclear bombs;

2) an increase in deadly pollution, already existing from unattended storage, with cleanup solutions not satisfactory;

3) threat of extreme pollution in case of an earthquake (this adds another meaning to the buckled sidewalks in my neighborhood);

4) making us a target for military or terrorist attack, a horror we don't want to think about, but should consider

?

This is a unique and glorious state, in its natural wonders and historic and cultural richness. It is an honor to live here. Activities at the nuclear facility could, slowly or suddenly, destroy it all. We should be diminishing this danger, not increasing it.

Sincerely,

Virginia Grass

PMB 174, 2442 Cerrillos Rd.  
Santa Fe, NM 87505

C5-1

C5-2

C5-1 NNSA notes the commentor's concerns regarding potential impacts from LANL operation.

Plutonium pits, which are the triggers for nuclear bombs, are produced at LANL. There are no nuclear bombs, however, produced or stored at LANL.

LANL operations do result in some discharges to the environment and in generation of waste. NNSA, however, is committed to conducting operations in compliance with worker, public, and environmental protection standards and requirements. The environmental and human health impacts of the continued operation of LANL are presented in Chapter 5 and summarized in Chapter 3, Table 3-19 and Summary Table S-5 of the SWEIS. As addressed in Chapter 4, Section 4.9, wastes generated at LANL are managed protectively until disposed of in regulated facilities. For example, legacy transuranic wastes are being safely stored while programs continue to prepare the wastes for shipment to WIPP. Chapter 2, Section 2.2.6 describes the progress NNSA has made in conducting the environmental restoration program at LANL. Appendix I presents options and environmental analyses for conducting future remediation activities at LANL primarily related to the March 2005 Consent Order. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3, of the SWEIS. The estimated human health and safety impacts from normal operations and postulated facility accidents including earthquakes are described in Chapter 5. Widespread contamination would be expected only in an earthquake of large magnitude that would not only affect LANL, but would cause area-wide destruction of structures.

NNSA gives high priority to the safety and security of all its facilities. Security and potential acts of sabotage are integral considerations in the designs and operating procedures for new and existing facilities. NNSA considers the threat of terrorist attack to be real and has an established safeguards and security process to assess facility vulnerabilities to various threats, including those from intentional destructive acts such

*Campaign C (cont'd)*

*Individuals submitting "Campaign C Letter" with additional comments*

as acts of terrorism. Chapter 4, Section 4.6, of the SWEIS has been revised to include additional discussion of the measures taken to protect assets at LANL from terrorist activities. As discussed in Chapter 5, Section 5.12.6, the impacts of potential terrorist actions have been considered in a separate, classified appendix to the SWEIS. Impacts of military actions against LANL are not within the scope of the SWEIS.

**C5-2** LANL activities are conducted in accordance with an Environmental Management System, which recognizes the need to conduct LANL mission work while being a good steward of the natural and cultural environment. LANL operations are designed to keep releases of chemicals and radioactive materials well within the regulatory limits designed to protect public health and the environment. Nuclear facilities are carefully designed to prevent accidents and to mitigate the results of any accident that might occur, regardless of the cause.

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

9.17.06

Dear Doc & Lani:

I am appalled that this country, the Good Old U.S. of A., refuses to sign an anti-nuclear proliferation treaty along with most of the rest of the Global Community. This is just one tragedy in a list too long to enumerate that our current administration is responsible for.

So, we in New Mexico are now in a position (because of Bush & Co.) of having our aquifers polluted by radioactive waste, having our highways become more perilous & using our precious water resources in the name of more war-mongering. No thank you!

Why not channel all that scientific brain power @ LANL to find clean energy sources? How about concentrating on coming up with solutions to the warming of our planet due to burning of fossil fuels. Come on guys, you can do it.

And by the way, I propose that we bury all of your radioactive waste on a ranch in Crawford, Texas. Mr. Bush, being such a good patriot ought to take care for "the Gipper". Let him pollute his aquifer, not ours, dammit!!  
Pet Zerkadar  
Santa Fe, New Mexico ~

C6-1

C6-1

The United States has signed and ratified the Treaty on the Non-Proliferation of Nuclear Weapons, which is the primary non-proliferation treaty. More recently, in 2002, the President signed the Treaty on Strategic Offensive Reductions. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

C6-2

C6-2

NNSA notes the commentor's general opposition to the effect of continued LANL operations on the environment. LANL operations are in compliance with Federal and State regulations for protection of human health and the environment, and, as shown in Chapter 5, would be expected to remain in compliance under all of the alternatives being considered. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

C6-3

C6-3

NNSA notes the commentor's desire for activities at LANL to be focused on areas other than those related to nuclear weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas not related to nuclear weapons such as renewable energy and global climate change. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Campaign C (cont'd)Individuals submitting "Campaign C Letter" with additional comments

9 Vista Grande Dr  
 Santa Fe NM 87508  
 9/18/06

Dear Sirs;  
 National Nuclear Security Administration  
 Los Alamos Site Office  
 Los Alamos NM

Our Country currently needs research in  
 renewable energy sources such as photovoltaics,  
 solar and hydrogen fuel which could be carried  
 out at Los Alamos.

I suggest that such research would provide  
 for more security than plutonium pit production.

Respectfully,

E. Joseph Ambuster  
 E. Joseph Ambuster

C7-1

C7-1

See the response to Comment no. C6-3.

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

- ★ LANL's long history of safety violations compromises worker and public protection and should be corrected before the Lab even considers expanded nuclear weapons operations.
- ★ The Lab should prioritize cleanup and the development of improved cleanup technologies.
- ★ The Lab should prioritize renewable energy programs such as wind and solar energy, instead of building MORE nuclear weapons.
- ★ The U.S. should lead by example in the global elimination of weapons of mass destruction.
- ★ Los Alamos should support that need instead of designing and producing new nuclear weapons.

Name: Whitney M. Nieman  
 Address: P.O. Box 357, El Prado, NM 87539

Signature: Whitney M. Nieman

486732  
 May LANL focus their brilliant minds toward pioneering  
 Life <sup>sustaining</sup> enhancing technologies to include the "No Waste" paradigm  
 exemplified by Mother Nature

C8-1

C8-1

See the responses to Comment nos. C-1 and C-2, as well as Section 2.7, Waste Management, of this CRD.

C8-2

NNSA notes the commentor's opposition to water pollution and increased water use by LANL. Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, over the past 6 years, LANL has a very good record of complying with permit conditions. It is expected that LANL would continue to meet permit conditions designed to protect water resources under all alternatives. In addition, NNSA operates a monitoring program (described in Chapter 4, Section 4.3.1.5) to detect contamination that has resulted from past practices. In accordance with applicable regulations and agreements, NNSA evaluates and takes corrective action for occurrences of contamination in ground and surface waters. LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's annual water use target ceiling. Refer to Section 2.8, Water Use, of this CRD for more information on LANL's water use, available water rights, and water supply planning.

-----cut here and mail to the Los Alamos address on the back-----

Dear DOE and LANL: Date: Sept. 20, 2006

ATT: Ms. Elizabeth Withers, Office of Environmental Stewardship

- ★ I absolutely oppose expanded plutonium pit production at the Los Alamos National Laboratory. Quadrupling pit production will turn the Lab into a nuclear materials storage and radioactive waste dump facility, and a NUCLEAR BOMB FACTORY. Additionally:

- ★ oppose the increased toxic and radioactive waste generated by expanded operations.
- ★ oppose LANL's continuing pollution of our precious water resources AND its increase in water use!
- ★ oppose the Lab's continuing burial of radioactive and chemical wastes in unlined dumps.
- ★ oppose the construction of new nuclear weapons facilities near earthquake fault lines.

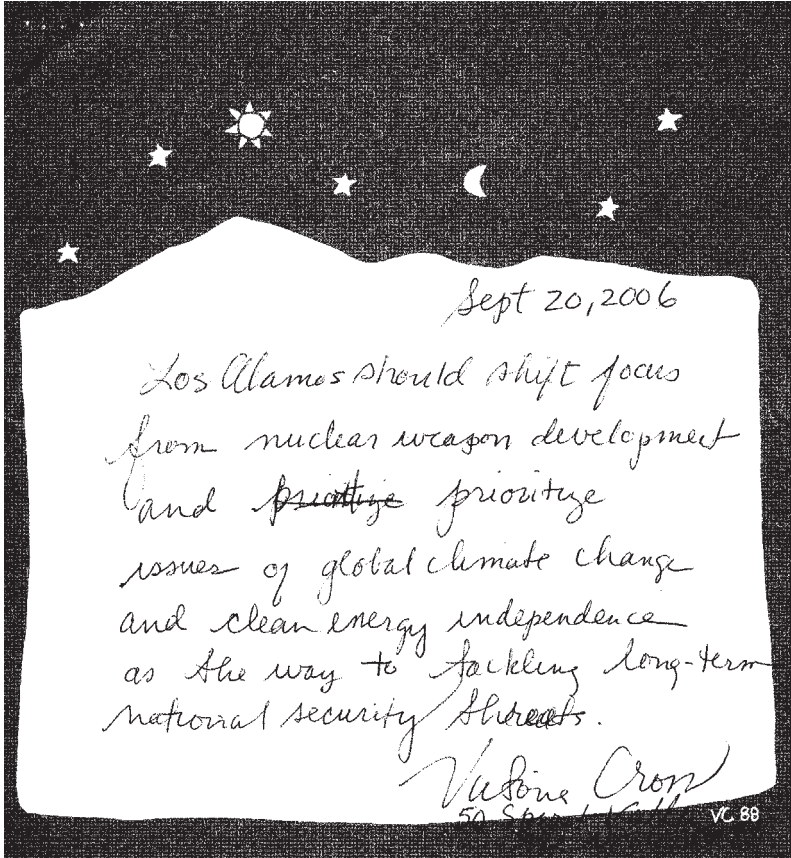
C8-2

C8-1  
cont'd

486732

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments



C9-1

C9-1

See the response to Comment no. C6-3.

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

Dear DOE and LANL:

Date: SEPT. 16, 2006

I absolutely oppose expanded plutonium pit production at the Los Alamos National Laboratory. Quadrupling pit production will turn the Lab into a nuclear materials storage and radioactive waste dump facility, and a NUCLEAR BOMB FACTORY. Additionally:

- ✓ I oppose the increased toxic and radioactive waste generated by expanded operations.
- ✓ I oppose LANL's continuing pollution of our precious water resources.
- ✓ I oppose the Lab's continuing burial of radioactive and chemical wastes in unlined dumps.
- ✓ I oppose the construction of new nuclear weapons facilities near earthquake fault lines.

LANL's long history of safety violations compromises worker and public protection and should be corrected before the Lab even considers expanded nuclear weapons operations.

The Lab should prioritize cleanup and the development of improved cleanup technologies.

The Lab should prioritize renewable energy programs such as wind and solar energy, instead of building MORE nuclear weapons.

The U.S. should lead by example in the global elimination of weapons of mass destruction.

Los Alamos should support that need instead of designing and producing new nuclear weapons.

Name: DAVID LAPLANTE (DAVID LAPLANTE)

Address: 69 LAS ESTRELLAS SANTA FE, N.M. 87507-4230

Signature: [Handwritten Signature]

496/02

496/17

C10-1

C10-1

See the responses to Comment nos. C6-1, C6-2, and C6-3, as well as Section 2.5, Water Resources, and Section 2.7, Waste Management, of this CRD.

C10-2

NNSA notes the commentor's opposition to nuclear weapons and desire for activities at LANL to be focused on areas other than those related to nuclear weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Sections 2.1, Opposition to Nuclear Weapons and Pit Production, and 2.3, Alternative Missions, of this CRD for more information.

PLEASE DOE AND LANL:

PLEASE, CONSIDER THE STILL YET, UNBORN CHILDREN - WHAT KIND OF WORLD DO YOU WANT THEM TO STEP INTO??

WE HAVE ENOUGH WEAPONS TO KILL ALL WORLD PEOPLES MANY TIMES OVER!

WHY NOT WORK ON PEACEFUL, RENEWABLE ENERGY PROGRAMS THAT WILL DO SOMETHING VALUABLE FOR ALL HUMANS!

DO THE RIGHT THING - WORK FOR HUMANITY

NOT DEAD SKELETONS!

THANK YOU!

[Handwritten Signature]

C10-2



Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

-----cut here and mail to the Los Alamos address on the back-----

Dear DOE and LANL: Date: Sept. 18, 2006

I absolutely oppose expanded plutonium pit production at the Los Alamos National Laboratory. Quadrupling pit production will turn the Lab into a nuclear materials storage and radioactive waste dump facility, and a NUCLEAR BOMB FACTORY. Additionally:

- \* I oppose the increased toxic and radioactive waste generated by expanded operations.
- \* I oppose LANL's continuing pollution of our precious water resources.
- \* I oppose the Lab's continuing burial of radioactive and chemical wastes in unlined dumps.
- \* I oppose the construction of new nuclear weapons facilities near earthquake fault lines.

*\* The LANL site was originally chosen because of its remote location. It is no longer practical to even have a Nuclear Weapons Production plant in such close proximity to large populations.*

CII-1

CII-2

C11-1

C11-2

NNSA notes the commentor's opposition to expanded plutonium pit production at LANL. Refer to Sections 2.1, Opposition to Nuclear Weapons and Pit Production, Section 2.5, Water Resources, and 2.7, Waste Management, of this CRD for more information. Also, see responses to Comment nos. C6-1 and C6-2.

As the commentor states, LANL was originally selected because of its remote location. The SWEIS evaluates the environmental impacts of continued operation of LANL to fulfill its mission work assignment as announced in the Record of Decision (61 FR 68014) for the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236). In that Record of Decision, LANL was identified as the location for re-establishment of a pit fabrication capability. On January 11, 2008, NNSA issued the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (Complex Transformation SPEIS)* (DOE/EIS-0236-S4), which evaluates the impacts associated with the continued transformation of the nuclear weapons complex as NNSA envisions it. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

Sept 16, 2006

To Whom it May Concern,

I am both outraged and concerned to hear of plans to increase nuclear weapons production at Los Alamos!

While we as a Country attempt to curtail nuclear weapon production by Countries around the world we ourselves are busy increasing our production,

We claim to be a Christian Country, yet we do not follow the Gospel mandates that call us to "Love our enemies & do good to those who harm us," Matt 5:14

If we practiced what many of us claim to believe, we would have few enemies and the world would be at peace!

I wish you peace,  
Juanita Mauw

C12-1

C12-1

NNSA notes the commentor's opposition to pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Campaign C (cont'd)

Individuals submitting "Campaign C Letter" with additional comments

P.O. Box 9801  
Santa Fe, NM 87504  
September 18, 2006

Ms. Elizabeth Withers  
Office of Environmental Stewardship  
National Nuclear Security Administration  
Los Alamos Site Office  
528 35<sup>th</sup> Street  
Los Alamos, NM 87544

To All Whom It May Concern:

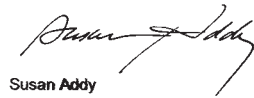
In spite of the fact that this appears to be merely a forwarding of a pre-written form, I want you to know that I am personally so opposed – on moral and other grounds – to the maintenance, much less the referenced expansion, of nuclear activities at Los Alamos National Laboratory.

This country has heretofore taken the high ground; but so many aspects of our previously-admired national character have recently suffered in the eyes of the world. If we are to maintain our honored place in the global environment, we must make our stand on the side of life, of right, and of good conscience.

Aside from the moral and political implications of continuing helter-skelter down the nuclear path, this course of action has the distinct possibility of immediate physical impact on me and other residents of our beautiful state and region. I live within a short radius of the "Lab" – and we residents are subject to the effects of radioactivity in our air and groundwater. Simply put, these are our very life sources.

"Los Alamos" has long been a draw for and a repository of some of the best scientific minds our country – and the world – has to offer. How appropriate it would be to focus their energies and attention on peace instead of destruction.

Most sincerely,

  
Susan Addy

enclosure

C13-1

C13-1

See the response to Comment nos. C-1 and C-2.

*Campaign D*

Say NO to nuclear weapons research and production at Los Alamos National Laboratory (LANL)

I vigorously oppose the proposal for LANL to continue or expand its nuclear weapons mission. It is dangerous to the health and safety of the environment and all life in northern New Mexico.

*D-1*

**D-1**

NNSA notes the commentors' opposition to activities related to nuclear weapons production at LANL. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. Chapter 5 of the SWEIS evaluates the potential environmental, health and safety impacts of continued operation of LANL under the three proposed alternatives. These analyses demonstrate that LANL can continue to operate safely under any of the three alternatives. Chapter 4, Section 4.6.1, of the SWEIS provides information on current cancer mortality and incidence rates in New Mexico and counties surrounding LANL. Table 4-26 shows that some cancer rates in Los Alamos vicinity are lower than the national average and some are higher, which is typical of any area. This section also presents information from the final LANL Public Health Assessment, issued on August 31, 2006 by the U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry which determined that, "...there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "...overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006). Chapter 5, Section 5.13 states that contamination from LANL or changes in Rio Grande flows are not likely to affect water quality. In addition, a drinking water pathway analysis has been added to Appendix C to address concerns expressed regarding contamination of the Rio Grande. The analysis shows that drinking Rio Grande water that could potentially be impacted by LANL activities is comparable to drinking water from the Jemez River, which is not downstream of LANL. The health impacts analysis uses air monitoring data to estimate dose to the population within a 50-mile (80-kilometer) radius of LANL. The maximum projected annual population dose would be 36 person-rem under the Expanded Operations Alternative. This dose would not be expected to result in any additional latent cancer fatalities in the affected population.

Campaign D (cont'd)**Individuals also submitting this campaign**

Carol Ageson	Jean Barton	Cindy Brott	Kathleen Christisni	J. Dalley	Sigrid Enika	Stephanie Garcia
John Acker	Jo Basiste	Edith Brown	Kelli Clare	Ann Daly	E. Ernbinder	David Gardner
Kathleen Adams	Tom Bass	Joan Brown	Beezie Clarke	Sandra Dancer	Carole Eschen	Kathleen Garduno
Sam Adams	Louise Baum	Kate Brown	Susan Classen	Glory Dassi	Maggie Evans	Heather A. Gaudet
Mary Adderley	Ruth Baybal	Phyllis Browne, Ph.D.	Heather Cleary	Shane S. Dauma	Maria Fahrner	John Geffroy
Ahmad Alarco	Jaya Bear	Dolores P. Bruce	Maggie Cloud	Matthew David	Marianne Fahrney	Gary Gegenhartner
Ahmina Alarco	K. Beasley	William Bruce	Pamela Clum	Nancy David	Richard Faller	Susan Gelenter
Gordie Albi	Robert Bell	Mary D. Bruck	David Coblentz	Terra David	Don Fanslow	Joy Gerity
Pauline Albin	Mary Lou Bender	Ralph Bruening	Ashleigh Cochran	D. Smith Davis	Kitty Farmer	Paige Gerlin
Martha Alderson	Judith K. Bennette	Margaret Brush	George M. Cohen	Cecil Dawkins	Richard Fay, Jr.	Jane German
Rosemary Allen	Leslie A. Bentley	Susan Bryant	Herb Cohen	Linda B. Day	Anne Feiza	Janet Gibeau
Grant Almasy	Tamara Berdofe	Norm Budow	Jerome Cohen	Annie Degen	Nicole Ferris	Nancy Gilchrist
Hillary Ames	Bob Bergeron	J. Keith Bull	Karen Cohen	Liz Deines	Nancy Finneran	Pamela Gilchrist
Melissa Ames	Laurie Betlach	Dana Bunker	Elizabeth Coleman	N. Delpero	Henry C. Finney	Katie Gillis
Peter Anastasia	Rachel Binavidez	Amy Bunting	Carol J. Colligan	William Delsue	Dee Finney, RN	Lorraine Gilmore
Robert Anderson	Paul Birchak	Mark Burton	G. Collins	Elaine Delvalle	Doris Finney	Julia Gilrez
Elise Andre	Joe Bird	Lynne Cabral	Michael T. Collins	E. Demmell	Thelma Finney	Sylvia Ginder
Taylor Angelino	Kristin Bishop	B. Calico-Hickey	Carl Colonius	Maria Demmin	Rosemary Fiori	Diane Gledhill
L. Anna	Gorus Bix	Patty Calipto	Lori Colt	Deborah Devito	Zane Fischer	Sheila Goggin
Vivian Anstranth	Tasha Bjolic	Claudia Calzetta	Pamela Colton	Lawrence Dicka	Geraldine Fiskus	Sandy Goins
Ann Anthony	Paul Blackburn	Beverly Sheena	Elizabeth A. Comeaux	Laurie Dickerson	Mary Flaherty	Shelly Gold
Dena Aquilina	Elizabeth Y. Blecha	Cameron	Vivian Ann Compton	Kristin Diferdinando	Nancy Florsheim	Jenny Goldberg
Lupe Arciniega	Jackie Blish	Dayton Cameron	Mary Sue Comstock	D. Dilan	Martha M. Fly	Cynthia Goldblatt
Sandy Ardogno	Beth Blissman	Sadaf Cameron	Rachael Conn	Tammy Dobbs	Brian Flynn	Veronica Golos
Bruce Armstrong	Lucey Bobik	Lauren Camp	Regina Conroy	Jan Dorris	Sean Flynn	Joanna Gonzalez
Julie Arneson	Niels Borch	Reed Campbell	Jaywynn Cooper	Megan Douglass	Joanne Forman	Marlin Good
Larry Audette	John Bourke	Alice Campion	Kathy Costa	Suzanne Dreith	Jowilla Forman	Sandra Goodwin
Iris Augustien	Clare Bowser	George and Joyce	Michael Costello	Regina Drey	Patricia J. Forman	Miriam Gordon
Bleck Aurore	Heron Boyce	Carlson	Steve Counsell	Jeanne Dueber	Carol Frank	J. Gould
James T. Avery	S. Janice Boyer	John Carnahan	Joan C. Coyote	Michael L. Dunn	Paulette Frankl	Katherine Graham
Richard Avery	M. Brace	Angela Caron	Daniel Craig	Clarissa Duran	Carla Fredman	Jeannine Gramick
Az-A-rail-ya	Mark S. Bradley	Mary Lou Carson	Ken Creek	Zoe Dwyer	Cindy Freedman	Mary Grathwol
Robert Backer	Joe Brahe	Tami Carson	Melissa Crocker	Ana Easter	Lisa Freeman	Julie Gray
Sandra Baker	Priscilla Brahe	Clark Case	Elizabeth Croom	Chris Eber	Mary Jean Friel	Celia Green
Maria Barcelona	Joan Brainard	Ernest Cashion	Jesse Cross	Liam Eberland	Joe Frustaci	Christopher Green
Steve Barela	Carol Brendenkamp, SCC	Polly Cashion	John Cross	Cindy Eck	Aurelia T. Fule	Jeanne Green
Brooke Barlow	Marcia Brenden	Jennifer Castillo	Peggy K. Cross	Rex Edmund	Joseph Fuller	Nomi Green
Elizabeth Barnes	Yvonne Brennan	Grady Challis	George E. Crowley	Kris Edwards	Melanie Fuller	Joel Greene
Brian Barnhart	Johanna Brian	Donna Chamisa	Pat Crowley	Stewart Edwards	Jane Furth	Laura J. Greenfield
Anita Barrer	Beatrice Bridges	Dr. Linda Chavez	Margaret Crumbacher	Janet Eigner	Cliff R. Gain	Maggie Greenwood
Chloe Barrett	Brian Brigham	Emmy Cheney	David Cunningham	Elena	Janice Ganard	Sally Greenwood
Melanie Bartness	Stephanie Brink	Geoff Cheshire	Erin Currier	Maize Elford-White	Nanette Gannone	Nona Lee Gregg
Cabrini Bartolo	Marilyn Brodie	Diane Chiccan	Andrew D'Amato	Kyle Elfrwr	Harry Garcia	Ellen Gregor
Jacqueline Barton	Ellen Brodsky	Neysa Chouteau	Rochelle D'Attinlo	Laurie Engelhard	Radha Garcia	Jade Grey

Campaign D (cont'd)

John Grey	Saul Hoffman	Robert Kaminsky	Maria Lewis	Ericson Martin	Barbara Mecher	Ben Neff
Kim Griffis	David Holmstrom	Susie Kanefield	N. Lewis	Lisa Martine	Clarence Medina	David Neff
Ed Grothus	Joni Holuf	Norman Katz	Roanne Lewis	Barbara Martinez	Joseph F. Medina	Emelye Neff
Peter Gueldher	Ron Holzman	Frances Kean	Kathleen Le Scouarnec	Elizabeth 'Betsy'	S. Medley	Mary M. Neikirk
Leigh Gusterson	Cynthia Homire	Kate Keely	Mark Licht	Martinez, PA-C	Dorothy Mendelson	R. Newby
Mary Gutzmilller	Richard Hostetter	Jean Kelley	Rose Liddell	John Martinez	Nancy Mercano	Reita M. Newkirk
Marie Le Guyer	Laird Houland	Kathy Kelly	Barbara Light	Josh Martinez	Jacqueline S. Mercenier	Jean Nichols
Marion Haas	Willow Huffman	Michele Kelly	Mary Jane Ligon	W. Martinez	Liz Merconi	D. Nielsen
Dori Hagler	Ann Hunkins	Susan Kelly	Joe Lindsay	Emmett Marx	Barbara Meyer	Yoki Nimura
Paul Haide	Justin Hunt	Susan Kenney	Debra Link	Joe Masica	Belinda Miceli	Cassandra Noel
John N. Hains	Thad Hunt	Eileen Kersgieter	Jane Lipman	Sara Masica	M. J. Miera	Suzanne Noga
Sue Ellen Hains	Madeline Hurd	Harijot Khalsa	Judy Lochne	Kalliroi Matsakis	Basia Miller	Corina R. Nolting
Helen Hall	Debrah Hurt	Delores Kincaide	Pat Lohmann	Donna Mattingly	Celeste Miller	Jean Nordhaus
Rebecca S. Hall	Jim Hyde	H. Kinderlikner	Onelio Lopez	Connie Mattox	Guthrie Miller	Valerie Novak
Brian Hammond	Mara Iaconi	Theresa M. Kinealy	Cheryl A. Lorange	S. R. Maxwell	Jude L. Miller	Maureen O'Connell
Mary Hanrahan	Tony Isaacs	H. King	Christina Lord	Harold T. May	Virginia J. Miller	Barbara O'Connor
Beth Hansen	Alycia Isenberg	Donal S. Kinney	Jesse Lower	Peter May	Lowell Mills	Kamara O'Connor
Brian L. Hardison	Rosie Jablonsky	Carolyn Kiser	Trevor Lucerno	Ken Mayers	Karen Milstein	Jim O'Donnell
David Hardy	Edith A. Jaeger	Bea Klebba	Elaine Lucero	Dominique Mazeaud	Philip Milstein	Moira O'Hanlon
Katherine Harmon	Philip James	Rick Klein	Luckey	Marian McAuooy	Viola Mintage	Michael O'Mooney
Kai Harper	Nancy Janosko	Terry Klein	Margery Luper	Alice McCallard	Katherine Misbauer	Gwen Oaks
Susan Harris	Barbara Jaramillo	Jackie Kneip	Jan Lustig	Pat McCain	J. Mark Mish	Nancy Oaks
Carol Harrison	Carolyn Jaramillo	Karen Knoll	Jill Lynch	Marta McCary	Helen Molanply	Tom Oaks
Allan Hart	Louie and Eva Jaramillo	Dawn Kohort	Ronald Lynn	Magdalena McCloskey	Eric Mondragon	Arlene Odenwald
Sherie C. Hartle	Randy Jason	Anna Koop	Allan MacGillivray, III	Sarah McCollum	Michael Monronev	Kristin Oldham
Gregg Hartnett	Alison Jayne	Sheri Kotowski	Virginia Maclovvia	Maureen McCormack	E. Montenavil	Ruth Omlin
Lorraine Has	Jose S. Jimeng	E. Krasilovsky	Alan Macrae	Sally McCormick	Stella Montoya	Sandra Oriel
Thane and Neva	Joshua Johnson	Bill Krass	Donna Macstas	Joan McDonald	Renee Morgan	T. E. Origer
Hascall	Karin J. Johnson	Betty Kronsny	Catherine Madden	Eric McEuen	Sally A. Morse	Suzanne Otter
Elizabeth Hayden	Thomas J. Johnson	Dan Kuehn	Diane Madsen	Gloria McFarland	Amy Mortier	Dennis Overman
Hallie Hayden	David Jones	Erich Kuerschner	Mary Mahan	Mary McGinnis	Mary Ann Moser	Eileen Overman
Scott Hayes	Marjorie Jones	Sarah Laeng-Galleatt	Elizabeth O. Malmgren	Joan McGrane	Agnes G. Moses	Gretchen Overman
Angelika Heikaus	Karen Jordan	Leslie Lakind, D.D.S.	Peter Malmgren	Keith McHenry	Lillian Moskeland	Angie Pacheco
Karen Herhahn-Bedwell	William Joseph	Kimberly Larson	Richard A. Malmgren	Bruce McIntosh	Un Mouna	Anne Padilla
Christopher Heron	Cynthia Joyce	Melissa Larson	Peggy Malone	Sara L. McIntosh	Andrew Munger	Jeanne Pahls
Peter Hess	Julie Joyce	Fran Lawson	Patricia J. Manion,	Jordan McKittrick	Penelope Lou Murnane	Sharon Palma
Annie Hickman	Kathy Joyce	Solange Leboucher	SL Ph.D.	Michael McKittrick	David J. Murnion	Elizabeth Pappalardo
Kelly Higgins	Tom Joyce	Donna Lefurgey	Lynne Mann	Rosemary McKittrick	Denis Murphy	Libby Pappalardo
Wendy Higgins	Frederick Kackley	Kirsten Leit	Mary Lynn Manning	Linda McLachlan	Pat Murphy	Marcelle Parker
Akiko Hirano	Lisa Kadel	Nancy Lent	Michael Marciano	Helen V. McLeod	Susan Murphy	Pamela Parker
Ethan A. Hitchcock	Charles Kading	David Lescht	Kate Marco	Leah McLeroy	Willow Murphy	John Parlett
Gabriel M. Hoare, SL	Eileen Kalinowski	Carolyn Melinda Levin	Gray Mareer	Penny McMullen	Minnie Murray	David Patton
Marie P. Hoare	Noelle Kalom	Kiron Levy	Janet Marshall	Mike McNaughton	Ryan Nadle	Therese Patton
Marilyn Hoff	Anna Lee Kaminsky	S. Levy	Charles Martin	Elizabeth McWilliams	Jennifer Nazak	Jenna Paulden

Campaign D (cont'd)

Jeannie Pearle	Wilham F. Roat	Dorothy Schoech	Joan Spero	Edmund Trujillo	Ben Wollter
Carol Pearson	Deborah Roberts	Vicki Schwartz	Thea Spicer	Shirley Trujillo	P. Suzanne Wollter
Robert E. Pearson	David Robinson	Scooter	Zane Spiegel	Jere Turner	Tim Wong
Mateo Peixinho	Barbara Roche	Ian Scully	Toni Spies	Bernadette Vadurro	Ellie Wood
Lydia M. Pena	Henry S. Rodgers	Paula Seaton	Lori Spillman	Christine Valdez	Margaret Wood
Sara Pene	Maureen Rodgers	Richard Sedillo	Suzanne R. Stanley	Gloria Veladi	Rachelle Woods
Dylan Pepper	Elena Rodriguez	Sylvia Sedillo, SL	Amelia Starkey	Joost Verbouen	Linda and Ron Wooten-
Krista Peterson	Terri Rolland	Mary E. Seematter	Alison Stecher	Charlie Villodes	Green
Nancy Peterson	Irene Romero	Holt Seiler	Marie L. Steckler	Elaine Vitsih	Ron Wooten-Green
All Petroleit	Tobi Romero	Lori Seligson	Monika Steinhoff	C. Vivanco	Jennifer Wyne
Sally Ann Phelps	Amanda Rose	Mike Seligson	David A. Stephenson	Shirley Joan Walker	Ayaka Yagi
Randa Phillips	Betty Ann Rose	Jennifer Sena	Dwight Stephenson	Stella Wallenbara	Nancy Kay Yankura
Marcy Piersol	Emily Rose	Gaila Senitt	Roy E. Stephenson	Lucy D. Walsh	Jack Young
Sara Pine	Naomi C. Rose	Adrian Serra	Annie Stevens	Dr. Jennifer Walters	Jill Young
Carol Ann Placek	Kirsten Rosenquist	Lexie Shabel	Jean Stevens	Honey Ward	Mayne Young
Coreen Plewa	Christian Ross	Mary Shaffer	Kenton Stevens	Joanne Ward	Gene Youngblood
Jim Plewa	Jill Rounds	Sandra Shaw	Michele Stimac	Caroline Wareham	Richard Yunker
Agnes Marie Plumb	Ruth Routten	Stephanie Shearer	John Storbeck	Stuart Warren	Sammy Yunker
Dianne Pola	Gabriel Roybal	Sandra Shell	Pinu Stout	Jill Wasden	Bernice Yuzzri
Alice Pomeranz	Elizabeth Rushnell	George Shepherd	Beth Strong	L. Weaver	Jeanne Zandi
Judy Popp	Gail Russell	Elisabeth Sherif	Jamie Stuehling	Terri Webb	Alicia Zapata
Marjorie Poppa	David Rust	Eldon E. Shields	Cathie Sullivan	Robert Weber	Jay Zeiger
Marilyn Price	Liz Rutherford	Janet Shipley	Martina Sullivan	Ralph Welch	Adele E. Zimmermann
Peggy Prince	Chrissy Rutkaus	Jane Shoenfeld	Julie Sutherland	John Wenger	Elaine Oser Zingg
Victoria Prince	Bud Ryan	Cindy Shore	Barbara Swanson	Elizabeth West	Otto Zingg
Rebecca Procter	Nancy Ryan	Andrew Sierra	Alisa Sydell	Patricia Whalen	Richard Zook
Anne de Quillets	Meena Sachderm	Emily Sign	Chizuko Tasaka	Talaya White	41 Signatures Illegible
Chantal Quincy	Miriam Sagan	C. Sigstedt	Stefanie Tashjian	Angela WhiteEyes	
Valorie Quintana	Rebecca Sagemiller	Carolyn Sigstedt	Brooke Tatum	Jonathan Whitney	
Elizabeth Raby	Larry Saine	Marcele R. Silva	Diana Thatcher	Mary Widger	
Melba Ramos	Susan Saine	Paul William Simons	Christina Thompson	Donald Wielenga	
David Ray	Mary Lou Salazar	Deborah D. Skinner	Laura Thompson	Natalie Wielenga	
Sarah L. Reeb	Julie Sales	Elliott Skinner	Kathleen Tiehe	Suzanne Wigggin	
Elizabeth M. Reed	Karen Salman	Carl A. Smith	Alicia Tietje	Dave Wilkison	
Dane Reese	Erin Sanborn	Cathy A. Smith	Terra Tiffany	Moriah Williams	
Cassandra Reid	Jasmin Sanders	Jack Smith	Mila Tilly	Claudia Wilson	
Nancy Renick	Srena Sanderson	Joy Smith	Judith J. Toler	James Wilson	
Maurine Renville	Mary Helen Sandoval	Maureen Smith	Clyde Tomlin	Sandra Wilson	
Houoka Richardson	Giovanni Sapienza	Scott D. Snyder	James Tonjes	Scott Wiseman	
Ron Richardson	Elaine Satterwhite	Stephen Soleas	Jean Tonjes	Evelyn M. Witt	
Eileen Richvalsky	Frederick Sawyer	Shannyn Sollitt	Bunni Toohey	Richard G. Witt	
K. Rittenhour	Lynda Schartle	Helen South	Olga Torres-Reid	Nancy Witter	
Rod Rivand	Dorothy Scheopner	Thea Spaeth	Mo Tredwin	Nancy Wittwer	
Tamar Rivers	Anne Schick	Edna Spence	Penny Truitt	Katie Wolfman	

Campaign E

TRISH DOHERTY  
285 WASHINGTON AVE  
BROOKLYN NY 11205-4202  
212-946-1619  
PO Box 1  
CHIMAYO  
NM 87522

SEPT. 20. 2006

National Nuclear  
Security Administration  
Los Alamos Site Office  
Office of Environmental Stewardship.  
528 35th Street,  
Los Alamos, NM 87544  
Attention: Ms E. Withers

Dear Ms Withers.

I enclose copies of 44 people (of wisdom  
in my opinion), all against the INSATIETY  
of producing nuclear weapons at Los Alamos.  
We are asking you, pleading with you,  
demanding that you do NOT INCREASE  
PRODUCTION OF PLUTONIUM PITS AT LOS  
ALAMOS LABORATORY.

I have mailed the originals to  
Peace-Action New Mexico.

Once again I ask that you & our  
supposed leaders come to their senses  
& see what they want to do & STOP IT.

E-1

E-1 NNSA notes the commentors' opposition to activities related to nuclear weapons production at LANL. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. Chapter 5 of the SWEIS evaluates the potential environmental, health and safety impacts of continued operation of LANL under the three proposed alternatives. These analyses demonstrate that LANL can continue to operate safely under any of the three alternatives. Chapter 4, Section 4.6.1, of the SWEIS provides information on current cancer mortality and incidence rates in New Mexico and counties surrounding LANL. Table 4-26 shows that some cancer rates in Los Alamos vicinity are lower than the national average and some are higher, which is typical of any area. This section also presents information from the final LANL Public Health Assessment, issued on August 31, 2006 by the U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry which determined that, "...there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "...overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006).

Chapter 5 of the SWEIS describes the environmental impacts of each of the three alternatives for continuing to operate LANL and includes the effects on surface waters, groundwater, and air. Section 5.13 states that contamination from LANL or changes in Rio Grande flows are not likely to affect water quality. In addition, a drinking water pathway analysis has been added to Appendix C to address concerns expressed regarding contamination of the Rio Grande. The analysis shows that drinking Rio Grande water that could potentially be impacted by LANL activities is comparable to drinking water from the Jemez River, which is not downstream of LANL. The health impacts analysis uses air monitoring data to estimate dose to the population within a 50-mile (80-kilometer) radius of LANL. The maximum projected annual population dose would be 36 person-rem under the Expanded Operations Alternative. This dose would not be expected to result in any additional latent cancer fatalities in the affected population.



Campaign E (cont'd)

One radioactive plume in Dixon is a tragedy unto itself, & how many more are there.

How pure is our soil around Los Alamos, how sweet the air, how pure the water. There is no terrorism greater than the destruction of these basic building blocks of life - destruction that will effect me, you, your children & all our children for hundreds of thousands of years to come.

I ask you to remove the denial from your eyes & see the truth of what you do.

In deep respect for your higher self,

Sincerely,

Tish Doherty.

Say NO to nuclear weapons research and production at Los Alamos National Laboratory (LANL)

I vigorously oppose the proposal for LANL to continue or expand its nuclear weapons mission. It is dangerous to the health and safety of the environment and all life in northern New Mexico.

E-2

E-1  
cont'd

E-1  
cont'd

E-2

In May 2006, the New Mexico Environment Department reported detecting americium-241 above background levels in a single plum sample collected near Dixon. The New Mexico Environment Department data was subsequently examined by other scientists who concluded that this was likely a "false positive" result. Refer to Section 2.6, Offsite Contamination, of this CRD for more information.

Campaign E (cont'd)

**Individuals also submitting this campaign:**

Jacob Anderson  
Josephine Axt  
Errol E. Bennett, Jr.  
Giovanni Borreto  
Chandra Bossard  
James Burnett  
Dave Camoirano  
Melissa Camoirano  
Barbara Caporale  
Sansi Coonan  
Lawrence Cruz  
Jackie Damsky  
Marina DeFranza  
Frank Deitle  
Trish Doherty  
J. Clifford Dyer  
Chellis Glendinning  
Leslie Goldstein  
William G. Grover  
Geri Jaramillo  
Dan Kelley  
Sharon Key  
Terry Lattiore  
Alex Leachman  
Nina Londyan  
Sasha Luci  
Pam McDonald  
Victor B. Odesanya  
Aminy Ostfeld  
Cathy Pedevillano  
Eddie Richardson  
Mauna Richardson  
Carla Sanders  
Peter Scherm  
Margie Scott  
Martha Shweder  
Robert Shweder  
Jonathan Skurnik  
Jim Soviero  
Ten  
Sally-Alice Thompson  
Chip Tolleson  
Misty Tolleson  
Robert M. Winn, Jr.

## Campaign F

U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, Attn: Ms. Elizabeth Withers, Office of Environmental Stewardship, 528 35<sup>th</sup> Street, Los Alamos, New Mexico, 87544 Public comment closes September 20, 2006

Dear Ms. Withers

**I strongly oppose expanded plutonium pit production at Los Alamos National Laboratory (LANL).** Quadrupling pit production will turn the LANL into a radioactive storage and waste dump facility, and a BOMB FACTORY.

**I have a couple of questions for you.**

- What is the future of increased toxic and radioactive waste generated by expanded operations?
- Why is LANL allowed to increasingly squander and pollute our precious water resource?
- What makes it possible for LANL to continue to hide behind regulations allowing for the release of toxic air pollutants in open burning and detonation practices using high explosives and depleted uranium?
- When is LANL going to be up to date with incomplete safety documentation that currently compromises worker wellbeing and how does LANL expect to keep up in the face of expanded operations?
- Where is the common sense behind allowing construction of large, complex, hazardous and expensive facilities on earthquake fault lines?
- Where are the finalized documents assessing public health risk, seismic risk and Area G?

When you can answer these questions and provide the finalized documents for public review and comment, then this will be an acceptable time to begin the public comment period for the draft Site Wide Environmental Impact Statement.

Sincerely,

Name:

E or USPS Address:

Signature:

Date:



*F-1*

*F-2*  
*F-3*

*F-4*

*F-5*

*F-6*

*F-5*  
*cont'd*

**F-1**

NNSA notes the commentors' opposition to increased pit production at LANL. The environmental impacts of waste generation and disposal are addressed in Chapter 5 of the SWEIS. While increased waste generation would occur as a result of expanded pit production, not all waste would be disposed of at LANL. Chemical waste and low-level radioactive mixed waste from LANL operations are sent offsite for treatment and disposal; transuranic waste is stored until shipped to WIPP for disposal, and low-level radioactive waste is either disposed of onsite at Area G or shipped offsite for disposal. Refer to Section 2.7, Waste Management, of this CRD for more information.

**F-2**

All wastes are stored onsite, primarily at TA-54, and managed protectively until disposed of. The disposal method and facility are determined based on the type of waste. At LANL, some low-level radioactive waste is disposed of onsite at TA-54. Other radioactive wastes are transported offsite for disposal. For example, transuranic waste is disposed of at WIPP, which is regulated by both the New Mexico Environment Department and the Environmental Protection Agency. Hazardous waste is sent to offsite commercial facilities for treatment and disposal. Refer to Section 2.7, Waste Management, of this CRD for more information.

**F-3**

NNSA notes the commentors' opposition to water pollution and increased water use by LANL. Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, over the past 6 years, LANL has had a very good record of complying with permit conditions. It is expected that LANL would continue to meet permit conditions designed to protect water resources under all alternatives. In addition, NNSA operates a monitoring program (described in Chapter 4, Section 4.3.1.5) to detect contamination that has resulted from past practices. In accordance with applicable regulations and agreements, NNSA evaluates and takes corrective action for occurrences of contamination in ground and surface waters. LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's annual water use target ceiling. Refer to Section 2.8, Water Use, of this CRD for more information on LANL's water use, available water rights, and water supply planning.

Campaign F (cont'd)

**F-4** All LANL activities are performed in accordance with State (New Mexico Air Quality Control Act) and Federal (Clean Air Act, Toxic Substances Control Act, DOE and EPA regulations, and Executive Orders) laws and have valid permits as described in Chapter 6 of the SWEIS. Current air sampling programs at LANL include ambient non-radiological air monitoring, an ambient radiological air sampling network called AIRNET, and stack sampling for radionuclides, as described in Chapter 4, Sections 4.4.2.3 and 4.4.3.1, of the SWEIS. The Clean Air Act, Title V operating permit includes requirements for monitoring emissions from sources at LANL and recordkeeping concerning those sources. Although toxic and radioactive air emissions can potentially have detrimental impacts, the past emission levels analyzed and those projected for LANL would not be expected to cause unacceptable impacts on human health or the environment, as shown in Sections 4.6.1.3, 5.4.1.1, and 5.6.2. NNSA has revised Chapter 6, Section 6.4 to reflect that the open burning permits have been withdrawn at LANL staff's request and the associated activities have ceased. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information on high explosives and depleted uranium activities.

**F-5** The process of ensuring that LANL facilities and operations are conducted in a safe manner is an ongoing process that requires constant review. In addition to conducting its own reviews, NNSA benefits from the independent oversight of facility safety provided by the Defense Nuclear Facilities Safety Board. Safety issues or gaps in safety documentation, whether identified by NNSA, the LANL contractor, or the Defense Nuclear Facilities Safety Board are reviewed and responded to with commitments to update and improve safety basis documentation. The Los Alamos Site Office Safety Authorization Basis Team ensures the development and approval of adequate controls in support of operations at LANL in a safe manner. All LANL facility operations are based on authorization and approval by NNSA from evaluation of the acceptability of existing relevant safety documentation.

The LANL Public Health Assessment prepared by U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry was finalized and issued August 31, 2006 (ATSDR 2006). The conclusions from the draft are essentially unchanged in the final

Campaign F (cont'd)

document. An update to the seismic hazard analysis was completed in June 2007 and incorporated into Chapter 4, Section 4.2.2.3, Chapter 5, Section 5.12 and Appendix D, Section D.4. Information under development that is not available for use in the Final SWEIS, such as the updated Area G performance assessment, will be considered as it becomes available and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

- F-6** The seismic characteristics of the LANL environment are described in Chapter 4, Section 4.2.2.3, of the SWEIS. Chapter 5, Section 5.12 presents the estimated human health impacts from postulated facility accidents, including earthquakes. Over the years, based on new seismic information or changed requirements, NNSA has evaluated the survivability of LANL buildings and structures and implemented mitigation measures in terms of structural upgrades, reduction of hazardous materials inventories, or replacement of the structures to reduce the potential for harm to the workforce and the public. Construction requirements are imposed for new structures in accordance with the site locations relative to known fault lines and in accordance with the planned future use of the structure. For proposed new buildings, safety studies in the form of hazards assessment documents that take into account the most current seismic information are prepared. The results of these safety studies are incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

Campaign F (cont'd)

**Individuals also submitting this campaign:**

Cid Bacher	Larry Miller
Floy Barrett	Sheila Miller
Michael Bellas	Jake Mosswan
Felicia Brooks	Mariel Nanasi
Nancy Campbell	Joan Norris, LM, CPM
Susan Christ	Jeffery Northrup
Darren Cordova	Alessandra Ogren
Wade Elston	Karen Olsen
Samuel England	Bernice Pacheco
Karla Eoff	Kelly Pasholk
Margaret Evans	Klaus Penzel
Rosamund Evans	David Phillips
Jerome Fernenby	Dylan Rappert
David Fischer	Mark Rohrshub
Ellen F. Franklin, Ph.D	Frances Romero
Dwain Freeman	Micah Roseberry
Lena Gallegos	Rena Rosequist
Randy Garcia	Mark Schiller
Steven P. Gloss	Rev. Mark A. Schultz
Barry Gober	Brian Shields
Shana Golden	Lisa Sipp
Rev. Elizabeth Graham	Elizabeth Stern
Stephanie Hiller	John Stowe
Mike Hullmer	Taos County Noxious Weed Committee
Daniel Hutchison	Taos Rio Arriba County, Green Party
Manuel Iniquez	Adam Tiney
Rosemary James	Phyllis Tomlinson
William J. Knight	Patty Torres
Renée LaBerge	Carl Wagner
Bonnie Larson	Mila Watson
Sharon Leach	Charles Wemple, C.P.S.
Karie LeCoyor	Stefani Wilkins
Don Lobato	Jonathan Wilson
Joyce Lobato	Ellie Wood
Frank Lucero	Joseph Wrede
Pam Lytle	
Debbie A. Maestas	
Lawrence Malisow	
Erica Martiez	
J. Mark Mash	
Michael Mash, Ph.D.	
Kevin McCourt	
Frances Medina	
Colette Mercier	

**Campaign F (cont'd)**

**Individuals submitting "Campaign F Letter" with additional comments**

U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, Attn: Ms. Elizabeth Withers, Office of Environmental Stewardship, 528 35<sup>th</sup> Street, Los Alamos, New Mexico, 87544 Public comment closes September 20, 2006

Dear Ms. Withers

**I strongly oppose expanded plutonium pit production at Los Alamos National Laboratory (LANL).** Quadrupling pit production will turn the LANL into a radioactive storage and waste dump facility, and a BOMB FACTORY.

**I have a couple of questions for you.**

- What is the future of increased toxic and radioactive waste generated by expanded operations?
- Why is LANL allowed to increasingly squander and pollute our precious water resource?
- What makes it possible for LANL to continue to hide behind regulations allowing for the release of toxic air pollutants in open burning and detonation practices using high explosives and depleted uranium?
- When is LANL going to be up to date with incomplete safety documentation that currently compromises worker wellbeing and how does LANL expect to keep up in the face of expanded operations?
- Where is the common sense behind allowing construction of large, complex, hazardous and expensive facilities on earthquake fault lines?
- Where are the finalized documents assessing public health risk, seismic risk and Area G?

When you can answer these questions and provide the finalized documents for public review and comment, then this will be an acceptable time to begin the public comment period for the draft Site Wide Environmental Impact Statement. *We do NOT need any more contaminants in our AREA!*

Sincerely, *Jermine Franenby* I drive for Seniors citizens  
Name: *JF* E or USPS Address: *Rt. Box 16 UADITO NM 87579*  
Signature: *Jermine Franenby* Date: *9/12/06*

F1-1

F1-1 NNSA notes the commentor's opposition to expanded plutonium pit production at LANL. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. Also, see comment responses F-1 through F-6 regarding the stated questions.

F1-2

F1-2 Chapter 5 of the SWEIS evaluates the potential environmental, health and safety impacts of continued operation of LANL under the three proposed alternatives. These analyses demonstrate that LANL can continue to operate safely under any of the three alternatives. LANL operations are designed to keep the release of chemicals and radioactive materials well within the regulatory limits designed to protect public health and the environment. LANL has monitoring programs that sample air, water and soils, and the results are reported in the annual environmental surveillance reports. Refer to Section 2.6, Offsite Contamination, of this CRD for more information.

U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, Attn: Ms. Elizabeth Withers, Office of Environmental Stewardship, 528 35<sup>th</sup> Street, Los Alamos, New Mexico, 87544 Public comment closes September 20, 2006

Dear Ms. Withers

**I strongly oppose expanded plutonium pit production at Los Alamos National Laboratory (LANL).** Quadrupling pit production will turn the LANL into a radioactive storage and waste dump facility, and a BOMB FACTORY.

**I have a couple of questions for you.**

- What is the future of increased toxic and radioactive waste generated by expanded operations?
- Why is LANL allowed to increasingly squander and pollute our precious water resource?
- What makes it possible for LANL to continue to hide behind regulations allowing for the release of toxic air pollutants in open burning and detonation practices using high explosives and depleted uranium?
- When is LANL going to be up to date with incomplete safety documentation that currently compromises worker wellbeing and how does LANL expect to keep up in the face of expanded operations?
- Where is the common sense behind allowing construction of large, complex, hazardous and expensive facilities on earthquake fault lines?
- Where are the finalized documents assessing public health risk, seismic risk and Area G?

When you can answer these questions and provide the finalized documents for public review and comment, then this will be an acceptable time to begin the public comment period for the draft Site Wide Environmental Impact Statement.

Sincerely, *Stephan Wilkins* (PS. This is my neighborhood! We have to develop ALTERNATIVES! Thanks for your attention!)  
Name: *Stephan S. Wilkins* E or USPS Address: *thanks for your attention!*  
Signature: *Stephan S. Wilkins* Date: *9-9-06*

F2-1

F2-1 NNSA notes the commentor's opposition to expanded plutonium pit production at LANL. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. Also, see comment responses F-1 through F-6 regarding the stated questions.

F2-2

F2-2 The most viable alternatives for the future operations at LANL are provided in Chapter 3, of the SWEIS. Any alternatives considered must support the mission assigned to NNSA by the U.S. Congress and the President. Cessation of these activities would be counter to national security policy as established by the Congress and the President.

## Campaign G

U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, Attn: Ms. Elizabeth Withers, Office of Environmental Stewardship, 528 35<sup>th</sup> Street, Los Alamos, New Mexico, 87544  
Comment period ends September 20, 2006

Dear Ms Withers,

I, \_\_\_\_\_, am united with my neighbors in opposition to the proposed Expanded Operations at Los Alamos National Laboratory.

**Plutonium bomb factories do not make good neighbors.  
They pollute our air. They pollute our water. They pollute our land.  
No Expanded Operations. No Expanded Harm  
No Bomb Factory in my back yard.**

I demand a Green Alternative for the Laboratory that will provide non-nuclear alternative energy that will address issues of global warming and will clean up Department of Energy pollution to the Sacred Ceremony Standard.

Sincerely,

Name: \_\_\_\_\_ E or USPS Address: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

G-1

G-2

**G-1** NNSA notes the commentors' opposition to the Expanded Operations Alternative. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD. Chapter 5 of the SWEIS evaluates the potential environmental, health and safety impacts of continued operation of LANL under the three proposed alternatives. These analyses demonstrate that LANL can continue to operate safely under any of the three alternatives. The results of these analyses are summarized in Chapter 3, Table 3-19 and Table S-5 of the Summary. Refer to Section 2.6, Offsite Contamination, for more information.

**G-2** Chapter 3, Section 3.5, of the SWEIS provides a discussion of NNSA's consideration of, and decision to not analyze a "Greener Alternative" in the SWEIS. A "Greener Alternative" was analyzed in the 1999 SWEIS but was not selected for implementation. NNSA does not believe, 7 years later, that a "Greener Alternative" is reasonable for the future operation of LANL to meet its primary mission of supporting the Stockpile Stewardship Program as directed by the Congress and the President, and has identified the Expanded Operations Alternative as its Preferred Alternative. In addition to LANL's Stockpile Stewardship activities, research is conducted in areas promoted by the commentor. These activities would continue at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the State of New Mexico in the Consent Order. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered such as containment in place, treatment, or removal. Any remedy selected for a site requiring environmental restoration must meet several criteria including protection of human health and the environment, and attainment of applicable cleanup standards including those for ground and surface waters and soil. If a site is to remain under DOE ownership, cleanup standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted access by the public, then the site would need to meet cleanup standards for unrestricted access. Decisions about the appropriate levels of cleanup for sites subject to the Consent

### Preliminary Siting Alternatives





**Campaign G (cont'd)**

**Individuals also submitting this campaign:**

Violette Alby	Zane Spiegel
Melinda Bateman	Adam Steinberg
Bob Bishop	Spirit Sullivan
Norah K. Bishop	Neal Thielke
Astrid Brouler	Andrea Usherwood
Judy M. Caldwell	Marion Wasserman
Joanie Carlisle	
Carole Clark-Dobos	
Laura Cook	
Rose Mary Crawford	
Peter Dongan	
John Mark Elder	
Tammy Gonzales	
Lorien Green	
Mary Green	
Rick Haltermann	
Saladin Hamdy	
Shelly Hamdy	
Kai Harper	
Stephanie Hiller	
Megan S. Johnson	
Michele Johnson	
Susan Jones	
Viola M. Jurica	
Susan Kalen	
Michael LaValley	
Joel M. Lage	
Tobi Loffer	
Elizabeth "Betsy" Martinez	
Karen McClaren	
Claudia Miller	
Marcia Naveau	
Jean Nichols	
One Straw Farm	
Gina Ortiz	
Mary Passaglia	
Chloe Pocock	
Suzanne M. Quintana	
Anne Reines	
Ellen Rink	
John Robbins	
Joan Saraniero	
Alan M. Siegel	

Order will be made by the State of New Mexico using cleanup criteria documented in Section VIII of the Consent Order. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

## Campaign H

U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Site Office, Attn: Ms. Elizabeth Withers, Office of Environmental Stewardship, 528 35<sup>th</sup> Street, Los Alamos, New Mexico, 87544  
The Public Comment Period ends on September 20<sup>th</sup>, 2006.

Dear Ms Withers,

On August 9, 2006, the 61<sup>st</sup> commemorative year of the bombing of Nagasaki, Japan, the Department of Energy received public oral comment on expanding operations at Los Alamos National Laboratory in Espanola, New Mexico.

**This is the environmental impact sadly not bound into the SWEIS:**

**One plutonium pit detonated in Nagasaki, Japan,  
75,000 humans dead instantly, millions of lives devastated by the poison of radiation;  
and the suffering is carried on through the generations and throughout the environment.**

I oppose current pit production at Los Alamos National Laboratory, expanded operations from 20 to 80 pits per year and the implication which is referenced 61 times to a modern pit facility with the capability of producing 450 pits per year. I join with my friends and neighbors to say:

**No Bomb Factory in my back yard or anywhere!**

**We demand a Green, non-nuclear Alternative that solely addresses climate change, renewable energy and clean-up technology that can restore environmental vitality to nuclear and non-nuclear industry devastated areas.**

Sincerely,

Signature:

E or USPS Address

Name:

Date:

H-1

H-2

H-1

NNSA notes the commentors' opposition to the Expanded Operations Alternative. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President, and is therefore not being considered in the SWEIS. Reference to a modern pit facility in the Draft LANL SWEIS was in the context of ensuring that reasonably foreseeable future actions were addressed in accordance with the Council on Environmental Quality NEPA regulations regarding cumulative impacts. The LANL SWEIS alternatives addressing operational levels for the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative). In October 2006, NNSA issued a Notice of Intent (71 FR 61731) to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (DOE/EIS-0236-S4). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). The Final SWEIS does not include reference to a modern pit facility. Refer to Sections 2.1, Opposition to Nuclear Weapons and Pit Production, and 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

H-2

Chapter 3, Section 3.5, of the SWEIS provides a discussion of NNSA's consideration of, and decision to not analyze a "Greener Alternative" in the SWEIS. A "Greener Alternative" was analyzed in the 1999 SWEIS but was not selected for implementation. NNSA does not believe, 7 years later, that a "Greener Alternative" is reasonable for the future operation of LANL to meet its mission as directed by the Congress and the President, and has identified the Expanded Operations Alternative as its Preferred Alternative. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

### Preliminary Siting Alternatives



Campaign H (cont'd)

**Individuals also submitting this campaign:**

Cass Adams	Shawna Yambire
Mary L. Archuleta	Claudia Yunker
Susan Bachrach	Richard Yunker
Amina Bilal	Bonnie Zirkel
Alberto Castagna	
Karen Castagna	
Michael Dudelczyk	
Tracy Monk Durland	
Donald Feinberg	
Vanessa Fields	
Peter J. Garcia	
Leigh Gusterson	
Rosa Hagan	
Margretina N. Hahn	
Woodson B. Hand	
Josie Harmon	
Cami Hartman	
Ann T. Hendrie	
Dory Hulburt	
Julia Ives	
Nancy L. Janosko	
Kathryn Keith, M.D.	
Beverly L. Kuhn	
Shauna Lasiloo	
Barbara Tullman Malisow	
Helen E. Martin	
D. Martinez	
Lucy McCall	
Nancy McLendon	
Virginia J. Miller	
Jean Nichols	
Michael Pacheco	
Kathleen G. Pease	
Jennifer Peck	
Cliff Peckham	
Toby Pocock	
Deborah Romero	
Jill Rounds	
Anne Ullman	
Annalee Veach	
Charles Veleodes	
Carol Wells	
Jean Whettnall	

Campaign I

Aug. 25, 2006

Dear Elizabeth Withers:

I send this letter to insist that in all fairness/justice the citizens of Albuquerque, New Mexico be provided public hearings to express their opinions/feelings concerning any increase in enlarging bomb-build- ing facilities and/or increasing bomb production in New Mexico.

This matter is so critical to the wellfare of the citizens of the entire United States, the hearings should be nationwide, but Albuquerque must be heard.

Sincerely,

Doris M. Pottenger, Idaho Downwinder  
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Aug. 25, 2006 .org/

cc Sen. Jeff Bingaman  
Con. Heather Wilson  
Con. Tom Udall  
Sen. Pete Domenici  
Dave McCoy, Assist. Director, Citizen Action  
New Mexico

I-1

I-1

NNSA notes the commentors' desire that Albuquerque have an opportunity to comment on the Draft SWEIS in a public hearing. Although there were no public hearings in Albuquerque, other means of providing comment on the Draft SWEIS were provided. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

*Campaign I (cont'd)*

**Individuals also submitting this campaign:**

Darrell Baldwin  
Marilyn Campbell  
Doris M. Pottenger  
Ira F. Pottenger

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 500: William Bruce*

My name is William Bruce. And I came over here tonight to just to express my concern for the continuation of the building of nuclear weapons and supporting those efforts and that continues to threaten the whole planet and my children and my children's children and so on.

500-1

I recently saw a movie called Why We Fight. And it highlighted what Dwight D. Eisenhower said way back in 1959 or '60. He said "Beware of the military industrial complex. It will take over this country, it will rob you of your liberties, it is something that has to be resisted at every level, especially the citizens have to keep an eye on Congress, on their government officials, otherwise this thing could get out of hand."

And obviously it has gotten out of hand. And that's why I'm here. I want to dismantle this military industrial complex, I want to be a force in that direction. And any continuation of the nuclear arms facilities here in Los Alamos I think should be converted to all the necessary technologies that this planet really needs.

For instance, fighting global warming. Obviously, you know, new energy technologies that won't threaten the planet, you know, that will reduce the greenhouse gas effect and the global warming effect and pull us out of this downward spiral that threatens everyone on the planet, you know.

500-2

And we here in the West and especially the United States are for sure the most responsible since we're using most of the energy. That's what I'd like to see, Los Alamos, the labs, used for, all those beautiful minds, those great minds put to the preservation of life on this planet and not threaten it. That's pretty much it.

500-1

NNSA notes the commentor's concerns regarding pit production and the existence of nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

500-2

Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 501: Erich Kuerschner*

Let's see here. Okay. First of all I want to thank everybody for coming and everybody that worked on the EIS and will continue to work on that. I mean it sounds like there's a lot of good information in there.

And hopefully we'll do this in an honest, open way and really get the science involved. And at least through the EIS, past EIS I can't say, but hopefully the EIS statement will reflect good science and result in the best possible decision.

Basically normally I do have written statements. But the problem is I was out of the country for three and a half weeks and returned to Denver on July 7, spent the night, and didn't get back into Taos until July 8.

It wasn't until 1:30 this afternoon that I saw my first hard copy of the EIS at the Outreach program. And I understand that they received their copy just today. There were copies in town at the DOE but not at the site that was listed.

As far as Taos is concerned, I have a letter with me from the librarian that EIS in Taos, contrary to what was published in the paper, it will not be available until this evening.

Española, as far as I'm able to ascertain, they're closed for re-inventory, removing books. And the librarian there doesn't even believe they received a copy. Now, these were hand-delivered to the various libraries.

The point I'm trying to make is that this is a huge, huge decision. And, from the looks of the document, perhaps it's all in there, perhaps it's all real great. But, in the two hours that I spent with that document, I was -- I'm a little nervous.

And, just as a background, my father retired from the Air Force in 1978. And he worked on national intelligence estimates. So I have some idea of what that's about. I originally started with -- was accepted at Cal Tech at nuclear physics but after my sophomore year switched to economics.

I did my first EIS in 1972 so I know what a good EIS looks like and I know what a good EIS produces. I mean we're talking here -- let me backtrack a little bit. And I'm sorry for my disorganized comments.

But my main concern is over the pit production. I want to limit my comments and discussion to that. I know there's a lot of air quality, water quality, and so on and so forth issues.

But my concern mainly has to do with the big overall picture, what does pit production do to the security and safety and the economy of my family, my children, my community, and my nation. I mean this is a nationwide issue. We spent \$8 trillion on nuclear weapons since World War II.

And we have stated publicly that we have the right to drop a nuclear bunker buster bomb in Afghanistan and Iran because maybe -- maybe, while there's no evidence of any breach of the nuclear proliferation treaty, we think that they might be moving in that direction. And we have the right to take it out with a nuclear weapon.

**501-1**

NNSA notes the commentor's concerns regarding safety and security as it relates to pit production. As indicated in Chapter 1, Section 1.2, of the SWEIS, the purpose of continued operation of LANL is to provide support for NNSA's stockpile stewardship mission as directed by the Congress and the President. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce the size of its overall stockpile. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. National and international policy issues regarding the use of nuclear weapons are not within the scope of this SWEIS.

**501-1**

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 501 (cont'd): Erich Kuerschner**

Well, if we're playing the game fairly, what that implies to me is they have the right to take Los Alamos out by the same reckoning unless we have a double standard. So I know that my house in Taos is not insured for an act of war and I'm counting on it for retirement hopefully for my children.

So you need to know what will happen if a nuclear weapon of the size that we are proposing dropping on Afghanistan gets dropped in Los Alamos. Can we get out, will the government compensate me for my house is not there, how will I be impacted.

The other thing I really need to know is now that so much has changed and a lot of the needs assessment is still based on the 1999 EIS. Well, I mean as people say September 11 changed everything. Now we have a different threat and a different proliferation treaty.

So I'm really concerned that, if we increase pit production here, what does that imply for the security and safety in the future of our children and our nation as a whole. And so -- explain to me what that means.

So really what I'm asking for is that, if we want to do this right, I mean it's impossible to start -- it's not fair to start the clock running on June 6. The clock should start running by today, when a reasonable person who is working in the field has access to it.

So I'm asking for an extension. And I'll put this specific comment that I was able to gather today and what I see as major flaws in the EIS. I'll put that in my written statement. Anyway, thank you all, folks, for coming. And thanks to everybody that's worked so hard. Let's do the right thing.

501-2

501-2

NNSA notes the commentor's desire for activities at LANL to be focused on areas other than those related to nuclear weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas not related to nuclear weapons such as renewable energy and global climate change. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information. The Nuclear Non-Proliferation Treaty (NPT) has not been replaced. Additional treaties have been signed over the years to reduce the nuclear weapons stockpile. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

501-1  
cont'd

501-3

501-3

Responding to requests for additional review time, NNSA extended the comment review period from the original 60 days to 75 days. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.



Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 500 (cont'd): William Bruce (comments continued from page 3-895)**

First of all, whoever decided to have the meeting here at the Fuller Lodge, I would like to thank you for that. I always wanted to visit this lodge. I've never been in here.

I've been in New Mexico about 33 years. I have two kids and three stepkids, five boys. So like the previous speaker I'm concerned about the pit production increasing instead of decreasing.

|| 500-1  
cont'd

What I would like to see is all the nuclear weapons facilities closed down and turned into some sort of technology research centers where things that the planet really needs could be developed, things that really threaten this planet, you know, like global warming and things like that. I think that would be a good use of the Los Alamos Labs.

|| 500-2  
cont'd

I think that Dwight D. Eisenhower, he tried to warn the people of this country back in 1959 or 1960, when he was leaving his presidency. And he put it right in our hands, he said "We have to keep an eye on the military industrial complex or it will take over this country and it will rob us all of our freedoms and liberties and we won't even realize it."

And it's up to us, the citizens, to do just that. And that's why I came all the way out here from Pecos, New Mexico, to be here tonight. I'm real concerned. I have five young kids that just like the previous speaker said, you know, what kind of a world are we setting up if we're continuing these nuclear weapons, you know, what are we handing over to them and what kind of security is there going to be for them as they grow up in a world that's -- we're just increasing the competition of these nasty, nasty things.

So that's my opinion. The waste issue, you know, it's kind of a no-brainer. We went through this in Pecos in the Terrero area, whether you cap it off or you dig it up and put it somewhere else. It's a tough decision. And it took years to figure out what to do, you know.

|| 500-3

But, if that's -- you know, if waste is a problem, why add to the waste, why not just stop producing waste first of all. That's the first step to the waste problem. And then research on what's the best thing to do with it. That's all. Thank you.

(NNSA responses to these comments are provided on page 3-893.)

500-3

Although LANL has instituted a pollution prevention and waste minimization program, operation of LANL in support of its mission does generate radioactive and chemical wastes. These wastes are managed, however, in a manner that minimizes environmental and human health impacts and complies with regulatory requirements and DOE policies and procedures. Refer to Section 2.7, Waste Management, of this CRD for more information.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 502: Astrid Webster

I sat down outside a few minutes ago and started writing because truthfully just being here makes me so angry that I can hardly think. And so I had to write something.

My birth was nine months to the day after the gadget was blown up in Southern New Mexico. And I grew up there. And I will never forget that the Department of Energy is really the Atomic Energy Commission. And you guys are married to it. In fact, by being citizens in this country, we're all married to it. And that's almost the saddest thing I can think about.

A few years ago I went into an auditorium and listened to Dennis Kucinich sing God bless America, land that I love. Stand beside her and guide her through the night with the light he sent from above. But the light that you guys are lighting is not from above, it's from below.

I've come here to talk to you from your future, from your children's hearts and inner knowing. Someday, unless they are blessed with the same moral myopia and historical amnesia that the people who work here possess, they will come to rue the day that you gave them life.

I too was born in the nuclear age nine months to the day after the Trinity explosion, when the Cold War was. You could hear the baby cry from wherever to wherever farm. I mean think of it. Those are the words that Oppenheimer gave. And the death of humanity was a birth of a baby. And somehow the people who have done this have put themselves in the footprints of God. And it's inconceivable to me.

I say rue because your children will inherit the history that you live so imprudently. When you lose the nuclear war for which you will soon begin to build pits, you will understand in a flash that the moment the first scientist understood the devastation you planned so carefully, that you threw each and every human being into the rubble.

Born in Germany to a German rocket scientist, I have already lived your children's history and ask you to solemnly foreswear this new generation of nuclear weapons.

It's not Linton Brooks but the people of this country which should be making this decision. And there, you know, you can print a million pages. But there's no truth in that. No matter how many pages you make, you need to understand that the people who stood there in the Tularosa Basin brought this pretty green glass home to their children to play with.

That's how much understanding they really had. Over a period of years, this stuff disappeared. But, you know, you can put that knowledge in a thimble compared to what we will eventually understand.

And you guys all have to live with the knowledge. But somehow you're not awake. And I will work on this and think about it and plan it and talk to people until I and the rest of us who are working on this figure out a way to wake you up. Thank you.

502-1

502-1

The purpose of the LANL SWEIS is to provide data and conclusions that will assist NNSA in making decisions regarding LANL operations. In accordance with Section 1505.2 of the Council on Environmental Quality regulations for implementing NEPA, decisions of NNSA regarding LANL will be made in one or more Records of Decision that will be issued no sooner than 30 days after publication of the Final LANL SWEIS.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 503: Greg Mello**

Good evening. The first thing I wanted to say speaks to the formal aspect of the NEPA process in actually I think that this EIS is a formal continuation of the modern pit facility EIS. It hasn't been couched that way, but actually this is a national decision.

And the mission which is to be assigned to Los Alamos National Laboratory is the mission that was discussed in the -- was discussed in the draft MPF EIS. And the facilities which are being assembled here in Los Alamos will have the potential or are being designed to have the potential to make pits in the same range of production capacity as the MPF.

So what's happened is that a national NEPA process has been stopped and a regional or local abridged NEPA process has replaced it. And I think that's of very deep concern as to the integrity of NEPA.

Now, this is a plan which, although it reads in plain vanilla, will dramatically change the nature of Los Alamos National Laboratory. I don't think that most of the community is fully aware of the changes that will be -- that will follow as sequelae of the pit production mission.

You have to consider how the budget is going down, how inflation is affecting the buying power of the money available. You have to look at the management fee increase, the gross receipts tax increase, security costs increases due to pit production, increased construction costs for the CMRR building, and other pit production related facilities.

And you have to consider that pit production -- as Edward Beckner said to me not too long ago, Los Alamos is now a pivotal site in the nuclear weapons complex. Because, if we're going to make anything new for the next 15 years, we have to make it at Los Alamos.

This pit production mission is going to be front and center in both in the consciousness of the LANS contractors and how they are evaluated by the NNSA, by Linton Brooks and his team. So science at Los Alamos is an endangered species because of these complex pressures which are pushing on science in a way from both ends.

So a self-understanding of people who work at Los Alamos about the nature of the laboratory is now on the table in this 2,000 page document which we're rushing through a public comment period. And people need to be quite aware of what's at stake here for the community of Los Alamos as well as the region as well as the nation. I'm not sure that everybody in Los Alamos really understands that.

Look at the numbers, go over it, think about it. Try to see how these numbers work out and see how they affect -- they could affect your program.

Everybody should be aware that the NNSA's approach to NEPA analysis is to create an envelope of impacts, and in the case of a SWEIS or a programmatic

503-1

**503-1** The LANL SWEIS alternatives addressing operational levels for the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative). Reference to a modern pit facility in the Draft LANL SWEIS was in the context of ensuring that reasonably foreseeable future actions were addressed in accordance with Council on Environmental Quality NEPA regulations regarding cumulative impacts. In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (71 FR 61731). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). The Final SWEIS does not include reference to a modern pit facility. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production; Section 2.2, National Environmental Policy Act (NEPA) Process; and Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for additional discussion.

503-2

**503-2** The cost of implementing the alternatives is not within the scope of the SWEIS, which focuses on evaluating potential environmental impacts of activities at LANL.

503-3

**503-3** The SWEIS analyzes the potential impacts of producing up to 80 pits per year. Should a greater production rate be desired, additional NEPA documentation and accompanying Records of Decision would be required. Note that the *Complex Transformation SPEIS* is evaluating a future production rate of 125 plutonium pits per year at a consolidated plutonium center or a consolidated nuclear production center, for which a site is yet to be determined. The Secretary of Energy Advisory Board task force agrees with this estimate (NNSA 2006b).

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 503 (cont'd): Greg Mello

environmental impact statement, there's no attempt to constrain each and every activity that happens at the site.

So, even though this document says surge production or production at 80 pits per year or 50 pits for the stockpile, that doesn't necessarily constrain pit production at Los Alamos to that number.

If the reliable replacement warhead as advertised is able to be produced with less hazardous waste, with greater throughput, broader tolerances, more automation, greater efficiency per square foot of category two space, then as the SEAB advisory -- oh, God.

As the SEAB advisory board said, the efficiency of pit production at Los Alamos ought to be increased 20 fold from its present rate. That was their number. And people in working for Congress have advised me to take that 20-fold increase very seriously.

I just want to say I guess in the remaining seconds that we are working with a law passed 36 years ago that was designed primarily with unclassified activities in mind. If we only blindly follow this law and don't engage in a profound debate around the policy -- policy decisions that are embodied in this poor environmental law that sort of feels like the dregs of democracy despite the best intentions of everybody involved, Elizabeth and all the other people who are working so hard, we have to make a special effort to open a debate so we can take the time.

I think possibly that people want to rush this through Bush's office. But we should slow down. There's no rush to make pits. Every year we learn -- more than a decade, we get more than a decade more information about pit longevity.

Let's take our time. We've got 10,000 nuclear weapons. Why don't we have a democratic discussion instead of a pro forma discussion that's limited to just a tiny fraction of the issues. Thank you very much.

503-3  
cont'd

503-4

503-4

Plutonium in pits is only one of many components of a nuclear weapon. Recent studies only evaluate the aging effects of plutonium in pits. In addition, a production rate of up to 80 pits per year provides operational flexibility to meet national security needs. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 504: Jody Benson**

Actually I echo a lot of what Greg Mello was talking about. One of my concerns is that a site-wide EIS is as Greg said an umbrella for just about everything. And I worry about that because just perhaps it's not going to put limits on what we can do but just wedge stuff into the specific categories.

When I was planning on coming to this meeting, I didn't know -- realize that it was a site-wide EIS, I thought it was specifically speaking about pit production. So I had looked at the old pit production EIS online.

And I think that's a valuable thing to look at because the pit production on EIS online, it again echoed what Greg was saying, that perhaps we don't need any new pits. And, as someone else stated, this is going to specifically change the direction of Los Alamos, move it from science to production. So we here at Los Alamos are going to be a little bit concerned with the change at the lab.

Here is something weird. I didn't know that LANSCE was on the block because of emissions. LANSCE is one of our premier science spots. I'm all for reducing emissions. But I didn't know LANSCE was on its way out. I'm concerned about that.

I would also like to make a philosophical comment, not just a comment on the EIS, and that is perhaps as other people have said we don't need nuclear weapons for security because one of the -- our enemies now isn't necessarily other nations but other individuals using terrorism. Hopefully we're not going to nuke another nation just because it has a few terrorists in it.

So maybe nuclear weapons are essentially obsolete and we should, as someone else stated, again philosophical turn our science into solving real security issues like energy and global warming.

504-1

504-1

As indicated in Chapter 1, Section 1.2, of the SWEIS, NNSA's purpose and need for agency action remain the same as in the 1999 SWEIS – the purpose of continued operation of LANL is to provide support for DOE's core missions as directed by the Congress and the President. As a site-wide environmental impacts statement, the document is intended to provide an envelope within which operations at LANL would be conducted over the next five-year period. The capabilities and levels of operations evaluated in the SWEIS are consistent with prior NEPA analyses for LANL with the exception of the specific projects discussed in Appendix J. On January 11, 2008, NNSA issued the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (Complex Transformation SPEIS)* (DOE/EIS-0236-S4) which addresses selecting a site for a new consolidated plutonium center or a consolidated nuclear production center whose mission would include pit surveillance and manufacturing. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

504-2

504-2

NNSA notes the commentor's concern that LANSCE could be shut down. Shutdown of LANSCE is being considered only in the Reduced Operations Alternative. It would continue to operate at current levels under both the No Action and Expanded Operations Alternatives. Under the Expanded Operations Alternative, one of the proposed projects, discussed in Appendix G of the SWEIS, would result in refurbishment of LANSCE to improve its reliability into the next decade. As stated in Chapter 1, Section 1.4, NNSA could choose to implement the alternatives either in whole or in part. Therefore, it is possible for LANSCE to remain operational even if other aspects of the Reduced Operations Alternative were selected in the ROD.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)Commentor No. 505: Ed Grothus

I'm Ed Grothus. I've been in Los Alamos over 57 years. I worked for most -- for 20 years in the laboratory. And, for most of those 20 years, I worked in a weapons development group. I'm one of the ones who made better, in quotes, atomic bombs. We reduced the size by 30 times while we increased the yield by 30 times.

I held a singular position, I was a singular link in the chain for making better bombs, better again in quotes. Vietnam was a turning point in my life as it was for so many other people. Search and destroy ignoble duty said, free fire zone, carpet bombs, Agent Orange.

At our site we did the preliminary tests for making new weapons of mass destruction. We -- I had a ton of U-238 depleted uranium. I passed 83 in June. I do not have the intense concern about radiation that many people do.

I'm more concerned about chemicals. I used gallons of trichloroethylene. I don't know if it affected my hearing, but I am not as steady as I might or should be. We scattered U-238 for a half a mile in every direction from the firing point, EF point at our site. I have lost all my faith in the weapons business. It's sheer madness.

No rational person would ever use a weapon of mass destruction. I have a fear, a real fear that we will blow ourselves up. I predict it will happen in 2013, when an American with an American weapon of mass destruction destroys Washington, D.C., which starts a nuclear holocaust and everyone on earth dies.

I know the laboratory hears my words because in recent press releases they are saying that, even if someone steals a bomb, he or she won't be able to set it off because they built in further safeguards so it can't happen. We threaten the world with our weapons of mass destruction. I have a number of tapes here, a former weapons division leader threatens the world with our bombs.

We will make your country go away if you mess with the United States. We will bring overwhelming force. You will only make that mistake once. It's a matter of record. We threaten the world with our bombs. People recognize this. They responded, they hit the very heart of our military industrial complex, the Pentagon. They hit the Twin Towers just to get our attention.

I'm old enough to remember a man who beat his horse unmercifully. Why did you do that? Just to get its attention. There isn't an airport in the world that hasn't been alerted. Those people knew what they were doing. Violence is evil. And the response is the golden rule. Do unto others as you would have others do unto you. Do good to that guy who might hurt you. Give Iraq good things instead of bombs.

We can only win the world by doing good. The laboratory should become a world science center. Inscribed on two monuments of mine, each weighing 25 tons which are now complete in China, monuments not to celebrate the bomb but to commemorate the most significant event in the history of the world.

Unimagined fantastic good coming from a golden age of science here in Los Alamos. But you have to abandon the nuclear business. Thank you all very much.

505-1

505-1

NNSA notes the commentor's suggestion that LANL's mission should be changed. In addition to LANL's mission of supporting the Stockpile Stewardship Program, research is conducted in other areas, as discussed in Section 2.3, Alternative Missions, of this CRD. NNSA is not contemplating changing LANL's primary mission at this time.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 506: Sophia Ritchie

Good evening. We are university students and recent graduates. And we are representatives of the nationwide coalition for education. Five of us hail from campuses in the University of California system which has managed the Los Alamos National Laboratory since its inception.

One of us is a recent graduate of the University of Missouri-Kansas City. Our presence here underscores our belief that what happens in Los Alamos, New Mexico, affects our lives and those of people around the world.

At a recent public forum in New York City, United Nations Weapons of Mass Destruction Commission Chairman Hans Blix noted he strongly supports the idea of international weapons inspectors closely monitoring the activities currently being conducted at the Los Alamos National Laboratory. With Mr. Blix's assessment in mind, we have constituted a University of California weapons inspection team.

In doing so we acknowledge that, if we don't attempt to carry out an investigation of the Los Alamos Laboratory, unfortunately it's unlikely that anybody else will.

As you all may know, the U.S. Government recently conducted an unsuccessful search for WMDs in Iraq. They are now searching for WMDs in Iran. Even fairly conservative estimates demonstrate that Iran is currently not in a position to acquire nuclear weapons at any time in the next ten years.

There are enrichment activities for nuclear weapons currently taking place and they are not in Iraq, they are not in Iran, they are here in Los Alamos. Intelligence reports note that the lab is pursuing a nuclear weapons activities that are illegal under international law, plutonium pit production.

The remaining parts of the statements are going to be read by one of my peers.

NNSA notes the speaker's remarks.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 507: Christy Escobar

I'm Christy Escobar. Plutonium pits are integral for the manufacture of new nuclear weapons which violate the 1970 Nuclear Nonproliferation Treaty which the U.S. is a signatory of.

507-1

These are weapons that kill women, children, and soldier alike. They do not discern between elderly and infirm. They are indiscriminate killers. The University of California was founded on the basis of truth and enlightenment. And, because continued nuclear production is taking place, the future is only uncertain.

As the UC weapons inspection team, we come here today to express our concern regarding the proposal to increase plutonium pit production at Los Alamos and to emphasize the need for the U.S. to uphold its moral and legal obligations under international law. The expansion of plutonium pit production here poses a grave danger to environmental security and the health of American citizens.

507-2

Because the University of California is a manager of the lab, we feel that we have a special obligation to speak out about what happens at Los Alamos. As stakeholders in this institution, we feel personally obligated to voice our opinions regarding the activities that take place at this facility.

Our comments here reflect the feelings of thousands of our peers whose sentiments we have gauged through a variety of means, passing student government referendums, conducting student body opinion polls, and holding dialogue oriented educational events.

The message of our peers has been clear. UC should get out of the nuclear business. Plutonium pit production at the Los Alamos Laboratory should not take place. Thank you.

507-2  
cont'd

507-1

Operations at LANL are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Continuing to ensure a safe and reliable nuclear stockpile violates none of the terms of the Treaty. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives. U.S. confidence in its stockpile stewardship capabilities is likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

507-2

Chapter 5 of the SWEIS evaluates the potential environmental, health and safety impacts of the continued operation of LANL under the three proposed alternatives. These analyses demonstrate that LANL can continue to operate safely under any of the three alternatives, including the Expanded Operations Alternative, which proposes an increase in pit production rate. The results of the evaluation are summarized in Chapter 3, Table 3-19, and Summary Table S-5.



Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 508: Andrew Culp

So I think we're all really aware that we live currently in the age of the information bomb. It's where there is so much coming at us from every angle, we're not able to discern or even filter through all the information that we think is necessary. We're getting violently reordered, our whole world is in confusion, and we only know certain things. But hopefully we know those.

But that leads to a social fragmentation. That means we only know the things that we really actively search out and everything else seems to be left for someone else to do.

Personally I think that is why Los Alamos is right here in the desert. It's used to make it so the people who are concerned about this have to come to the desert. And so the people who do that work are the only people who end up being here.

That means I have to travel for hundreds, if not thousands, of miles to voice my concern. That means there are thousands of people like me who are never going to be able to make it to this public forum.

Now, what that means is that there are so many experts involved that we can never know the exact details of what's going on. So that means we have to consider the consequences of our jobs. Even people who are in the military, people who are serving are told yes, you have to follow your orders. But, if you think that there's something wrong with it, you are allowed to not do that order.

Well, I know that there are a lot of people here in Los Alamos that may be doing the job that they sometimes agree with it maybe sometimes they don't. But they're not given that option of not doing it if they really don't think it's going to happen.

Maybe it's because of this social fragmentation, maybe because you think that it's other people's decisions to make that happen. But I think it's your choice and it's for you to understand that everything that you're involved in is for an end, it is going to be used for something.

The new pit production is used to make the new flexible response for the United States nuclear arsenal. That means it's more usable. That means so people are going to take the weapons and deploy them in the battlefield. They're going to have them there for use.

And that means that every person who helps with that new program is ultimately going to be responsible for those weapons being there in the first place. And, even if you're not working on those weapons programs, you are helping Los Alamos.

For instance, the University of California puts a great name on Los Alamos Laboratories, right. It's an institution of enlightenment and thinking. But this is a weapons manufacturing laboratory.

So the University of California is just as responsible. And that's why we're here as University of California students, to say no, we do not want to give our good name to something that we don't support.

508-1

508-1

The purpose of producing new plutonium pits is to maintain the safety, security, and reliability of the current nuclear weapons stockpile. The United States deploys nuclear weapons and is reducing the size of the stockpile in keeping with current international treaties. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 508 (cont'd): Andrew Culp*

So what does that mean? That means that you can do something. You know, people say that the genie is out of the bottle, we can't do anything about it. Well, you can. Nuclear weapons are made by lots of smart people with lots of smart resources; that, if those people don't exist, it's not going to happen.

The reason why -- I mean it wasn't so amazing that the Russians were able to make the bomb. It was amazing that they were able to make the navigation systems because the complex precision instruments were not possible we thought at all because they did not have any of the resources, the technology, any of the stuff from Germany, I mean there's a long history of the technology necessary for these sorts of operations from occurring that we can get rid of international law or anything to keep it from happening in the future.

So that means that we as people have responsibilities to stand up for what we know is right. You know, maybe sometimes we don't know if what we're doing is going to be used or going towards something that's good.

But at least I know that I'm willing to speak out and take a stand and know that I'm trying to make a better world tomorrow. And I don't want to just be making money, you know, I can do that if I wanted. But that's not what this is here for, you know. We are here to have a responsibility to future generations to make sure that we have a better tomorrow.

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Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 509: Will Parrish**

Everyone, my name is Will Parrish and I'm a graduate of the University of California-Santa Cruz, class of 2004. And this is my first visit to Los Alamos, but I've been involved with efforts to disarm this lab for the past several years as a University of California student.

I learned toward the end of my undergraduate career that the University of California was the manager of this facility at the time of the Manhattan Project and continued to manage the lab as the sole manager up until June 1st of this year and now co-manages the lab with Bechtel Corporation under a limited liability corporation called Los Alamos National Security, LLC.

And so I've always had a real strong connection with opposing the work that takes place here. And so it's really great, I'm very excited to be able to speak at this forum and appreciate the opportunity.

I have heard it said that the first rule of propaganda is that, if you can slide your premises by people, then you've got them. And I heard a lot of statements that I considered highly propagandistic in the initial presentations that preceded this public comment period. Perhaps unintentionally so.

But, to give you a couple of examples, I heard it said that we have a commitment to clean up Los Alamos Laboratory. Now, the premise there that I take issue with is that it's impossible to clean up Los Alamos National Laboratory particularly if new plutonium pit production is pursued at this facility.

I think we all know that it's pretty much impossible to clean up nuclear waste. That's why there are hundreds of 55 gallon drums of waste sitting at the Los Alamos National Laboratory right now. That's why the federal government of the United States is attempting to store 70,000 tons of high level nuclear waste at the Yucca Mountain.

We have no way to safely clean up nuclear waste. And especially if new plutonium pits are created here. I fail to see how we're going to go down the path to clean up Los Alamos.

And, as evidence of that, I studied what happened at the Rocky Flats nuclear weapons plant in Colorado during its over 40 years of plutonium pit production. According to some studies, the amount of radioactive waste that is present at some communities downwind from that facility is equivalent to that that's currently found in Hiroshima.

Plutonium pit production, if it's allowed to take place, will prevent the Los Alamos Lab from ever being cleaned up, even if such a thing is possible.

Another premise that I heard was that we need your help to make this the best possible impact analysis. And I'm sure that statement is true. But the premise that underlies that statement is that this public comment process and the environmental impact statement process is set up in a way that makes it possible for us to help come up with the best decision as to the future of this facility.

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509-2

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cont'd

509-3

509-1

NNSA notes the commentor's concerns about NNSA's ability to clean up the LANL site, but disagrees with the assertion that pit production would preclude environmental restoration and safe management of radioactive waste at LANL. Chapter 2, Section 2.2.6, of the SWEIS, describes the progress that NNSA has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Appendix I presents options and environmental analyses for conducting future remediation activities at LANL primarily related to the Consent Order that was entered into in March 2005. Appendix I also summarizes several technologies for cleanup of soil, water, and air, and refers the reader to additional sources of information about existing and emerging cleanup technologies. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Waste management activities at LANL are addressed in several places including Chapter 2, Sections 2.4.12 and 2.4.14, Chapter 4, Section 4.9, and Chapter 5, Section 5.9, and portions of the appendices. All wastes are managed protectively until disposed of in regulated facilities. At LANL, low-level radioactive wastes are disposed of onsite at a location with controlled access. Other radioactive wastes are transported offsite for disposal at licensed facilities. For example, transuranic wastes are disposed of at WIPP. Legacy transuranic waste at LANL is being safely stored in drums and other containers in above- and below-ground storage configurations, while programs continue to prepare this waste for shipment to WIPP. NNSA intends to complete transfer of legacy transuranic waste to WIPP within 10 years. Newly generated transuranic waste from pit production and other sources will also be transported to WIPP.

509-2

Operation of and environmental impacts associated with Rocky Flats are not within the scope of the SWEIS. Refer to Section 2.12, Comparison to Rocky Flats Plant, of this CRD for information regarding the differences between LANL and former Rocky Flats operations. Assuming the commentor is implying that offsite contamination will result from pit production at LANL, it is NNSA policy to conduct operations in a manner that ensures the protection of public health

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 509 (cont'd): Will Parrish

I think it's pretty clear that, as Greg Mello alluded to in his comments, that this is an extremely rushed process and that there is not going to be time for the public to adequately provide commentary and direction over what happens with Los Alamos Laboratory.

First of all it was said that Linton Brooks is going to ultimately be the person who decides what happens with the environmental impact statement, he's going to create it. And to think that one person can ultimately dictate what's going to happen with the environmental impact statement that's being created here without any oversight from the public is I think delusional. So thank you for listening.

509-3  
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509-3

and safety and the environment through compliance with applicable Federal, state, and local laws and regulations. See Section 2.6, Offsite Contamination, of this CRD for more information.

NNSA considers the comments provided on the SWEIS and as described in Section 1.4 of this CRD, makes changes to the document to improve the environmental impacts analysis. As discussed in Chapter 1, Section 1.4, of the SWEIS, the environmental impacts identified in the SWEIS are among the factors that NNSA will consider when making decisions on the level of operations and the implementation of projects discussed in the SWEIS; other factors that will be considered include programmatic need, schedule, security and safety concerns, and cost. Regarding the comment about not having adequate time to review the Draft SWEIS, NNSA extended the comment period from 60 days to 75 days to provide additional review time. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 510: Kamara O'Connor

Hi. Thank you for having me here. My name is Kamara O'Connor. And I'm a peace and social justice activist. And I'm also here as part of the Real World Oversight Committee on the environmental impact statement.

And, because I'm addressing a group of what I assume are largely scientists, I just really want to put forth that any action that we take, of course, is going to stimulate a consequence. And I just really believe that it is folly to think that consequences of continued nuclear weapons development can be managed or controlled or kept safe in some sphere.

The first thing I want to bring up is that the continued production of nuclear weapons stimulates the production of conventional biological chemical weapons internationally. I feel like there is a strong disconnect between what's happening here at Los Alamos and what's going on in our global community. And I feel like the environment here is not being stretched to the full capacity of what the global environment means.

I also find that there is a strong emphasis on a scientific sort of language, where it's like acceptable risk and slight increase in health effects, which I feel is using a sort of scientific authority to separate out disenfranchised indigenous communities that have been suffering under the weight of the nuclear industry as well as basically devaluing the opinions and experiences of nonscientists such as myself.

510-1

510-1

NNSA has tried to make the main body of the SWEIS understandable by the general population and has included more technical discussions in the appendices. There is a concerted effort to explain risks in terms that are understandable such as qualitative terms like "a slight increase" or in quantitative terms such as "1 chance in a million." Use of the term "acceptable risk" occurs in Chapter 4, Section 4.6.1.3, of the SWEIS, in a discussion of the results of an earlier study that refers to the "EPA established range of acceptable risk;" the text further defines "acceptable risk" as a range of 1 in one million to 1 in 10,000.

So again another consequence that I want to stress is that my environment, while it includes this whole earth and it also includes things like education, things like healthcare, the nuclear industry is draining money from all of those things that would be contributing to a healthy environment, what I believe would be to the best advantage of local citizens and global citizens.

So I just basically want to ask people at Los Alamos to take some responsibility and to take some accountability for the work that you're doing and the global ramifications, the global consequences. And I think that the only way to ensure safety in a nuclear weapons program is to stop it.

510-2

510-2

NNSA notes the commentor's opposition to nuclear weapons production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

I think the only way to talk about helping our environment is really to disarm and move towards safety in the real sense of the word. So thank you very much. I appreciate you listening to me.

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 511: Heron Boyce*

Heron Boyce. So I'm going to do this in a nontraditional way, some poetry.

Invest energy and it will grow. Patience and focus are the catalysts for growth. The existence is simple. And we will to be whatever we desire.

A quick poem by Barry Oliver.

Tell me what else I should have done. Doesn't everything die at last and too soon?  
Tell me what is your plan, what is it you plan to do with your one wild and precious life.

Fear, the externalization of our own inabilities to accept and be tolerant of others. In the desire to protect ourselves, we put drama and our insecurities above the betterment of our fellowman let alone other life forms.

Calm and patience are what is necessitated in this day and age. Understanding and acceptance of others. There are differences in their ways of life. No longer can we accept propaganda convincing a majority to cow down to divide and conquer mentalities.

We must be communal in our communities, we must be civil in our civility, we must be humane in our humanity and recall we are all symbiotic, one love.

NNSA notes the speaker's remarks.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 512: Anne Sensenig

Good evening. My name is Anne Sensenig, I'm here from Albuquerque, New Mexico. I'm an educational assistant at Bandelier Elementary School in Albuquerque and part of the Albuquerque Mennonite Church.

I'd like to start by saying that I'm morally opposed to both the production of and use of nuclear weapons. And, if some of you are not opposed to production of because you think that it will be used just as a deterrent and not ever be used, I'd like to present the moral issues.

512-1

512-1

NNSA notes the commentor's opposition to nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

The fact as Kamara said is that money is being diverted from important arenas that are facing our nation, health, education, social welfare.

In New Mexico or in the whole country, \$7,600 per household in this country goes toward military expenditures. As an educational assistant who doesn't make very much in Albuquerque -- and, just for an example, teachers in New Mexico are 48th on the list of teacher salaries. And educational assistants are far below that.

512-2

Within the context of the SWEIS, NNSA has not attempted to make a connection between LANL's presence and economic prosperity in New Mexico. As shown in Chapter 4, Section 4.8.1.3, of the SWEIS, per capita income in the counties where most LANL employees reside is higher than the state average. However, changes in per capita income across the state and income disparity are not within the scope of the analyses presented in the SWEIS.

Just think what the amount of money that is spent on something that I hope will never be used could accomplish if it were put towards other healthy and beneficial issues like health, education, and all of that kind of thing.

A lot of people might say that the fact that Los Alamos is here in this state provides economic prosperity for New Mexico. But, in fact, in the last 20 years, when funding for Los Alamos National Labs has increased a lot, the per capita income for New Mexico has greatly decreased. And there are a lot of statistics out there about New Mexico being 49th, 48th, 50th, whatever, in a lot of health and education and social welfare statistics.

512-2

So this state is not benefiting. There are maybe some people who are benefiting from working there. There may be people or companies that are benefiting. But certainly the people of New Mexico have not benefited from the fact that Los Alamos has been here in the last 20 years. There's been a great disparity between the poorest New Mexicans and the richest New Mexicans in the past 20 years.

So in conclusion I would just like to say that, as signatories of this nuclear nonproliferation treaty, I think we should go for option A which is like no new or expanded production. But I would like to say what we need is cessation of trigger production or nuclear weapons at all. Thank you.

512-1  
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*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 513: Donna Detweiler*

I'm Donna Detweiler from Albuquerque, New Mexico, where I manage apartments for low income people. I'm here today because of my rising nausea about what's happening here and my own need for confession because I've been part of it.

I have been silent and I have paid my taxes and I'm a very embarrassed about that. And so I'm trying to break the silence and I'm trying to do something different. And I want to encourage the people who feel the same to do something different.

I discovered that just a couple of weeks ago that my company is not withholding my federal income tax. Okay. This could get me in big trouble for saying this publicly, but it was a blessing to me because now I can decide if this is something that I want to pay for or something that I don't want to pay for. And I really don't. And I have to decide how I'm going to accomplish that.

So this is a beautiful place and I honor people who do what they believe is right in life. And I don't want to vomit all over this floor, but I'm really close and I really want it to stop. Thank you.

NNSA notes the speaker's remarks.



Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 514: Daniel Erdman

My name is Daniel Erdman. I am a pastor in Albuquerque to a small congregation of Hispanic folks, most of whom are immigrants from Latin America.

Today marks the 61st anniversary of the day on which the United States decided for the second time in history to be the only nation ever to use nuclear weapons in war. And, amidst all the words that we have heard today, I'm asking for a moment of silence to recall that event for the people of Nagasaki.

I pray this will be the last time any nation ever uses a nuclear weapon. Since 1945 our life as a nation and as a world has been profoundly impacted by nuclear weapons. As a nation we have come to place our ultimate security in the belief that these weapons will protect us.

Today I'm here to speak against the production of plutonium pits here or anywhere else for a number of reasons. The first is the increased production of waste. This has already been mentioned. But currently we do not have adequate and safe plans for the disposal of the waste that has already been produced, and yet we propose to increase the amount of that waste.

The second reason is the increased expense in a nation that is headed frankly for bankruptcy, a nation that has a national debt unprecedented in history. Essential services are being cut back everywhere. And I see the impact in the people of my congregation as they continue to struggle to make a living at minimum wage with no benefits, no prospect of healthcare, no assistance when they are laid off.

The impact of continuing to devote such a large part of the national budget to nuclear weapons will result not just in an environmental impact but also in a human impact as has been mentioned, on health, on education, on employment, on housing, but also with not dealing with the real environmental dangers that we face as a world.

In the past 120 years, we have managed to use up almost all of the fossil fuels on the planet and at the same time cause global warming to increase. We are not dealing with these because there is not the money to research how to deal with these because we are spending it on nuclear weapons.

The world has changed. We have 10,000 nuclear weapons. Making more will be a decrease in our security. As a nation many of us have a concern about terrorists getting their hands on fissionable material. One step towards solution would be not to produce more. And, if any money is spent, let it be on securing the existing material, not making more of it.

When the nuclear age began decades ago, a very wise man said everything changed except the way we think. After September 11, a less wise man said nothing is the same since September 11. But something is still the same. We still have not changed the way we think. I pray that you will.

514-1

514-2

514-3

514-1  
cont'd

514-1 NNSA notes the commentor's opposition to pit production. The pits that would be produced at LANL would replace existing pits and would not add to the number of nuclear weapons in the stockpile. Please refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. With regard to the terrorism concern raised in this comment, DOE gives high priority to the safety and security of all its facilities. Security and potential acts of sabotage are integral considerations in the designs and operating procedures for new and existing DOE facilities. DOE considers the threat of terrorist attack to be real and has an established safeguards and security process it undertakes to assess facility vulnerabilities to various threats, including those from intentional destructive acts, such as acts of terrorism. Chapter 4, Section 4.6, of the SWEIS has been revised to include additional discussion of the measures taken to protect assets at LANL from terrorist activities.

514-2 All wastes are stored onsite, primarily at TA-54, and managed protectively until disposed of. The disposal facility is selected based on the type of waste. At LANL, some low-level radioactive waste is disposed of onsite at TA-54. Other radioactive wastes are transported offsite for disposal. For example, transuranic waste is disposed of at WIPP, which is regulated by both the New Mexico Environment Department and the U.S. Environmental Protection Agency. Hazardous waste is sent to offsite commercial facilities for treatment and disposal.

514-3 The U.S. Congress and the President are responsible for establishing funding levels for various government programs. The SWEIS evaluates the environmental impacts of the alternatives for continued operation of LANL. As noted in Chapter 1, Section 1.3.4, of the SWEIS, implementation of decisions made in a ROD will be contingent on the level of funding allocated.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 515: George Baker

George Baker. Water. We live in a high desert where water is a very scarce resource. Global warming predicts that it's going -- our water supply here in Los Alamos and in New Mexico is likely to decrease, not increase. The snow pack will melt sooner and will be accumulated later. And so our water supply that we depend on will be decreasing.

515-1

The expanded operations will lead to a need for ever more water and electricity. And, as you may know, generating electricity also takes water. Aside from the supply issue, every bit of pit production will generate more waste stream than no pit production.

515-2

We already are seeing a laboratory generated contamination of water in the test wells that have been drilled around here. This threatens not just the water supply for Los Alamos, but for a great number of surrounding communities.

515-3

Norris Bradbury who was once director of the laboratory who is quoted as saying I spent my whole life working on something that can't be used. People say that the bunker buster bomb can be used. It cannot be used because it creates radiation contamination over a large area. You can't send troops in after you've blown one of those things up, even if it's effective.

515-4

And besides all that, the real mission and desirable future for Los Alamos is to be a scientific laboratory, not a pit production facility. This is just not what we need here. Thank you.

515-5

515-1 NNSA notes the commentor's concerns about global warming and the potential for increased water and electricity use under the Expanded Operations Alternative. NNSA takes its resource stewardship and conservation responsibilities seriously. NNSA continues to work with Los Alamos County in implementing measures to conserve water, and through the Los Alamos Power Pool, to ensure the availability and reliability of electric power for the Los Alamos region as a whole (see Chapter 4, Section 4.8.2, of the SWEIS). Utility demand projections have been updated in the SWEIS based on the latest trend analysis and projections that include calendar year 2005 data for LANL, and for other Los Alamos county users that rely upon the same utility system as LANL. These conservative projections are compared to the current (baseline) capacity or authorization limits of the respective utility system, as appropriate, and do not include any proposed or future upgrades or capacity increases. For water, it is currently projected that LANL operational demands combined with the larger and growing demands of other Los Alamos County users could require up to 98 percent of the currently available water rights, as presented in Chapter 5, Section 5.8.2.3, Table 5-36. However, LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling as discussed in Chapter 4, Section 4.8.2.3. Refer to Section 2.8, Water Use, of this CRD for more information on LANL's water use, available water rights, and water supply planning. Similarly, up to 96 percent of the electric peak load capacity of the Los Alamos Power Pool could be required to support LANL operational demands combined with the growing demand by other Los Alamos County users. As further discussed in Chapter 5, Section 5.8.2.3 and detailed in Chapter 4, Section 4.8.2.1, ongoing upgrades to the electrical power transmission and distribution system including construction of a third transmission line would allow additional power to be imported and support a higher electric peak load in the future.

515-2 The volume of low-level radioactive, mixed, transuranic, and chemical wastes that could be generated due to increased pit production at the Plutonium Facility Complex is specified in Chapter 5, Table 5-47, of the SWEIS. Existing onsite and offsite treatment, storage and disposal facilities would be sufficient to manage these waste streams. Refer to Section 2.7, Waste Management, of this CRD for more information.

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 515 (cont'd): George Baker*

- 515-3** NNSA notes the commentor's concerns regarding groundwater contamination and potable water supply quality. NNSA intends to follow the Consent Order that stipulates groundwater cleanup levels for human health and is committed to maintaining drinking water standards. NNSA is also committed to decreasing or eliminating all discharges that have a potential to release contaminants to the environment. Refer to Chapter 4, Section 4.3.2, of the SWEIS for a discussion of water quality in the vicinity of LANL. Also, Sections 2.5, Water Resources, and 2.6, Offsite Contamination, of the CRD discuss what is being done to address these concerns, including monitoring groundwater quality.
- 515-4** The environmental impacts associated with the use of nuclear weapons is not within the scope of this SWEIS, which analyzes the environmental impacts of LANL operations.
- 515-5** NNSA notes the commentor's opposition to activities related to nuclear weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 516: Regina Wheeler*

Hello. I have a very short statement. My name is Regina Wheeler, I'm representing Los Alamos County Local Government. And we wanted to let people know that we are reviewing the site-wide environmental impact statement draft and will be submitting written comments. Thank you.

NNSA notes the speaker's remarks.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 517: Shannyn Sollitt

My name is Shannyn Sollitt and I live in Santa Fe, New Mexico, downwind, downstream. I have not read the site-wide environmental impact statements, the studies. And I'm only commenting on my own understanding as an environmentalist for all my life. At least all my adult life.

And I would like to raise a question to the scientists here. As to whether it is good science to put a nuclear weapons production facility at the top of a watershed, a windswept area in a fire prone zone, and expect that it is not going to adversely affect all the people downwind and downstream.

That's the first and most obvious environmental impact that I see that is just beyond my imagination, that there can be environmental scientists here at the laboratory that would agree that this would be a good place to put a nuclear weapons production facility.

I would not advocate a nuclear weapons production facility anywhere. But, if there needs to be one, why not put it right next to the nuclear weapons waste facility in Carlsbad, New Mexico, so that the waste that has already been generated from the nuclear weapons facility that hasn't ever made it out of Los Alamos County.

I flew over it in an airplane. And I got up on the airplane and said look, everybody, this is the largest nuclear weapons waste facility on the planet. And you don't know how to deal with it because there is no way to deal with it. The only way to deal with it is to try to figure out a way to remediate it. So that's number one question I would like to have addressed.

Number two is, you know, the environmental impact is also a psychological impact. And the people, the children, I do the Trains For Peace project, I work with children for world peace. And children are growing up with the understanding that they are living in a community that creates weapons of mass destruction. What is this going to do to their psychology.

I've been out and talking to the children up here. I've been talking to the children who are state boarding over at the plutonium plant, you know, from the forties, you know. And it took a long time for even to begin to start worrying about cleaning up for your own children. That's just abhorrent to me.

And it's so depressing. It is so completely depressing to people in Santa Fe and I'm sure most of the people in Northern New Mexico to feel as if we are so unempowered to speak truth to power and to recognize what abhorrent activity we are doing here at the crown jewel of New Mexico when we could be doing something so valuable, so important, utilizing our educational facilities for the creation of technologies that can address the real, real national security issues of global climate change, for instance.

There are so many ways that the brilliant minds that are working in Los Alamos could be utilized rather than making nuclear pits. We already have 10,000 nuclear weapons and 20,000 of them, you know, in storage. And the scientists who have

- 517-1** LANL's location was selected during World War II because of its isolation. The continuing mission of LANL, has been support of the U.S. nuclear weapons program. As the needs of the U.S. weapons program have changed, so has the role LANL serves in the program. As announced in the ROD (61 FR 68014) for the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (DOE 1996), LANL was selected as the location for re-establishment of a pit fabrication capability partly because of its existing facilities and capabilities. NNSA is aware of the potential for wildfire and has undertaken an ongoing wildfire hazard reduction and forest health improvement program, including extensive forest thinning, to reduce wildfire risk. Chapter 5 of the SWEIS describes the air, water, and other types of impacts associated with the three alternatives for operating LANL. As summarized in Chapter 3, Table 3-19, LANL operations are not expected to result in major detrimental impacts to the environment.
- 517-2** NNSA notes the commentor's suggestion to collocate pit production near WIPP. The SWEIS evaluates the environmental impacts of continuing operations at LANL, and is not considering ending or relocating the LANL mission work assignment of supporting stockpile stewardship. On January 11, 2008, NNSA issued the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (Complex Transformation SPEIS)* (DOE/EIS-0236-S4), which considers alternate locations for activities in support of the NNSA mission.
- 517-3** Waste management activities at LANL are addressed in several places within the SWEIS, including Chapter 2, Sections 2.4.12 and 2.4.14, Chapter 4, Section 4.9, Chapter 5, Section 5.9, and portions of the SWEIS appendices. Additional information is in Section 2.7, Waste Management, of this CRD. All wastes are stored onsite and managed protectively until disposed of in regulated facilities. At LANL, low-level radioactive wastes are disposed of onsite at a location with controlled access. Other radioactive wastes are transported offsite for disposal at licensed facilities. For example, transuranic wastes are disposed of at WIPP, which is regulated by both the New Mexico Environment Department and the U.S. Environmental Protection Agency. NNSA is proceeding with its program to prepare and transport

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 517 (cont'd): Shannyn Sollitt

worked on these weapons according to Nuclear Watch of New Mexico say that they have an undetermined end date. What do we need to build more pits for.

517-6  
cont'd

I have here a card for people to send to their legislators that addresses the nonproliferation treaty and the fact that any legislator who votes to allocate funds for the future nuclear weapons is -- for the future of nuclear weapons is really in violation of his or her oath of office because the nonproliferation treaty is according to the constitution the law of the land.

517-7

And, if your elected official is not upholding their duty to abide by this treaty, then they are in violation of their oath of office. And I would ask you to come and pick up these cards from me.

And I really hold a prayer for Los Alamos. I hold a prayer that it can be transformed as this T-shirt says into an educational institution, into an institution that engages only in life affirming research and development. The people who live here deserve that and the world deserves it. Thank you.

517-5  
cont'd

legacy and newly generated transuranic wastes to WIPP and plans to complete transfer of legacy transuranic waste to WIPP within 10 years.

Chapter 2, Section 2.2.6, of the SWEIS describes the progress that NNSA has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Appendix I of the SWEIS presents options and environmental analyses for conducting future remediation activities at LANL primarily related to the Consent Order that was entered into in March 2005. Appendix I also summarizes several technologies for cleanup of soil, water, and air, and refers the reader to additional sources of information about existing and emerging cleanup technologies. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Additional information about the Consent Order and environmental remediation is in Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD.

517-4 NNSA notes the commentor's concerns regarding psychological impacts on children of living in a community that creates weapons of mass destruction. The CEQ NEPA regulations require that EISs evaluate environmental impacts of major Federal actions. In 1983, the U.S. Supreme Court ruled (*Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766) that "psychological effects" are not included among the environmental impacts required to be analyzed in EISs.

517-5 Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 517 (cont'd): Shannyn Sollitt

**517-6** NNSA's purpose and need for agency action in this SWEIS remain the same as in the *1999 SWEIS*: that is, the purpose of continued operation of LANL is to support NNSA's core missions as directed by the Congress and the President which includes ensuring a safe and reliable nuclear stockpile. As discussed in the response to Commentor no. 517-5, cessation of these activities, including pit production, would be counter to national security policy.

NNSA has reviewed the pit lifetime studies and has concluded that degradation of plutonium in the majority of nuclear weapons would not affect warhead reliability for a minimum of 85 years. The analysis in the LANL SWEIS, however, is still valid and provides a bounding scenario in which up to 80 pits per year could be produced. This potential production rate provides NNSA with flexibility in meeting its stockpile stewardship mission, taking into account changing geopolitical conditions. Please refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

**517-7** Maintaining a safe, secure, and reliable nuclear weapons stockpile violates none of the terms of the Treaty on the Non-Proliferation of Nuclear Weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 518: Trish Williams*

I would like to yield my time to Greg Mello

NNSA notes the speaker's remarks.



Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 519: Charles Pergler**

Charles Pergler. Thank you. I appreciate the opportunity to speak tonight. One of the things I've never forgotten is my right as a citizen of U.S. to speak out on any topic. I have never forgotten my responsibility to speak out on any topic. And this night is one of those.

The public notice of these meetings and the public participation is flawed. It's not flawed in a procedural sense, but it is flawed in the spirit of NEPA, trying to reach out and get as broad a representation of the public as you can get.

Now, that sounds like criticism of the NNSA. It really isn't. It's just a difficult process to get citizens involved in speaking out and understanding. But in this case I think they need to go more than the procedural aspects of NEPA. I think they have to enjoin with the spirit of NEPA.

And that is I suggest further debate in this county of the sanity of pit production here. When I talked to friends and colleagues around this county, it becomes painfully obvious they don't know it's pit production. That's really what this site-wide is about. It's pit production. That seems to be lost.

I would like to recommend to the NNSA to do a more extensive outreach program and facilitate community discussion. The thing that bothers me the most on this is the science is not there saying we need to have new pits. Indeed there seems to be evidence that we don't need new pits. It seems with my knowledge that our pits are effective at least until about 2050, 2060.

Why the rush to build new pits. As Greg Mello has already stated, there is research going on currently to determine the actual aging process of the pits to assess their effectiveness. One year's worth of data as Greg has stated is worth ten years of aging, ten to 14 years.

Let's wait a couple years, let's have the data come in, let's fully understand before we spend a billion dollars on this what we're getting into, if our stockpile is safe and secure. Isn't that something? It saves us money that we can put to education or other purposes.

Now, another fundamental that I will call a flaw in the NEPA process is I believe this takes out of the country's hands the decision to hear the arguments pro and con against -- for or against pit production.

As Greg once again has alluded to, the modern pit facility EIS was put on hold after the draft. No decision was issued. Many communities were involved in that process. What happens here if we decide to go to pit production at Los Alamos? We effectively foreclose on other communities' ability to speak and attract that business should they want to do so.

I think that is a fundamental process flaw in the NEPA. LANS has just taken over the contract for Los Alamos National Laboratory. Its predecessor UC had flaws in the way it managed this facility. It was improving. But, nevertheless, it was still weak.

**519-1** As discussed in Chapter 1, the SWEIS evaluates the environmental impacts of continued operation of LANL. The larger issue of the NNSA's nuclear weapons complex and the missions assigned to the sites within the complex was previously addressed in the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (DOE 1996); consistent with the resulting Record of Decision, LANL is to provide interim pit manufacturing capabilities of up to 80 pits per year. The 1999 SWEIS and the LANL SWEIS evaluate levels of operation consistent with that previous Record of Decision. On January 11, 2008, NNSA issued the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (Complex Transformation SPEIS)* (DOE/EIS-0236-S4), which evaluates the impacts associated with the continued transformation of the nuclear weapons complex as NNSA envisions it. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

**519-2** Please refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for a discussion of the plutonium pit lifetime studies. The analysis of a production rate of up to 80 pits per year is still valid despite the conclusion that degradation of plutonium in the majority of nuclear weapons would not affect performance for a minimum of 85 years, as it provides a bounding scenario and provides operational flexibility to meet national security needs. The U.S. Congress and the President are responsible for determining funding priorities for government programs. Determining funding priorities is not within the scope of the SWEIS, which evaluates the environmental impacts of the proposed action and alternatives. With respect to the new management and operating contractor at LANL, NNSA selected Los Alamos National Security, LLC, based on a thorough evaluation of qualified bidders and an assessment that it can manage and operate LANL to meet NNSA and DOE requirements and missions as established by the President and the Congress.

**519-1**

**519-2**

**519-1  
cont'd**

**519-2  
cont'd**

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 519 (cont'd): Charles Pergler*

LANS is a new contractor. Let's see their track record before we give them this great responsibility of taking care of pit production. Again let's wait two, three, four, five years, get a track record from LANS. We do not compromise our stockpiles. It will be safe for the next five years.

In closing I just want to emphasize again I believe this will be a national issue as advertised locally that's a flaw in the process. Just stand up and say no. Thank you.

*519-2  
cont'd*

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*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

**Commentor No. 520: Kalliroi Matsakis**

My name is Kalliroi Matsakis and I'm here to speak on behalf of Concerned Citizens For Nuclear Safety. And what I would like to do is read some letters that we had signed recently. And then afterwards, Ms. Withers, I have a receipt for you to sign I'm going to take back with me. And I'll give you the letters.

The first one is a request for an extension of time. And we appreciate the extension until the 20th, but we would like it to be much longer.

Dear Ms. Withers, I feel the Department of Energy is serving a grave injustice on the people of Northern New Mexico. The people are being asked to comment on a complex and lengthy document during a time of summer vacation, harvests, getting children ready for school, and preparations for market, feast, and fiesta days.

I'm concerned about the lack of time allowed for the public to thoroughly review the draft site-wide environmental impact statement for Los Alamos National Laboratory. Also many documents referenced in the draft LANL SWEIS are not readily available to the public other than through the DOE reading room. Many documents are not available electronically. Many who are interested in providing comments work during the day when the reading rooms are open.

I am also concerned that the draft LANL SWEIS relies on conclusions made in a draft Agency for Toxic Substances and Disease Registry public health assessment that concludes, quote, that there was no data to link environmental factors with the observed incidence of any cancer in Los Alamos County, end quote.

And I quote, "that no harmful exposures due to chemical or radioactive contamination detected in groundwater, surface soil, surface water and sediment, or biota are occurring or expected to occur in the future."

In comments about the draft assessment, the Environmental Protection Agency stated, "ATSDR may have been overly conservative in their risk assessment approach and makes a blanket statement that there is no problem. ATSDR should redo their risk assessment to reduce conservatism and not assume that there is no risk."

An inaccurate, incomplete, and inadequate health assessment misdirects policy, undermines pollution prevention, and thereby increases the risk to human health. The draft LANL SWEIS should be pulled until a technically defensible public health assessment is written and made available for public review.

Furthermore, two important documents have not been completed prior to the release of the draft LANL SWEIS. These reports are the earthquake report and the risk assessment for LANL's low level radioactive waste dump at Area G. The deadline for commenting on the draft LANL SWEIS should be delayed until after the public has had an adequate opportunity to review both reports.

Therefore, I request that the comment period remain open until such time as the new public health assessment, the earthquake report, and the risk assessment for

**520-1** NNSA notes the commentor's concern that there was insufficient time to comment on the Draft LANL SWEIS and the availability of information. Responding to requests for additional review time, NNSA extended the comment period from the original 60 days to 75 days. During the comment period, NNSA made the references available in three DOE Public Reading Rooms located in Los Alamos, Santa Fe, and Albuquerque. As with other elements of this public comment period, this was consistent with past practices for other LANL NEPA documents. See additional discussion in Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD.

**520-2** The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry (ATSDR) Public Health Assessment in any specific way for its conclusions. The ATSDR is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting Public Health Assessments at each site on the U.S. Environmental Protection Agency (EPA) National Priorities List. It is appropriate for the SWEIS to acknowledge the conclusions of the LANL Public Health Assessment because the Public Health Assessment is a relevant Federal agency study. The EPA did not reject the draft Public Health Assessment; however it did submit comments. The comments provided by the EPA on the draft Public Health Assessment were addressed by ATSDR in the final document. The Public Health Assessment was finalized and released on August 31, 2006 (ATSDR 2006). The ATSDR Public Health Assessment for LANL was prepared with public oversight and review. Appendix I to the final Public Health Assessment lists the comments on the draft that were received from members of the public and other Federal agencies and describes how those comments were addressed in the final document. The Public Health Assessment document states that the ATSDR conducted its evaluations in accordance with guidance provided in the Public Health Assessment Guidance Manual, which is available to the public at [www.atsdr.cdc.gov/HAC/PHAManual/index.html](http://www.atsdr.cdc.gov/HAC/PHAManual/index.html).

**520-3** To the extent possible, the most recent technical documents, including an update to the seismic hazard analysis, completed in June 2007, are considered in the Final SWEIS analyses. Information under development that is not available for use in the Final SWEIS, such as the updated Area G performance assessment, will be considered as it becomes available, and, in accordance with the NEPA compliance

520-1

520-2

520-3

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Commentor No. 520 (cont'd): Kalliroi Matsakis

Area G are released for public review. Under the circumstances I request a written response within five days. || 520-3 cont'd

And I have another one to read as well. Okay. So I'm going to skip over some of this since a lot of plutonium has been covered, but there are some water issues that I would like to address.

When implementing cleanup, LANL must do so to the fullest extent possible. Lands must be cleaned up to the level that allows for a future pregnant subsistence farmer and her children to live on the land, grow food, raise animals, and drink the water their entire lives with good health. All waste must be removed during cleanup. || 520-4

LANL currently has approximately 40,000 drums of transuranic waste sitting above ground in fabric tents awaiting shipment to WIPP. However, the proposed expansion operations focuses on a vast expansion of waste generation and removing drums that are currently buried in Area G. DOE should address permanent disposal of existing waste before further waste generation is even considered. || 520-5

LANL activities jeopardize both water quality and quantity. New Mexicans rely on this water for drinking and farming. Contaminants exceeding acceptable levels for health have already been found in surface water and the regional aquifer. DOE did not use the most current water quality standards or consider contaminants that are moved in running canyons when analyzing the impacts for our water. || 520-6

DOE finds no problem with increasing LANL's water usage above the amount allotted to it from the regional aquifer while proposing to dump 268 million gallons of treated wastewater into the canyons which flow to the Rio Grande. It is unacceptable that LANL blatantly or that DOE blatantly disregards laws regulating water quality and quantity. || 520-6

LANL must be required to reevaluate and broaden their air sampling programs. Toxic and radioactive air emissions do have a detrimental impact on the surrounding area and people. The draft SWEIS allows for processing 87,000 pounds of high explosives and up to 6,900 pounds of depleted uranium to be blown up in dynamic experiments annually. || 520-7

DOE must monitor and implement comprehensive sampling programs at all open burning and open detonation sites for all activities using high explosives and depleted uranium. Beyond that DOE must institute a program to stop all toxic air pollutant emissions from LANL facilities and activities. || 520-7

Operations at LANL are a major violation of environmental justice. New Mexico has the second highest minority population in the country. It is not possible that LANL activities would have no effect on these populations. The analysis using six-year-old information does not account for undocumented residents nor low-income individuals above the poverty level. || 520-8

process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3, and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12, and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

520-4 Although Appendix I of the SWEIS evaluates the environmental impacts associated with potential remedial action alternatives, decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered such as containment in place, treatment, or removal. Any remedy selected for a site requiring environmental restoration must meet several criteria including protection of human health and the environment, and attainment of applicable cleanup standards including those for ground and surface waters and soil. If the site is to remain under DOE ownership, then cleanup standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted access by the public, then the site would need to meet cleanup standards for unrestricted access. Decisions about the appropriate levels of cleanup for sites subject to the Consent Order will be made by the State of New Mexico using cleanup criteria documented in Section VIII of the Consent Order. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for additional information.

520-5 Although a pollution prevention and waste minimization program has been instituted at LANL (see Chapter 4, Section 4.9, of the SWEIS), operation of LANL will cause the generation of waste that NNSA intends to safely manage as it continues to address existing waste in

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Commentor No. 520 (cont'd): Kalliroi Matsakis

In addition, there are 15 pueblos within a 50-mile radius of LANL. And yet the public hearings are to take place during pueblo feast days which assures in large part that many will be unable to participate. I request an analysis in the final SWEIS with public input and review.

520-1  
cont'd

My recommendation is that Congress change the mission of LANL to focus on research and development into renewable energy such as solar and wind and cleanup technologies that support the environmental and public health. The SWEIS must include a fourth alternative that focuses on these activities. While DOE does not think that such a shift is possible, it is my belief that LANL must transition to peaceful and sustainable research.

520-9

And do I have a minute? Can I just read one person's comment that they wrote on the end? So this is a letter that CCN has circulated and signed. And I would just like to read one person's comment that they wrote at the bottom which is "Albuquerque and the surrounding region are not included in this and they should be given a voice and their own public hearing. Thank you."

520-10

And I just want to thank the people in Albuquerque who did come up and say that we strongly feel that 60 miles is not too far to be concerned. Thank you.

storage. Nearly all of the stored waste at LANL consists of legacy transuranic waste that is stored above ground within domes in TA-54. Most of this waste was originally stored below grade, but was retrieved and placed in an above ground, inspectable configuration as required by the State of New Mexico. NNSA is working to prepare all stored and newly generated transuranic waste for shipment to WIPP. Shipment rates for 2006 have increased significantly over past years. Refer to Section 2.7, Waste Management, of this CRD for more information.

520-6

Chapter 4, Section 4.3, and Appendix F of the SWEIS describe the results of monitoring for contamination of environmental media around LANL. It is true that some contaminants are present at levels above applicable standards and guidelines. Elevated levels are investigated to confirm the validity of the results, determine the source and extent of the contamination, and evaluate needed control and cleanup measures. Section 4.3 and Appendix F of the Final SWEIS were revised to include data from the 2005 Annual Site Environmental Report (LANL 2006g), and to include additional discussion and interpretation of the monitoring results.

Chapter 4, Section 4.3 references appropriate groundwater quality standards. Chapter 4, Section 4.3.1.1, was updated to include the revised the New Mexico Environment Department listing of impaired stream reaches.

Section 5.3.1.3 states that under the Expanded Operations Alternative, increased discharges from the Radioactive Liquid Waste Treatment Facility outfall would result in about a 25 percent higher effluent discharge rate into Mortandad Canyon compared to the No Action Alternative. Under the Expanded Operations Alternative the Radioactive Liquid Waste Treatment Facility effluent would account for only about 11 percent of the discharges into this canyon, the other 89 percent being cooling water. This section further states that operation of the new Radioactive Liquid Waste Treatment Facility would have beneficial impacts on surface water quality as the improved treatment processes reduce the contaminant concentrations in the effluent.

As described in Section 5.8.2.3, even under the Expanded Operations Alternative, LANL water use would remain within its annual water use

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 520 (cont'd): Kalliroi Matsakis

target ceiling. Section 4.8.2.3 describes the derivation of the LANL annual water use target ceiling quantity.

**520-7** Current air sampling programs at LANL include ambient non-radiological air monitoring, an ambient radiological air sampling network called AIRNET, and stack sampling for radionuclides, as described in Chapter 4, Sections 4.4.2.3 and 4.4.3.1, of the SWEIS. The Clean Air Act, Title V, operating permit includes requirements for monitoring emissions from sources at LANL and recordkeeping concerning those sources. Although toxic and radioactive air emissions can potentially have detrimental impacts, the past emission levels analyzed and those projected for LANL would not be expected to cause unacceptable impacts on human health or the environment, as shown in Sections 4.6.1.3, 5.4.1.1, and 5.6.2. NNSA has revised Chapter 6, Section 6.4, to reflect that the open burning permits have been withdrawn at LANL staff's request and the associated activities have ceased. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information on high explosives and depleted uranium activities.

**520-8** As discussed in Chapter 5, Section 5.11, no disproportionately high and adverse impacts on minority and low-income populations would be expected to result from LANL operations. The analyses presented in Section 5.11 and Chapter 4, Section 4.8.1.2, used the most recent Census data available at the time the analysis was prepared. In collecting data for the Census, the Census Bureau does not ask about the citizenship of respondents. According to the Census Bureau, they expect that undocumented residents are among those included in their counts given its counting nearly every person residing in the United States. DOE, and by extension NNSA, define low-income populations in terms of the Census Bureau's statistical poverty level, which was used in the SWEIS. Since the Draft SWEIS was published, the Census Bureau has released revised projections through mid-2005 for select counties in New Mexico, including Santa Fe County. This information was compared to the data for 2000 and these more recent projections would not change any of the analyses presented in the SWEIS because the level of minority or low-income populations in the available counties did not change substantially from the levels reported in 2000.

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 520 (cont'd): Kalliroi Matsakis*

- 520-9** In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.
- 520-10** Selection of venues for the LANL SWEIS public hearings was based on past experience with LANL NEPA documents. Although there were no public hearings in Albuquerque, other means of providing comment on the Draft SWEIS were provided. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 521: Stephanie Hiller

Thank you. My name is Stephanie Hiller and I am here from the North Bay area of California which is where Los Alamos' twin facility Lawrence Livermore Labs is located and where plutonium is slated to be vastly increased in the near future despite the fact that the Department of Energy says that the facility really can't handle it and so they're going to increase it. And then maybe they're going to remove it after 2014.

I would like everyone at Los Alamos and all of you, if you don't already know, to realize that the quadrupling of pit production here is just part of a critical change in the United States nuclear policy since 2002. I don't mean just part, I mean it is one part of a vast and significant overhaul of United States nuclear policy.

Up until 2002 the policy of the United States after dropping the bomb twice as you know was deterrence, that the more we amassed, the more we could prevent nuclear war. And there was folly in that policy as anyone could realize. But the folly has exceeded itself.

In 2002, when Bush announced the new nuclear policy and in a series of subsequent documents that have come to light recently, joint military operations directives, presidential directives, Pentagon documents and so forth, there has been a marked change from deterrence to use.

And tactical nuclear weapons which are a third to three times, I'm not sure if I'm exactly right on this, but approximately the size of the bomb which leveled Hiroshima are now included in a triad of usable -- safe usable military weapons.

This is a really significant change. And the public is completely unaware of this. And so apparently is Los Alamos. So this is not an academic exercise.

By making more pits, this lab and the citizens of New Mexico and the citizens of the United States are preparing to participate in a nuclear strike anywhere in the world that could easily lead to World War III or sometimes called World War IV and, in fact, has already been labeled and is expected to do so.

Is that really what the best and brightest American minds want to do here? It's not what the people of America want. In numerous surveys the majority of Americans have repeatedly said they did not believe nuclear weapons should ever be used.

The use of taxpayer money to enable companies like Bechtel and their friends to create more bombs is a travesty of American democracy. Thank you.

521-1

521-1

Actions being undertaken at Lawrence Livermore National Laboratory are addressed in the *Final Site-Wide Environmental Impact Statement for the Continued Operation of Lawrence Livermore National Laboratory* (DOE/EIS-0348) (DOE 2005a), and are not within the scope of this SWEIS.

521-2

NNSA notes the commentor's opinion regarding pit production. Pit production at LANL supports NNSA's mission to ensure a safe and reliable nuclear stockpile. Maintenance of the nuclear weapons stockpile to maintain a credible deterrence is a political and strategic issue not within the scope of the SWEIS. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

521-2



Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 503 (cont'd): Greg Mello** (comments continued from page 3-900)

Thank you for the extra minutes.

I haven't read all of EIS yet. But it's important for everybody to realize that there will be accidents involved in expanded plutonium operations. There already are accidents. And they're important to people who work in the plutonium facility.

I recall being on an airplane with a scientist who was on his way to a job interview because his wife demanded that they get out of here. Eight people have been contaminated not too far from his work area. And she was laying down the line and he was getting a job interview elsewhere.

Well, that's one type of accident. There are other kinds of accidents as well. And I just want to put out the -- a serious question that what's called high reliability theory in risk analysis can be applicable to an operation as complex as this and urge you strongly to look at the alternative approach so-called normal accident theory, which posits a number of limits on the liability of operations and accidents. Accidents happened aplenty at Rocky Flats and accidents happen here as well.

I want to return to the adequacy of the process to deal with the subject matter. I just noticed driving up here that there is a mention in the summary of the EIS of a plan to be able to manufacture 50 nuclear weapon secondaries here in addition to pits. So, in addition to the primaries, there is a plan to manufacture the secondaries here in New Mexico on a comparable scale.

Well, this is new to me. And I try to understand what's happening here. This raises the question of whether or not we understand everything that is involved, all of the connected actions that are involved in pit production here. And some of these connected actions may be planned and others may just be held in reserve as contingency.

So all of you who are involved in the EIS process may be working very hard to try to get it right and everything. But you are not -- it's certain that you're not getting complete information from the programs.

The question is what degree of withholding is there and what contingencies are there that the programs themselves are not fully cognizant? At STRATCOM in 2003 there was a discussion of small builds of special weapons.

Los Alamos briefed Congress in 1999 in a classified briefing on small builds of special weapons. John Emily spoke of small builds of special weapons in the state of laboratory address in approximately 1991. In the federal budget, there is a mention of bays and cells at Pantex for the assembly of small builds.

I think we have to look carefully at the possibility that what is being done here may -- there may be another part to this iceberg. And it may be as I said partly planned and classified or partly a contingency which could be put into operation later which all the good-hearted people might not know about now.

503-5

503-5

Design, procedural, and operational experiences at the Rocky Flats Plant formed the bases for many lessons learned that were recorded and used throughout the DOE weapons complex to further protect public and worker health and safety. At LANL, there have been numerous advancements in facility design, operations, equipment, procedures, and training to minimize the risks to the public, workers, and the environment from LANL activities. Chapter 4, Section 4.6.3, of the SWEIS contains a discussion of accident and safety history at LANL facilities. The accident analyses included in the SWEIS consider a range of possible incidents that could result in the release of materials to the environment. Limits on operations are included when considering possible incidents. Detailed analysis is then focused on the most significant of those accidents based on potential consequences and risks. Thus, although all accidents or failures may not be addressed specifically, the accidents analyzed in Chapter 5, Section 5.12 are expected to result in impacts that would bound those that would result from other reasonably foreseeable events.

503-6

503-6

This SWEIS analyzes the environmental impacts of three alternatives for the continued operation of LANL. The No Action Alternative, which serves as the baseline, reflects decisions based on the 1999 SWEIS. As shown in Chapter 3 of the SWEIS, this includes the manufacture of components for secondaries at the Sigma Complex and the evaluation of secondaries at the Chemistry and Metallurgy Research Building. The mission assignments of the sites that comprise the nuclear weapons complex are discussed in the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (DOE 1996). The *Complex Transformation SPEIS*, as described above will analyze the environmental impacts of the continued transformation of the nuclear weapons complex as these mission assignments are envisioned by NNSA.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 503 (cont'd): Greg Mello** (comments continued from page 3-900)

So I guess the idea that -- I mean returning to the Elizabeth metaphor about Linton Brooks making this vote party line or mixed candidates, it's a kind of travesty of a democratic decision. We can't even know some of the most fundamental aspects of what we are supposedly discussing here.

503-6  
cont'd

Because of things like this, as many of us have seen in last week in widely reported newspaper accounts, trust in government is plummeting in this country. The question is how badly is Los Alamos Laboratory going to hurt itself with this process.

No one trusts Los Alamos outside the county and I'm not sure that that many people trust Los Alamos Labs inside the county. It behooves the laboratory and the county government as well as the citizens to try to tease apart this process to the maximum extent well beyond the requirement of law because of the nature of what's being decided.

What Kalliroi said about the reference documents of the EIS is an extremely important point. It would be very important to get those electronically to folks. This whole discussion is taking place in a context in which the information flow from Los Alamos Lab has been constricted over a number of years to an unprecedented level.

503-7

503-7

NNSA recognizes that in light of electronic capabilities now available, commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in Los Alamos, Santa Fe, and Albuquerque. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional discussion.

Maybe some of you know that for a long time the public reading room was actually behind the razor wire fence and no member of the public could actually go to it. Then the people who were assigned to give documents to the public were actually not empowered to do that.

And then the security people who had to vet whether those documents could go out were reassigned. You could spend your life trying to get basic documents. You can't get an LAUR. That means unrestricted circulation at Los Alamos unrestricted. You can't get those documents from the Los Alamos library anymore, from the lab library. You have to order them from NTIS.

503-8

The TA-54 Area G performance assessment and composite analysis undergoing a periodic update. That update must undergo a thorough technical review before it is released and made available to the public. Until it is completed, the existing document remains valid. In accordance with DOE's Order 435.1, the results of the updated performance assessment and composite analysis will be used to ensure the continued safe disposal of low-level radioactive waste in Area G.

So I would say that there's been a systematic attempt to damage the context in which this discussion was on. Anyway that's just my way of background. So this particular process is itself damaged by the damage to that context.

Now, a couple of seconds to tally those comments. The performance assessment for Area G is not available to the public. It's long overdue by DOE's -- by the standards of DOE's own quarters. The cognizant DOE official in Albuquerque is unable to acquire a copy of this document, the person who is supposed to review it.

503-8

The Citizens Advisory Board is unable to acquire a copy of this document. The management of Area G has been transferred from the environmental part of the laboratory to the pit production part of the laboratory because as we hear some people in the environmental management group are not happy with the whole concept of permanent disposal of nuclear waste here in Los Alamos County.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 503 (cont'd): Greg Mello (comments continued from page 3-900)**

When we talk about cleanup here, we have to always -- it's not really the greatest word to use because of the continued disposal which has come up several times. So the question is are we cleaning up or are we dirtying or polluting. It's kind of a race.

And the seesaw -- I don't know whether we've ever gone into the positive side of this ledger. Now, there's a Consent Order and there is dirt being dug up. I don't know whether that volume of earth, the contaminated material being removed is -- comes up to what is disposed every year at Area G permanently. So cleanup is kind of a euphemism.

The seismic analysis is also very important, and Kalliroi brought that up also. It's been pending for a long time. And there are two components, two separate analyses which are very important to understand the implications of the plans discussed in the SWEIS.

One is the seismic driver. There have been very large earthquakes here in Los Alamos, a Richter magnitude of seven according to Los Alamos Lab. These earthquakes will knock down most of the buildings in Los Alamos. There have been three of them since the end of the Pliocene according again to the laboratory's seismologists.

Now, we don't have anything written on this which the rest of us can get or which Roger at the Monitor can get. And we need that report. Years have gone into it. Dozens of people have worked on it. And it should be an ingredient in this EIS.

The second component is what is the engineering response of the building structures to these seismic drivers. How many buildings here at the lab are going to fall down. What about the Sigma Complex, for example, an older building which is necessary for the pit production mission.

Now, Chuck Pergler mentioned the billion dollar commitment to pit production through the chemistry and metallurgy research replacement building. But, in order for the CMRR to be really useful, PF-4, a main plutonium facility, has to be upgraded. And quite possibly the Sigma Complex has to be ungraded or even replaced.

So the question is are we -- is there an attempt to rush the commitment of the nation to pit production here which will entail really a lot of expense, not just a billion, maybe 2 billion in ancillary facilities. And we won't know until we get the seismic analysis, the two reports of the seismic analysis.

I guess the last comment is not long ago I spoke to the Los Alamos County Council. One of the other speakers was a mental health practitioner consultant to the county here. Previously I had heard a presentation by the medical director of Los Alamos lab.

503-9

503-10

503-11

503-10  
cont'd

503-9

NNSA notes the commentor's concerns about the balance between environmental cleanup and the production of low-level radioactive waste requiring disposal. Decisions about environmental restoration for any contaminated site will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order that was entered into in March 2005. Volumes of different types of waste may be generated from environmental restoration depending on these regulatory decisions. Waste management activities at LANL are addressed in several places within the SWEIS, including Chapter 2, Sections 2.4.12 and 2.4.14, Chapter 4, Section 4.9, and Chapter 5, Section 5.9, of the SWEIS, and portions of the SWEIS appendices. NNSA expects that solid wastes, hazardous wastes, and mixed low-level radioactive wastes from environmental restoration would be disposed of in offsite disposal facilities and that transuranic wastes would be disposed of at WIPP or its replacement facility. Disposal of low-level radioactive waste may occur partly in onsite and partly in offsite disposal facilities, depending on the volumes that may be generated from environmental restoration and other LANL activities.

503-10

NNSA recognizes the presence of volcanic, seismic, and geologic features in and around LANL, as discussed in Chapter 4, Sections 4.2.2.2 and 4.2.2.3, of the SWEIS, and has ongoing studies to update the large base of research in this area. The studies described below are focused on continuous improvement in the understanding of the seismic setting at LANL. An update to the seismic hazard analysis was completed in June 2007. Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3, and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12, and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

The new geological information in the 2007 seismic hazard analysis report has been interpreted as indicating that the seismic hazard at LANL is greater than previously understood. The relevance of the seismic hazard to facility accidents will undergo a rigorous and thoughtful

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

**Commentor No. 503 (cont'd): Greg Mello (comments continued from page 3-900)**

Both of those presentations pointed to depression and stress as the highest environmental health problems here in Los Alamos County. The presentations to the county council said that the most significant health problem as she saw it in Los Alamos County was attempted youth suicide which she said is rampant in Los Alamos.

Now, is this in the EIS. We have to look at these inchoate secondary impacts. We have to look at the effect on the community. And we may not be fully able to get it in a table with numbers. But we need to look at it carefully.

Suicide levels of female radiation workers have historically been high at Los Alamos, elevated more than ten times the national average according to the lab. We need to get this stuff out there and talk about it because it affects the quality of life here in this community and in this region.

And I beg you not to rush past all of this and just treat the EIS process as just a wicket you have to get through as soon as possible because the result of that will be harm for everybody. Thank you.

503-12

503-13

evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

Following the NEPA process but prior to the design and operation of specific facilities, safety studies in the form of Hazard Assessment Documents and Safety Analysis Reports that include seismic concerns and take into account the most current seismic information would be prepared to address a comprehensive set of accident risks. The results of these safety studies would be incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

503-11

The nuclear facilities at LANL are designed to withstand an earthquake of a specified magnitude congruent with their intended function. Over the years, based on new seismic information, NNSA has evaluated the survivability of LANL buildings and structures and implemented mitigation measures, as necessary, in terms of structural upgrades, reduction of hazardous materials inventory, or replacement of the structures to reduce the potential for harm to the workforce and the public.

The Chemistry and Metallurgy Research Building mentioned by the commentor provides a good example. Under the No Action and Expanded Operations Alternatives of the SWEIS, the Chemistry and Metallurgy Research Building would be replaced with new structures that would fully meet seismic design standards for a nuclear Hazard Category 2 facility. Current operations in the Chemistry and Metallurgy Research Building have been limited commensurate with the structural integrity of the building. Appendix G, Section G.7, of the SWEIS, includes an impacts assessment for the Plutonium Facility Complex Refurbishment Project to address facility upgrades, but significant structural upgrades have not been identified as necessary. The project comprises life-extension, not structural, subprojects. There are currently no plans to perform seismic upgrades to the Sigma Facility; however, over the long term, many of the capabilities and operations of the Sigma

*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 503 (cont'd): Greg Mello (comments continued from page 3-900)*

Facility would transition to the Radiological Sciences Institute addressed in Appendix G, Section G.3; as indicated in Section G.3.2.2, the Institute would have both Hazard Category 2 and 3 structures. The accidents analyzed in the SWEIS used specified earthquake magnitudes, beyond which structure failure was assumed. Chapter 5, Section 5.12, presents the estimated human health impacts from postulated facility accidents, including earthquakes.

**503-12** NNSA agrees that suicides are terrible losses and affect the quality of life for all in the community. The Council on Environmental Quality NEPA regulations require that EISs evaluate environmental impacts of major Federal actions. In 1983, the U.S. Supreme Court ruled (*Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766) that “psychological effects” are not included among the environmental impacts required to be analyzed in EISs.

**503-13** NNSA notes the commentor’s concern regarding implementation of NEPA. NNSA considered the comments provided on the Draft SWEIS and as described in Section 1.4 of this CRD, made changes to the SWEIS to improve the environmental impacts analysis. As discussed in Chapter 1, Section 1.4, of the SWEIS, the environmental impacts identified in the SWEIS are among the factors that NNSA will consider when making decisions on the level of operations and the implementation of projects discussed in the SWEIS; other factors that will be considered include programmatic need, schedule, security and safety concerns, and cost.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 522: Chris Mechels

Hi, I'm Chris Mechels, I'm retired from the laboratory. I didn't plan to speak tonight, but I tried to do my homework. And I find I can't really do my homework because I was trying to get the DOE documents, some of the environmental assessments that are referenced in this SWEIS, and I can't figure out where to get them.

They're on the DOE web site, but they're locked out, I mean they're password only. I mean I'm very surprised. Once upon a time on the DOE site you could actually get the environmental assessments. Now, you can't.

My question is what the hell is going on. And, if Elizabeth is around, what the hell is going on? You're referring to environmental assessments and we can't get to them. They're on your bloody web site, but you've got to have a password.

So please tell us where we can get this stuff. If you're going to lock out the DOE web site, then you better tell us where we can get them if we are to make an intelligent comment.

We've got a few days left. So please, Elizabeth, if you're around, please tell us where we can get this environmental assessment because we can't get them from where we used to. Thank you.

522-1

522-1

NNSA recognizes that in light of electronic capabilities now available, commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in Los Alamos, Santa Fe, and Albuquerque. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional discussion.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 505 (cont'd): Ed Grothus (comments continued from page 3-903)

I really want to thank the court reporter. Without her I wouldn't have known a thing about what was going on. But I do want to say something about nuclear waste. There are a 103 nuclear power plants in this country. They have a lifetime too just like everybody and every other thing. It's like 35 years and now they're pushing it up to around 50 years.

At the end of the lifetime of a nuclear power plant, you have to get rid of the whole thing. Massive, massive amounts of nuclear waste, highly radioactive nuclear waste.

Los Alamos isn't talking about this. They even want to build more nuclear power plants. Supposedly the new ones will be better and safer than the ones that are now in operation. What are they going to do with this massive amount of material?

I think that's an impact that exceeds every other kind of environmental assessment. What are you going to do with the nuclear waste from 103 nuclear power plants?

One other thing. No one is secure unless everyone is secure. We cannot threaten the world with our bombs. Deterrence is a failure. Families don't live that way and nations shouldn't get along that way. We have to learn the golden rule, peace on earth goodwill to men, treat everyone as you want to be treated.

So it's the only way we're going to solve this conundrum. Thank you again for letting me speak a second time.

505-2

505-2

The disposition of radioactive waste generated by commercial nuclear power plants is not within the scope of the SWEIS. Note that low-level radioactive waste from commercial nuclear power plants is not disposed of at LANL but at licensed facilities outside the State of New Mexico. High-level radioactive waste from commercial nuclear power plants is planned to be disposed of at Yucca Mountain in the State of Nevada. LANL activities do not generate high-level radioactive waste; the waste generated by LANL activities is described in Chapter 5, Section 5.9, of the SWEIS.

Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)

Commentor No. 502 (cont'd): Astrid Webster (comments continued from page 3-899)

I'm Astrid Webster. And I wish it noted in the record that not one person at this small forum spoke up in favor of nuclear pit production. The other is that nuclear deterrence is like eating ice cream to prevent obesity. Thank you.

502-2

502-2

NNSA notes the commentor's statements.



*Comments from the Los Alamos, New Mexico, Public Hearing (August 8, 2006)*

*Commentor No. 523: Dave Thompson*

I'm Dave Thompson. And I'm speaking as a citizen. I just want to make an announcement. I'm very active as those of you in the audience know me in the Los Alamos Committee on Arms Control and International Security. We have been working for 20 years on the problem of arms reduction and how to eliminate the nuclear threat.

I just wanted to announce that we're going to have a major public meeting in September at the United Church on the topic of -- with a laboratory speaker. And on the topic of the issues surrounding the possible pit production and plutonium disposition in general.

We also -- a couple of us hope to be at the county fair with a table for the other people, an information table to discuss these issues with anyone that would like to discuss them and our long term proposals for reducing nuclear arms. Thank you.

NNSA notes the speaker's remarks.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 600: Greg Mello

Thank you, all of you who have come so far to hear our testimony. And let me say, very quickly run down a few points. I believe that this EIS process is a continuation and an abridgement of the failed modern pit facility environmental impact process, which was a national process that provided a great deal more possibilities for input around the country on pit production, and this process is being foisted here on New Mexico with just three days of public hearings, in what is the poorest, practically, state in the country. I think this is being done to get this through during the existing administration, and to get it through before a consciousness of debt in this country rises to the level that this type of expense becomes more and more problematic. Because of the debt situation, essentially all the expanded alternative activities are -- will be financed out of public debt. So, what we're talking about is borrowing money to build these, what looks like, a very large Christmas stocking of projects at Los Alamos National Laboratory. If you have read this, you see that they want to tear down a lot of existing facilities which have been perfectly adequate until this moment, at least they're being -- I mean, I haven't heard that they are inadequate -- and they would like to replace them with brand new facilities, hundreds of thousands of square feet per project, and there are several such projects.

I want to correct the idea that this EIS involves a lot of cleanup. Now, maybe it does and maybe it doesn't, but disposal takes place all the time at Los Alamos National Laboratory, permanent disposal. Cleanup is a -- is a -- something that proceeds by fits and starts. There is -- it's -- I think it's quite deceptive or confusing for the expanded operations alternative to have expanded nuclear weapons activities in many forms, especially pit production, and to also put in that alternative expanded cleanup for two reasons. First, it submerges the real policy choices between cleanup and increased nuclear weapons. And there is no way that there can be money to do those things at the same time.

So, in the analysis, the expanded operations alternative may cover the impacts of the pit production by blending them with impacts which are actually imaginary from cleanup that no one really has the money to do or intent to do. So it's very important that Elizabeth said that Linton Brooks can pick and choose projects from within these alternatives. And I would suggest that these alternatives be split apart so that the real alternatives facing the country can be brought out in starker relief, and the policy content of the EIS would come more to the surface.

Another alternative which should be here is to wait. There is no rush to do any of these projects. There's no rush to produce plutonium pits. There's no rush to replace existing buildings with new buildings, fancier buildings, and we ought to wait while we are accumulating, even if you really, really like nuclear weapons, we are getting data on the longevity of nuclear weapons, a great deal of information every year through accelerating aging experiments. So the present value of these expenditures could be tremendously decreased by postponing these expenditures into the future. So if we could wait 10 or 20 years to produce -- to make a pit factory, the present value of that investment, the difference would be really huge and of importance, great policy importance.

600-1

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**600-1** As discussed in Chapter 1, the LANL SWEIS focuses on operational levels at LANL for the next 5 years; there is no intent to substitute the LANL SWEIS for analyses that would be conducted to make programmatic decisions regarding the future of the nuclear weapons complex. In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (71 FR 61731). This notice announced plans to prepare the *Complex Transformation SPEIS* to assess the environmental impacts from the continued transformation of the nuclear weapons complex, a national process such as that referred to by the commentor. In the Notice of Intent, NNSA also announced the cancellation of plans to prepare a supplemental EIS for a modern pit facility. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for additional discussion.

**600-2** LANL's infrastructure is deteriorating to the point of jeopardizing its long-term ability to fulfill its stockpile stewardship mission. Many of the current structures in use at LANL are 20 to 50 years old. A large percentage of the LANL workforce is located in facilities that are reaching the end of their useful lives and would require major upgrade investments to meet future mission needs and ensure the health and safety of LANL employees. Older structures were not built to current structural (including seismic), health, safety, and security standards; nor can they be easily or economically retrofitted to meet these standards or to accommodate present day office electronics, communications equipment, or heating and cooling systems. If these buildings are not replaced, they would eventually need to be shut down for safety reasons and their missions would be compromised. Additional discussion is included in Appendix G of the SWEIS, under Purpose and Need.

**600-3** NNSA does not consider compliance with the Consent Order to be optional, and is not linking Consent Order compliance with decisions about pit production; proposed new projects or activities; increased operational levels; or waste generated from other LANL activities. Chapter 1, Section 1.3, of the SWEIS defines the three alternatives and explains why activities to comply with the Consent Order are included

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 600 (cont'd): Greg Mello**

Let's see -- the Congress is the one who makes the decisions about this, not Linton Brooks. That's very important. Now, from perspective of the NNSA employees, that's how they think of it but, in fact, it's Congress who funds these, especially the House of Representatives. This is a very controversial set of projects which the House of Representatives has called absurd and irrational. So, people who oppose expansion of pit production are in very good hands because it's Republicans in the House that are using this language, especially in the House Appropriations Committee, but those bills have been ratified by the entire House, which is not particularly specific as I --

So, another important point -- so, we want to bring our concerns after these hearings and after this NEPA process directly to Congress. Don't be satisfied with providing input to the executive branch only, because that's where good ideas can go to die right now. So, we have to bring these concerns to Congress.

It's very important that the underlying documents that this EIS refers to be available to the public. This process is taking place in a backdrop of opacity and lack of transparency from the DOE for a very long time, about any of the policy issues involved in any of the underlying documents. Even the citizen's advisory board, my experience is if you say one thing which is critical of the Department of Energy, you get dropped from their E-mail. And I haven't gotten an E-mail from them in months.

Now, I want to in the remaining minute or two, I want to say something about economic impact. The choices in this Environmental Impact Statement entail economic choices for the country, and while people may think that jobs come here to Rio Arriba County as a result of the lab, and they're right in that, I think about a 175 million dollars comes to Rio Arriba County from the lab, but it comes with a price. There's more federal jobs, more federal money pouring into Rio Arriba County from nonmilitary-related sources, and when we put our vote for nuclear military spending, it's a vote against these other forms of spending which are actually the predominant forms of spending, federal spending in Northern New Mexico. So it's a vote to impoverish ourselves.

The average American household is spending about \$7,600 on military matters each year now. This represents an immense opportunity cost for the country. There is no way we can lift our people out of poverty, get the education we need or the healthcare we need while we are supporting the military to the tune of over \$7,000 per household.

And so we have to look at those kind of distributed socioeconomic costs.

And for the other counties, Rio Arriba County is the most military-dependent county in the hinterland of Los Alamos. For the other counties it's really extreme. Taos County is vastly more influenced by nonmilitary federal spending than military federal spending. Thank you, very much.

**600-4  
cont'd**

**600-5**

**600-6**

**600-7**

only in the Expanded Operations Alternative. Chapter 1, Section 1.4 states that NNSA could choose to implement the alternatives either in whole or in part, and that NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information.

Impacts resulting from activities related to implementing the Consent Order are evaluated in Chapter 5 and Appendix I, and summarized in Chapter 3, Table 3-19, and the Summary. The SWEIS has been revised so that where relevant, impacts associated with Consent Order implementation are clearly distinguished from other potential impacts of the Expanded Operations Alternative.

**600-4**

NNSA has recently completed a series of pit lifetime studies and has concluded that degradation of plutonium in the majority of nuclear weapons will not affect warhead reliability for a minimum of 85 years, as discussed in Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD. The weapons laboratories, including LANL, will annually re-assess plutonium in nuclear weapons. Since LANL has the only operational capabilities in the DOE complex for producing certified pits, LANL must have, at least in the near term, the responsibility of producing these pits in limited quantities so that the Nation can maintain a safe and reliable nuclear weapons stockpile. The LANL SWEIS analyzes a production rate of up to 80 pits per year as a bounding scenario to provide NNSA flexibility in being able to meet its stockpile stewardship obligations and to give the United States future flexibility to meet changing global geopolitical threats. NNSA is analyzing its long-term vision of a more efficient nuclear weapons complex, which includes a consolidated plutonium center or a consolidated nuclear production center, in the *Complex Transformation SPEIS*. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD.

**600-5**

NNSA made the Draft LANL SWEIS and reference material available for public review in DOE Public Reading Rooms in the general vicinity of LANL, including those in Los Alamos, Santa Fe, and Albuquerque. See Section 2.2, National Environmental Policy Act (NEPA) Process,

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 600 (cont'd): Greg Mello

of this CRD for more information. Comments regarding Citizen's Advisory Board are not within the scope of this SWEIS.

**600-6** While the dollar amount varies, local DOE activities directly and indirectly account for more than one-third of employment, wage and salary income, and business activity in the Tri-County area, as described in Chapter 4, Section 4.8.1.6, of the SWEIS.

**600-7** NNSA notes the commentor's statement regarding the funding priorities of the U.S. Government. The U.S. Congress and the President are responsible for determining the funding level for government programs. This SWEIS evaluates the environmental impacts of the alternatives for continued operation of LANL.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 601: Michelle Peixinho

My name is Michelle Peixinho. It's Portuguese. I am Tau from the Philippines. I grew up in Manila and Honolulu. I have lived in Chimayo with my family for six years now. And before we moved here, I was living in Las Vegas, Nevada, so I learned a lot, quite a bit about nuclear weapons and nuclear weapons production. I lived for a few years with my family in a little town called Tecopa, California, just across the California border, which is directly downstream of Yucca Mountain, and because of that I learned a lot about nuclear waste and the problems that we have in our country about dealing with the waste that we have produced, that is, particularly waste coming out of nuclear power production, which I think is yet unresolved to this day.

I think that for me, I have three children. I am a worrier, and I am extremely concerned about my ability to grow food and my ability to feed my kids, my ability to be able to draw water out of the ground and feel good about drinking it. I am worried about this stuff, and I worry about it every day. Every single day. So, I came here thinking that I was going to be among my peers and I do see many of my peers here, but my neighbors aren't here. A lot of my clients that I work with aren't here. There's nobody that I see who are parents from my children's school who are here. This is a very, very small group of people from Rio Arriba County. And I don't -- I -- this is not enough for -- of a voice. So I don't know if you can maybe seek out more, because this is not enough.

So, I am concerned here with what I see on page 10 of this document. I just opened it up, and all these -- for this expanded operations. I mean, you are looking at from 38,000 cubic yards of low level, it goes up to 881,000 cubic yards. That's just one of these -- and there are several pages of types of waste that comes out of this expanded operations. So I am concerned about where that's going to go, because I feel like I have lived at the end of the nuclear waste cycle, and whether it goes to Nevada, whether it goes down to Southern New Mexico, whether it stays right here, it doesn't matter, because it's all the same water. It's the same hydrologic cycle that we all depend on, and that makes me worried.

So, I just wanted to bring attention to that right there because there's lots of it here, lots of different kinds -- chemical waste from 19,000 low end it goes up to 129,000. Where's that going to go, you know? And how can I, you know, keep my kids from having to deal with that.

And the other issue that I learned at Yucca Mountain in dealing with is it is the longevity of this waste. It's not just like trash and you throw it away and it's done. This stuff will be here for whatever, hundreds -- 250,000 years. I don't know the number. I'm not a scientist, you know, but it's not going to go away, so how many generations exactly is that? And how are we accountable to those generations? How do you look at the intergenerational impact of these genetic changes that happen because of this radiation that's affecting us? I sit on the Maternal Child Health Council of Rio Arriba County and our issue now is obesity, and I raised my hand to my peers there and I said, hey, what about thyroid problems? We have

**601-1** The estimates for operational waste generation are based on projections in the 1999 SWEIS, which were increased as necessary in the SWEIS based on actual generation rates and recent waste generation forecasts. The projections for waste generated by routine operations are designed to be conservative, providing an upper bound by which impacts may be measured. In addition, much of the waste projected for the Expanded Operations Alternative is attributable to remediation actions; the actual amount generated will depend on future regulatory decisions by the State of New Mexico. As such, the estimates of waste generation are conservative and actual generation rates may not approach the projections. All wastes are stored onsite, primarily at TA-54, and managed protectively until disposed of. The disposal facility is selected based on the type of waste. At LANL, some low-level radioactive waste is disposed of onsite at TA-54. Other radioactive wastes are transported offsite for disposal. For example, transuranic waste is disposed of at WIPP, which is regulated by both the New Mexico Environment Department and the Environmental Protection Agency. Hazardous waste is sent to offsite commercial facilities for treatment and disposal. All disposal facilities are designed and operated in accordance with standards developed specifically for the waste type accepted. Refer to Sections 2.7, Waste Management, and 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information related to this comment.

**601-2** **601-1** As the commenter notes, radioactive waste can remain hazardous for many years. Radioactive wastes generated at LANL include transuranic and low-level radioactive waste (including mixed low-level radioactive waste); high-level waste is not generated at LANL but would be disposed of at Yucca Mountain. See the response to Comment no. 601-1.

601-1

601-2

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 601 (cont'd): Michelle Peixinho*

a huge obesity issue in our county. We have a huge suicide issue in our county. We're top in the nation. We have a huge drug problem, we're top in the nation. You are sitting right here in Rio Arriba County, and these are our problems. How is all this money that is our money that we pay into, to go into this, going to help solve our daily problems? And then, to top that off, you got to turn on the news and watch how nuclear weapons are causing people to kill each other. Hand to hand. They are not even fighting with nuclear weapons, but they're fighting over nuclear weapons. They're already dying from nuclear weapons, you know what I'm saying? It worries me. I worry about it sick. I cry about it, you know, and I'm sure that you guys understand, because I think we're all in the same page about it. We're all human beings. And that's -- that's how I feel about it. We're human beings, and at some point we would have to say, well, why do we want to be a community that continues to endorse and stand by while our country continues to develop these nuclear weapons, points fingers at all these other countries to say, you can't develop these nuclear weapons, and these huge wars are happening over it. We're hypocrites. We're Americans and we are hypocrites. And I'm an American. I'm not talking about somebody else. I'm talking about me. I'm a taxpaying American. I'm standing up here and I'm a hypocrite, you know, and I feel crappy about it. I don't want to feel like that, you know.

So, those are my feelings about it, and I appreciate you all taking the time to listen to it. And I am going to try to write out, you know, my feelings about it. I don't know how I can get more of my neighbors involved. I am pretty darned sure that a lot of them didn't even know this was going to be happening, so how is it that we're really truly going to get people's opinions and take away the economic factor of the fact that people have to work at Los Alamos because they have to make a living. People can't find good jobs in Espanola, in Rio Arriba County. People can't find good jobs. If you want to make more than 20 bucks an hour, if you want to have benefits, you want to have a retirement plan, you better work at LANL, you know. And I can't blame anybody for that, so I don't blame people for that. But they have to have an opinion about it outside of their work, you know, outside of their economic situation. How are we going to seek out that opinion, you know?

So, anyway, I appreciate you guys listening to me, and thank you.

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Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 602: Trish Doherty**

Hi, everybody. My name is Trish Doherty and I'm actually English. I was born in England. I have been 30 years in this country. I'm still based in New York City, and I had a great privilege of purchasing a piece of land in Chimayo just recently -- two years ago, actually, and I'm in the process of moving over here. And I'm extremely, extremely, extremely upset and concerned that LANL wants to produce more plutonium pits. I am so amazed. Thank you.

602-1

I am asking decision makers to come with great wisdom, to see with great vision, to be accountable to all future generations. We are at a turning point at this time on the earth. This is the time to apply great intelligence of the human being. I am 100 percent against Los Alamos National Lab producing more nuclear weapons, more pits per year, more transportation of waste, more health concerns and more toxic waste. I have to wonder what makes you think you can take the future of this beautiful place in New Mexico into your own hands and endanger all life for thousands of years to come. It only takes one mistake, one accident, one fire, one terrorist attack, one earthquake -- Los Alamos stands on three fault lines -- to set off a catastrophic accident beyond words.

602-1  
cont'd

Have you ever seen the movie showing the deformed, lifeless disabled children lying helplessly in beds their entire lives, the victims of Chernobyl? They would have been normal children. You are playing with a gamble that is unacceptable.

The SWEIS document fails to address several issues. It is not a viable document, so why do we keep referring to it? There is no real health assessment. The cleanup has not been addressed -- and I realize you spoke about it a little bit earlier -- but it has not been made a priority. There have been no comprehensive health studies done near the nuclear facility. How do I know as a person coming here that my health will not be adversely affected by contamination in the air, the water, the soil and the food? It is a fact that plutonium was found that can be traced isotopically in the sediments of the Rio Grande at Cochiti.

602-2

602-3  
602-2  
cont'd

It is a fact that a produce sample, a plum from this area, was found to be high in americium, a substance which is the product of radioactivity. It is a fact that already 822 acre fields of industrial waste is being discharged into the canyons every year. Apparently you say the canyons are dry. But water comes sometimes, as it has this summer, and spreads that waste into our sacred soil and our sacred water.

602-4

It is a fact that there are records of higher cancer rates in Los Alamos County. I have questions about if I want to move here. I happened to have a hair analysis test in 2004, because I have some lead in my body, and I took another test a year later to check if the lead had gone down. My uranium levels, which were no problem in 2004, had gone over what is an acceptable level. Now I wasn't here all that much between 2004, 2005, but I was on my land, my sacred, beautiful land, for a few weeks, and I was drinking my well water. And I have been told that there's natural uranium here. So all I'm saying is, we don't know, and are there

602-2  
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602-1

NNSA notes the commentor's opposition to the increased production of plutonium pits, and resulting transportation of waste, health concerns, and generation of additional waste. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for information related to the need for pit production. Chapter 5 of the SWEIS evaluates the potential environmental, health, and safety impacts of continued operation of LANL under the three proposed alternatives. These analyses demonstrate that LANL can continue to operate safely under any of the three alternatives, including the Expanded Operations Alternative, which proposes an increase in pit production. NNSA and the LANL contractor work to decrease the chance that any type of accident could take place and to minimize the impacts of any accident. Chapter 5, Section 5.12, of the SWEIS presents an analysis of potential accidents at LANL including individual facility accidents, a wildfire, and a seismic event. Although it is not a part of the NEPA process, safety documentation that analyzes the potential for a wider range of accidents is developed for each nuclear facility. This documentation identifies safety features and practices to minimize the results of likely accidents, whatever the cause, before operations begin or continue in the facility. With regard to the terrorism concern raised in this comment, DOE gives high priority to the safety and security of all its facilities. Security and potential acts of sabotage are integral considerations in the designs and operating procedures for new and existing DOE facilities. Chapter 4, Section 4.6, has been revised to include additional discussion of the measures taken to protect assets at LANL from terrorist activities. As discussed in Chapter 5, Section 5.12.6, the impacts of terrorist action are considered in a separate classified appendix to the SWEIS.

602-2

Chapter 4, Section 4.6.1, of the SWEIS provides detailed information on cancer mortality and incidence rates in New Mexico and all counties surrounding LANL. This data, along with the final LANL Public Health Assessment, issued on August 31, 2006, by the U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, shows that, "...there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "...overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006). Chapter 4, Table 4-26, shows that some cancer rates in Los Alamos County are lower than

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 602 (cont'd): Trish Doherty

any tests being done to find out about this. How are your uranium levels? How are your uranium levels? Do you know is anyone testing?

Uranium levels in toxic levels lead to kidney disease.

There is an alternative to this plan to increase nuclear weapons production, which is not, I don't believe stated, that is highly intelligent, deeply wise and sustainable. That would be to convert Los Alamos National Laboratory into a research center on climate change, just a small problem that our society is facing right now. And renewable energies, that is intelligent. And sustainable agriculture, which is helping to keep our earth strong and healthy for future generations and for all life on this beautiful, beautiful planet. This would be an investment in the future of our children, and the many generations to come, as well as nature, wildlife, and would honor the total interconnectedness of all life.

In terms of referring to what was said earlier, I would definitely, out of the options presented, would choose the cleaning up and reduction of explosions. And of course, to these more environmentally friendly solutions. Thank you.

602-2  
cont'd

602-5

the national average and some are higher, which is typical of any area. Natural uranium concentrations in and around LANL are higher than in other parts of the country. LANL monitors for uranium concentrations in groundwater, surface water, soil, and sediment as shown in Appendix F which presents detailed environmental surveillance data for radioisotopes and chemicals in groundwater, surface water, sediment, and soil in and around LANL. Refer to Section 2.6, Offsite Contamination, of this CRD for information about the report of americium-241 in a plum sample in Dixon, New Mexico. Examination of the data indicates that this was likely a false positive finding. The discussion also describes how LANL staff limits releases to the air and outfall discharges from current operations to levels within the regulatory limits to protect public health and the environment.

602-3 There have been some detections of plutonium at some stream sampling locations, including those furthest downstream from LANL (see Chapter 4, Section 4.2.3.1, of the SWEIS), but statistically they cannot be differentiated from regional plutonium levels that came from atmospheric fallout. Nonetheless, in order to minimize any potential releases, the LANL contractor maintains a program of continuous improvement in plutonium management to minimize any future releases and cleanup or isolate legacy plutonium in the environment.

602-4 As described in Chapter 5, Section 5.3.1, of the SWEIS, the Expanded Operations Alternative would discharge about 267 million gallons (1,011 million liters or 819 acre-feet) of treated industrial wastewater into the canyons at LANL. Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, over the past 6 years, LANL has a very good record of complying with permit conditions. Under all alternatives, NNSA would continue to meet permit conditions designed to protect water resources at LANL. Most of the treated effluent discharged to the canyons infiltrates into the ground before it leaves LANL property. These effluents do not normally flow directly into the Rio Grande; surface waters may reach the river a few times a year during large precipitation events. NNSA has programs in place to monitor stormwater to minimize the offsite transport of contaminants.



Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 602 (cont'd): Trish Doherty

**602-5** Cessation of NNSA's core mission activities in support of NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. Therefore, ending these activities at LANL is not being considered in the SWEIS. In addition to performing these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 603: Regina Wheeler*

Hello. My name is Regina Wheeler. I'm representing Los Alamos County Local Government, and we just wanted to let you know that we are reviewing the LANL SWEIS draft and will be submitting written comments. Thank you.

NNSA notes the speaker's remarks.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 604: Mateo Peixinho**

I'll be brief. Honestly, first comment I have on this is that I would like to formally protest this process, echoing what Mr. Mello said. This format of three hearings here in Northern New Mexico is not even close to being adequate to address the enormity of this proposal.

**604-1**

Increasing our pit production is a huge problem. It's the wrong way for us to go. I'm a general contractor in the area and, you know, the capitalist side says, oh, great, money coming in. This is, you know, a chance for us all to put money in our pockets. But this is the wrong way to go about it, because ultimately our natural beauty here, our children, all the things that are the real important things are going to be sacrificed for a very short-term gain.

**604-2**

And so, like my wife had said, we worry about these things for our children. We live within sight. We see your porch lights, for those of you who work at the lab, from our home. We look across at what you're doing there and we're downwind from you. And we would like you to know that, that we survive from this land here and we want to continue to. And if our lakes and our rivers are contaminated, that's going to make all the living things have shorter lives, and that's unacceptable. So, that's the first thing that I was wanting to say.

**604-3**

Another issue before it got into general contracting here, I worked in water remediation. I think there's some big problems with the test wells that are around the site, the way that they're being drilled, the way that they are tested, with small amounts of water being pulled up, sometimes a gallon or so being pulled up at one time. It's not going to represent anything, especially as time goes on. If you drill and you use, you know, the drilling products, the different types of clays, the bentonite clays, they're going to clog up your groundwater movement, and also clog up the filters in those test wells. So, I think we're being fooled. And you know, like I said, I worked in groundwater remediation. It's kind of a joke. A lot of people who were in the oil industry are making good money on that now, but we can't get it clean once it's contaminated.

**604-4**

So, okay, we're monitoring. What next? Say we find it's moving faster, like we found around the Nevada test site? They said it would take, you know, thousands of years for it to move a half a mile, and within a few years of these test wells being put in, there were some of them put in improperly, we found that the radioactive waste was migrating much more quickly. So as we look, you know, as water becomes more and more precious every moment, we are going to see that what a huge mistake we have made.

So when you make more pits, when you go from 20 to 80, that's a huge problem for our future generations. And we can't do it, you know. We are either going to stop by consciousness and by the right thinking, or it's going to stop when we just can't survive anymore. And you know, I just can't understand why we put that on our children's children and our great-great-grandchildren. That's just wrong-minded, you know. And not only us as humans, but all the living things. Our lives

**604-2  
cont'd**

**604-1** NNSA notes the commentor's statements regarding the format of the public hearings conducted for the Draft LANL SWEIS. Selection of venues and the format for the hearings were based on past experience with LANL NEPA documents. NNSA reviewed and considered all public comments received on the Draft LANL SWEIS. Responses to public comments are in this section of the CRD. Major changes from the Draft SWEIS are summarized in Section 1.4 of this CRD. All technical changes are denoted with a sidebar in the Final LANL SWEIS. Some of these changes were made in response to public comments.

**604-2** NNSA notes the commentor's opposition to increased pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information. Chapter 5 of the SWEIS evaluates the potential environmental, health, and safety impacts of continued operation of LANL under the three proposed alternatives. These analyses demonstrate that LANL can continue to operate safely under any of the three alternatives, including the Expanded Operations Alternative, in which the pit production rate could increase to up to 80 pits per year.

**604-3** NNSA notes the commentor's concern related to offsite contamination. LANL operations are designed to keep the release of chemicals and radioactive materials well within regulatory limits designed to protect public health and the environment. Refer to Section 2.6, Offsite Contamination, of this CRD for more information related to this concern.

**604-4** NNSA agrees that some of the LANL monitoring wells were improperly installed for the purposes for which they were intended. More than half (52 percent) of the well screens evaluated in the *Well Screen Analysis Report* (LA-UR-05-8615) (LANL 2005c) produce water quality samples that are not significantly impacted by residual drilling fluids. For those well screens that have been impacted by residual drilling fluids, LANL staff initiated a program to rehabilitate the R-Wells that may be producing suspect groundwater monitoring results. This program is described in the *Workplan for R-Well Rehabilitation and Replacement* (LA-UR-06-3687) (LANL 2006e). Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding well construction and groundwater monitoring.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 604 (cont'd): Mateo Peixinho*

are already being curtailed by nuclear contamination, you know, cancer rates and all these things.

Again, you know, I am here talking to this microphone. I don't feel that the Department of Energy has any intentions, whatsoever, of taking our public comments and utilizing them in their decision-making process. I think that this is a total farce. And I want to make sure that that's in the record and issue my grievance against my government and protest against that. So, thank you very much and have a good evening.

604-1  
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Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 605: Jean Nichols

My name is Jean Nichols, and I don't even know where to begin. I am also outraged that this process is just a very short comment period when it took a year and a half to come up with this Site-wide. It's -- it's right during August when, you know, a lot of people are on vacation and it's the Indians' feast days and, you know, we're just like, you know, everybody else said, and here it is in a sports plex, which goes to show that we're just being made a sport of. And then it's on Nagasaki Day, when we should never more be considering dropping nuclear weapons. We should not be making more pits. There's no reason for one more pit, let alone 80. And I understand this is just a coverup for the next step, which will be 450 pits a day -- a year, you know, as another Rocky Flats.

605-1

So, I am representing not just myself. I mean, like we said, there aren't very many of our neighbors here, but I represent a group called United Neighbors, and it's all of us in Northern New Mexico, and all the people in Penasco, and all the people in Dixon and everybody -- you know, when you consider Site-wide, you really have to go -- the site is everybody downwind and everybody downwater. You have to take into account all of our health studies which are not being done. I mean, I go to the clinic and I say, have there been health studies? Way too many people have cancer. Way too many people. I just found out about a family in Ojo Sarco the other day who, he worked at the lab. He came home and he washed his clothes in the -- in with the diapers of the family, and the whole family had cancer. And they had cancer to the extent where they couldn't even donate body parts because every part of their body was riddled with cancer. We're not even studying that. We're an experiment.

605-2

She spoke about the plums that had been studied, and these plums that were tested with americium that came from my neighborhood, and whoever did the test told the people where the plums are growing, don't feed these to your grandchildren. And yet, you know, we're trying to live here, and people are trying to come and grow, and grow organic things. And we just want to live, you know. I don't have any hard feelings against individual people who work at the lab. I'm trying not to. You know, I think you are misinformed and, you know, we're all into tunnel vision. And this whole Site-wide Environmental Impact Statement, it is. It's premature. I mean, right now we're just glimpsing the very tip of the melting iceberg with these rains that are coming now. So the fact that we are -- we are going to see more and more flash floods going down these canyons, picking up this waste, carrying it to the Rio Grande, and we're also not taking into account the seismic activity. I understand that there's a study is due out in 2006, so why we're not waiting for that study and basing this Environmental Impact Statement on those results? It's just -- it's absurd. You know, it's so absurd that I think we're all suffering from posttraumatic stress syndrome and that we really -- that's why it's so hard for people to come to these hearings. They hear nuclear and they just go blank. They don't want to even think about it because it is unthinkable, and it's asking us to accept the unacceptable every day in our lives and it's not right.

605-3

605-4

**605-1** NNSA notes the commentor's concern that there was insufficient time to comment on the Draft LANL SWEIS. Responding to requests for additional review time, NNSA extended the comment period from the original 60 days to 75 days. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional discussion.

**605-2** NNSA notes the commentor's opposition to pit production. The Expanded Operations Alternative proposes to produce up to 80 pits per year. NNSA has issued the *Draft Complex Transformation Supplemental Programmatic Environmental Impact Statement (Complex Transformation SPEIS)* (DOE/EIS-0236-S4), which analyzes the environmental impacts from the continued transformation of the nuclear weapons complex by implementing NNSA's vision of the complex. Alternatives in the *Complex Transformation SPEIS* evaluate different future pit production requirements.

**605-3** Chapter 4, Section 4.6.1, of the SWEIS provides detailed information on cancer mortality and incidence rates in New Mexico and all counties surrounding LANL. This data, along with the final LANL Public Health Assessment, issued on August 31, 2006, by the U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, shows that, "there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "...overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006). Table 4-26 shows that some cancer rates in Los Alamos County are lower than the national average and some are higher, which is typical of any area. Refer to Section 2.6, Offsite Contamination, of this CRD for information about the report of americium-241 in a plum sample in Dixon, New Mexico. Examination of the data indicates that this was likely a false positive finding. The discussion also describes how LANL staff limits releases to the air and outfall discharges from current operations to levels within the regulatory limits to protect public health and the environment.

**605-4** NNSA is following the Consent Order that addresses cleanup of the canyons to levels that are protective of human health. Decisions about clean up of sites subject to the Consent Order will be made by the New Mexico Environment Department. In addition, NNSA

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 605 (cont'd): Jean Nichols

There's a whole lot of other things with the air and the water and the cleanup, and the only one -- you know, only the expanded alternative has any kind of cleanup to it. We need a cleanup first before we even think of any of these alternatives.

605-5

I didn't come prepared at all, so, you know, I am going to try to think about it more and actually write out a, you know, some statements. But right now I'm just, like, so overwhelmed by the contradictions here, and the fact that, you know, we can't be doing this. They never said how much any of this is going to cost. Yes, it comes out of our public debt. Well, how much? How much we're talking here? You know, 3,000,000,000? 83,000,000,000? Whatever the cost is, any time you deal with nuclear substances, however much you are spending on it, you can -- you can multiply that by at least 29, because if you are talking about the cancers and the cost of the medical and the people down line and the cleanup and the -- everything else, not to mention the lack of respect that we now have in the world for even doing this.

605-6

Nuclear weapons are illegal on an international level, and we should listen to that and -- you know, we are telling Iran they can't even develop nuclear weapons sometime in the future, and then we're going to make more here? Excuse me. No.

605-7

operates a monitoring program (described in Chapter 4, Section 4.3.1.5, of the SWEIS) to detect contamination that has resulted from past practices. NNSA evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters at LANL, in accordance with applicable regulations and agreements. NNSA recognizes that LANL is a geologically-active area and has investigated the seismic risk to facilities, operations, and the public. An update to the seismic hazard analysis was completed in June 2007. Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3, and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12, and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

The new geological information in the 2007 seismic hazard analysis report has been interpreted as indicating that the seismic hazard at LANL is greater than previously understood. The relevance of the seismic hazard to facility accidents will undergo a rigorous and thoughtful evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

Following the NEPA process but prior to the design and operation of specific facilities, safety studies in the form of Hazard Assessment Documents and Safety Analysis Reports that include seismic concerns and take into account the most current seismic information would be prepared to address a comprehensive set of accident risks. The results of these safety studies would be incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

605-5

NNSA does not consider compliance with the Consent Order to be optional, and is not linking Consent Order compliance with decisions about pit production; proposed new projects or activities; increased

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 605 (cont'd): Jean Nichols*

operational levels; or waste generated from other LANL activities. Chapter 1, Section 1.3, of the SWEIS defines the three alternatives and explains why activities to comply with the Consent Order are included only in the Expanded Operations Alternative. Chapter 1, Section 1.4, states that NNSA could choose to implement the alternatives either in whole or in part, and that NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information on environmental cleanup.

**605-6** NNSA notes the commentor's concerns regarding the costs of LANL operations. The cost of implementing any of the alternatives is not within the scope of this SWEIS, which focuses on evaluating potential environmental impacts of operations at LANL. As noted in Chapter 1, Section 1.4, of the SWEIS, the environmental impacts of the proposed actions will be considered by NNSA along with other factors such as cost, programmatic considerations, and schedule in making decisions.

**605-7** The national and international debate on the proliferation of nuclear weapons is not within the scope of the SWEIS, which focuses on the environmental impacts of alternatives for continued operation of LANL. It should be noted that the United States is a world leader in nonproliferation initiatives and is currently reducing the Nation's nuclear stockpile in compliance with treaties that have been signed. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 606: Carol Miller*

I used to come to these meetings as a public health professional representing the American Public Health Association, the New Mexico Public Health Association. Also, I served as an officer, and I realized this was not about public health. This is not about anything except an insanity that has gripped our government. I can't believe that we're here on Nagasaki Day. I'm glad Jean raised it. This should be a day of reflection of what happens. We are in the time period where a lot of people around the world are grieving over the United States' use of nuclear weapons on innocent civilians in Hiroshima and Nagasaki.

So, I have a couple of points I want to make. One is, abolish nuclear weapons world wide. That is the goal. And I want to quote a very dear friend Winona Leduke, who said, everything we do has to be by mom's rules. You know, mom's rules, you can't make another mess until you clean up your first mess. Let's talk after this is cleaned up, which no one knows how to do, will cost more than the 1,000,000,000,000-plus dollars we have spent in this country alone on nuclear weapons. And I want to take the rest of my time with all of us for a moment of silence, and I want the timekeeper to actually make sure it's okay. And this moment of silence is for the Navajo uranium miners who died getting the raw uranium out of the ground. It doesn't just get to Los Alamos with no human contact. For the workers across the United States and the other countries who have died and are dying from being involved in nuclear weapons complex. For the one-second victims of Hiroshima and Nagasaki, several hundred thousand people that were vaporized, along with their buildings, in one second. I did take a pilgrimage to Hiroshima in 2004 and brought ash from the Cerro Grande fire that fell in my garden and put it in the river at ground zero as just my own personal asking of forgiveness for what has happened.

I want a moment of silence for my neighbors, current and former lab workers, dead, barely dead and somewhat alive. And I would like someone to notify us when the remainder of my time is done. Thank you.

NNSA notes the speaker's remarks.



Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 607: Andrew Culp

My name is Andrew, and I have a family that's really involved in nuclear issues. Both my parents met in the Air Force when -- Hill Air Force Base, where my father helped design the navigation system for the Minuteman II intercontinental ballistic missile. And then my brother has gone on to work for Essex in St. Louis, where he helps make fighter jets which are used to deliver all kinds of weapons. So I think it's really important, too, that I actually grew up in Omaha, right next to Offutt Air Force Base, which used to be the Strategic Air Command, and is now the Strategic Nuclear Command. And it seems like it was always in the back of my mind that, you know, nuclear weapons were all around me, they were really close, and that the people who push the button are just, you know, 30 minutes away from me. And it was always kind of in the back of my mind and kind of scary.

And so, I come here today with a couple of things. The first is, I really don't think plutonium pits are needed. No one has really explained what they would be used for, other than maybe these new flexible nuclear weapons, which I think the flexible response is just code word for more usable nuclear weapons that could be actually used. That's kind of scary. And it's really ominous for something like this to happen on a day where I get discuss -- on Nagasaki Day. It has been 61 years since the nuclear weapon was used, yet people want to start making weapons that can and should -- and they say they should be used, because they want small weapons, maybe even -- you know, I have seen reports of suggestions to build even one kiloton nuclear weapons, and that's just ridiculous, you know. So why do we need more pits? We're signing all these international treaties to get rid of nuclear weapons. Why do we need more of them, you know?

We don't have Russia anymore as a threat. And there are accidents and miscalculations that happen every day. The Jupiter II intermediate range ballistic missiles we used to have in Italy? They got struck by lightning on four different occasions and actually armed themselves. You know, things like that happen.

In 1995, after the cold war, the United States and Norway, fired off a research rocket, and Russia's failing early warning system declared it as a nuclear attack on Russia. Yeltsin was woken up in the middle of the night. He had given the codes and was 30 seconds from firing the weapons, from what most people think, and decided against it at the last minute. That was after the cold war, you know. That was just a few years ago. That could happen to us at any moment. There's no reason to make that more possible.

So, you know, in this SWEIS people are talking about safety and, you know, we drove by Los Alamos Nuclear Labs today and saw, you know, big safety signs. But, you know, what is safe about nuclear weapons; right? Safety to most people means acceptable risk; right? It doesn't mean that there is nothing happening. Safe doesn't mean that no one is getting hurt. Safe, according to most people, means that less people are getting hurt. You know, enough people that's okay. I don't think it should be okay. I don't think it's safe for anyone to be getting hurt.

607-1

607-1

NNSA notes the commentor's statements regarding the need for plutonium pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

607-2

NNSA notes the commentor's concerns regarding the use or detonation of nuclear weapons; however, the use or detonation of nuclear weapons, whether purposefully or by accident, is not within the scope of the SWEIS, which focuses on the environmental impacts of the alternatives for operations at LANL.

607-2

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 607 (cont'd): Andrew Culp

But this report shows that if we expand production, more people will get hurt. And it will be workers, people who have to work really hard jobs and go in there and do work that they probably should not have to do, but they have to put food on the table for their families, so they're going into work every day, and they're the people who are on the front lines having to face this kind of contamination threat, and that is just unacceptable for plutonium pits that aren't needed?

607-3

607-3

NNSA notes the commentor's opposition to plutonium pit production. Chapter 5, Section 5.6.3, of the SWEIS presents the analysis of all three alternatives in terms of worker health including the Expanded Operations Alternative, which would include expanded production of pits at LANL.

And why is this statewide? You know, I grew up in Omaha. I had to deal with problems like this every day. This shouldn't be a statewide issue. I have friends from where I grew up who I know would really love to comment about this, but they don't have \$400 to get plane tickets and a hotel and everything to come out here for these three days after reading the document that came out just a few days ago, the thousands of pages. You know, these people don't have time to do all this. It's just being rushed.

607-4

607-4

For people in other locations or who were otherwise unable to attend the hearings, NNSA provided a number of other ways that they could comment on the Draft SWEIS. NNSA included information in the July 7, 2006, *Federal Register* notice announcing availability of the Draft SWEIS; in letters transmitting the document to interested parties; and in advertisements in Albuquerque, Santa Fe, Española, and Los Alamos newspapers on how to submit comments on the Draft SWEIS by U.S. mail, email, and a toll-free phone line. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

I'm offering you one solution. That's all I'm offering right now. It's just wait. You know? Wait and actually listen to people, because the statistics and the studies in this report are flawed. People can't get the documents, some of the DOE documents. They don't even know the secondary research that's backing this up. They cannot access any of the information, and even if they wanted to, they cannot pour through those pages and pages of research and decode all this really complex scientific information, kind of mull it over, and come to one of these three hearings in New Mexico, you know, and just days after it's happened. So just wait. There's plenty of time. What do we need new pits for, anyway?

607-5

607-5

NNSA notes the commentor's concern that there was insufficient time to comment on the Draft LANL SWEIS and on the availability of the reference documents. Responding to requests for additional review time, NNSA extended the comment period from the original 60 days to 75 days. While electronic copies of all references were not available, hard copies were available in DOE Public Reading Rooms in Los Alamos, Santa Fe, and Albuquerque. See the response to Comment no. 607-4 above. As stated in Chapter 1, the ability to produce certified plutonium pits is needed so that NNSA can meet its mission of stockpile stewardship responsibilities.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 608: Will Parrish**

Okay. There's a reason they call me the world's tallest peace activist. Anyway, my name is Will, and I am a graduate of the University -- I'm sorry.

Thank you.

My name is Will, and I'm a graduate of the University of California Santa Cruz, class of 2004. And I think it's pretty clear that within this process of evaluating the Site-wide Environmental Impact Statement, that whatever comments are made here aren't going to be heard by those in power. Linton Brooks doesn't really care what I have to say. So with my comments what I'm hoping to achieve is to connect with at least some of you here, and hopefully contribute something valuable to your efforts in opposing plutonium pit production at the Los Alamos lab.

608-1

Now, when I was a UC Santa Cruz student I learned in my third year there that the University of California manages both the Los Alamos National Laboratory and the Lawrence Livermore National Laboratory, Los Alamos' sister facility in Northern California. And I was at a point in my life where I had come to actually think that I had something wrong with me. I thought I was crazy, because issues like nuclear weapons, issues like global warming, other issues that are confronting the safety of people, the safety of the environment, that are threatening the future of our planet were treated as normal by most people I was around, and I had so much trouble understanding that, I thought I must be crazy for caring so much when I learned about these issues.

And learning that the University of California is involved with production of nuclear weapons and research on nuclear weapons was actually a very helpful and healing process for me, because the University of California is pledged officially to supporting open inquiry and supporting education for the benefit of the future. And I realized when I learned that the University of California was actually actively supporting proliferation of nuclear weapons, that that was a lie and that was a myth, and based on learning about that myth, I began to question a lot of other myths that I had been fed, and I realized that it is normal to be concerned about the future right now. It is very normal to speak out and express concern about the future.

And so, the reason I am here is that I became a nuclear disarmament activist as a student at the University of California. I now work full-time as a nuclear disarmament activist, and I came here all the way here from Santa Barbara, California, because I want to be here in solidarity with all of the people here in this community, and all of the people who live downwind from nuclear weapons production here, who are speaking out based on their concern for the future, and I want to point out that there is no such thing as safe production of nuclear weapons. That is a complete corruption and perversion of the term safety.

608-2

And I also want to point out that if you look at the record of plutonium pit production in particular in this country, which I have studied a bit, the Rocky Flats nuclear weapons plant in Colorado produced plutonium pits for over 40 years, and it

608-3

**608-1** NNSA strives to meet the spirit and intent of the NEPA public comment process in accordance with Council on Environmental Quality regulations (40 CFR Parts 1500 to 1508) and DOE implementing procedures (10 CFR Part 1021). Responses to comments received on the Draft LANL SWEIS are included in this CRD, and where appropriate, revisions were made to the Final LANL SWEIS. NNSA will issue its decisions regarding pit production and other proposed operations at LANL in a Record of Decision issued no earlier than 30 days after publication of the SWEIS. While NNSA is responsible for making decisions for the direction and implementation of program objectives to meet missions assigned to it by the Congress and the President, the Congress and the President are responsible for funding these initiatives.

**608-2** NNSA notes the commentor's opinion regarding the safety of nuclear weapon production. As noted in Section 2.13, Recommendations of the Defense Nuclear Facilities Safety Board, of this CRD, safe operation is an intrinsic part of the activities proposed and analyzed in the SWEIS. Nonetheless, NNSA anticipates the possible occurrence of operational accidents or natural events and analyzes the impacts of potential accident scenarios as part of the NEPA Compliance Process so that this information can be part of the decisionmaking process for a proposed action. Chapter 5 of the SWEIS provides detailed environmental impacts from all operations at LANL including pit production-related activities. Also refer to Section 2.6, Offsite Contamination, of this CRD.

**608-3** NNSA notes the commentor's concerns regarding the Rocky Flats Plant and environmental contamination. NNSA strives to conduct activities at LANL in a safe manner that is protective of workers, the public, and the environment. NNSA and its operating contractors have internal organizations dedicated to safe operation of its nuclear facilities. DOE has issued regulations, standards, and guidance for nuclear facility operation including requirements for performance of safety evaluations and risk assessments which become the basis for facility operating parameters. These regulations and standards of operations help reduce the likelihood of accidents. LANL operations are not comparable to those at the Rocky Flats Plant. LANL uses newer facilities and technology, has a much lower level of pit production, employs improved operational controls and management practices, and is subject to additional independent oversight. Refer to Section 2.12, Comparison

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 608 (cont'd): Will Parrish

was actually raided by the FBI in 1992 and then shut down because it had become so unsafe there.

There are communities -- people I know, people I'm friends with in doing this work, who live in communities that have been -- that's been demonstrated to have as much radioactivity as areas of Hiroshima and Nagasaki, Japan. And that's not a local issue. That's an issue that affects all of us. Radioactive toxins affect everyone on this planet, and they also embody exactly the type of direction we should not be headed in collectively in this society.

And so I thank everyone here for their commitment for stopping the production of new plutonium pits. I vow to do whatever is in my power to support you in that effort. And I also want to take this time to strongly support reconsidering this entire, quite frankly, sham of a public comment process. I think that this process needs to play out in a much different way, and that Congress, first of all, needs to have oversight over the final decision about what happens at Los Alamos. What happens here affects people everywhere, not only in this country, but all over the world. And Linton Brooks should not be the sole person deciding what gets -- what happens with this Site-wide Environmental Impact Statement. Thank you very much.

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to Rocky Flats Plant, of this CRD for more information. The impacts projected in Chapter 5 of the SWEIS indicate that operations would be conducted in compliance with environmental regulations designed to be protective of the public and the environment. In addition, as discussed in Appendix I of the SWEIS, activities are being pursued to address environmental contamination from earlier operations at LANL. Refer to Section 2.6, Offsite Contamination, and 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for additional information.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 609: Christy Escobar*

Hello. I'm Christy Escobar, and we're here representing University of California. And I'm sorry if any of this is a little repetitive, because we all kind of have the same idea. But -- okay. Good evening. We are here representing the Coalition to Demilitarize Education. We are students and recent graduates of three University of California campuses and the University of Missouri, Kansas City. We appreciate the opportunity to speak here tonight, and we're excited to be continuing our education by learning from everyone's public comments, as well as by talking individually with many of you.

We are here tonight as the University of California Weapons Inspectors. The UC has managed the Los Alamos National Laboratory since its inception. We believe the nuclear weapons industry is extremely destructive, and we have come all the way from California because we are ashamed by our University's involvement with it. We believe that we have a special responsibility to speak out about the activity the Los Alamos Laboratory engages in.

Let the record show that we, as representatives of the UC, do not believe there is any safe way to produce weapons of mass destruction or the radioactive components. Nuclear weapons are not environmentally safe. They significantly detract from social programs, and they diminish national security.

Specifically in regards to the plutonium pit production proposed in this Site-wide Environmental Impact Statement, we think that this is a particularly dangerous and unwise idea. Plutonium pit production is quite simply bad for both human health and respective surrounding communities. As Will mentioned earlier, at the Rocky Flats Nuclear Weapons Lab in Colorado, the last facility in the United States to engage in large-scale pit production, there are now many communities located downwind that have been measured to be as radioactive as Hiroshima in Japan. Cancer is an epidemic there.

There's no such thing as safe plutonium pit production, and we will not stand by as our university endorses it.

Ultimately, we don't believe that any community under any circumstances should have to suffer under the effects of nuclear weapons production. We thank you for listening.

609-1

609-1

NNSA notes the commentor's opinions regarding the safety of LANL operations. NNSA strives for LANL to be operated in a safe manner that is protective of workers and the public, and in compliance with Federal, State, and local requirements. The environmental and human health impacts associated with the alternatives for continued operation of LANL are presented in Chapter 5 of the SWEIS and summarized in Summary Table S-5. NNSA also notes the commentor's concerns regarding the Rocky Flats Plant and environmental contamination. As discussed in the response to Comment no. 608-3, LANL operations are not comparable to those at the Rocky Flats Plant. Refer to Section 2.12, Comparison to Rocky Flats Plant, of this CRD for more information.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 610: Kalea Matsakis

Hi. My name is Kalea Matsakis, and I want to make it clear that I'm speaking on behalf of myself and not on behalf of any organization. And I want to talk a little bit about my experience with the SWEIS, because I started reading it about, I guess, three weeks ago. And it's been a really difficult and confusing process for me, mostly because I just don't understand how some of these decisions are being made. But actually, I'm going to step back a minute and talk about when I got the notice for this SWEIS, and I saw that the public comment hearings were on Nagasaki -- one of them was on Nagasaki Day, and they were all on this week. And I didn't understand how it was possible -- I didn't believe myself that I remembered the date correctly, and I had to go check with my coworkers, but I was right, it is August 9th that we dropped the bomb 61 years ago on Nagasaki, Japan. And I realize that -- is it just that you didn't know, or were you just unaware of the history to the point where you would schedule a hearing for this date? Because that's how it felt to me. I mean, it couldn't be blatant disrespect. But it seemed as though it was just not being aware of the history, which is something that I felt while reading the document. Because you don't tell me what any of these things are, and I'm sorry that I'm not addressing the crowd. I really want to take this opportunity to discuss my frustrations with the people who are present here. And it's just that you don't tell me what these experiments are. I don't understand what a criticality test is in support of, what dynamic experiments are, why you are detonating depleted uranium in the open air. I don't understand this when I'm reading this. And I would really like to ask the purpose of these experiments that is included. And I think that that might help address some of this lack of awareness that I saw in the scheduling of the hearing.

610-1

But then again, I mean, I started to think, maybe someone did know, and maybe this was sort of a way to open up a conversation about the historical impacts of our nuclear weapons production and to really bring in remembrance and recognition of what we have done into this discussion -- into this discussed proposed activities. And I think that that would be a really positive thing, if that's the way that this meeting was going.

However, I don't know, because when I came yesterday and I started to talk to some of the people, who were running the hearings, and I asked whether or not, you know, Nagasaki Day was going to be addressed today, I was told with a raised eyebrow, it's ironic, isn't it? And I thought, well, yes, it is. But it's also not like that. It's serious as well. And I was given the impression that it be would addressed in an official way, that there would be some official recognition of the day. However, coming in today I asked about this again, and I was told that that might be a violation of the separation between church and state. And I personally feel disrespected by that comment. And I actually felt disrespected by a lot of things in this process.

I felt disrespected by the fact that the comment period began before I received the document, and I do work for an organization which is -- you know, we should

610-2

610-1 NNSA notes the commentor's concerns regarding the use of certain terms and the need for definitions of those terms in the SWEIS. While it is not possible to provide extensive detail about the individual experiments in a site-wide environmental impact statement, Chapter 2 of the SWEIS does present an overview of LANL activities and facilities including an overview of TA-18 in Section 2.4.8. This is the site of the criticality experiments conducted at LANL. Dynamic experiments are defined in Chapter 3, Section 3.1.3.7. The description of hydrodynamic tests in this section has been revised to include the reason depleted uranium is used in these experiments. Several additional terms are defined in Chapter 8, Glossary.

610-2 NNSA made reasonable efforts to ensure copies of the SWEIS were received by individuals and organizations prior to the Notice of Availability published in the *Federal Register*; however, NNSA also understands that some copies were not delivered in a timely manner.

NNSA recognizes that in light of electronic capabilities now available, that commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in the general vicinity of LANL. Those reading rooms are located in Los Alamos, Santa Fe, and Albuquerque.

To the extent possible, the most recent technical documents, including an update to the seismic hazard analysis, completed in June 2007, are considered in the Final SWEIS analyses. Information under development that is not available for use in the Final SWEIS, such as the updated Area G performance assessment, will be considered as it becomes available, and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3, and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 610 (cont'd): Kalea Matsakis**

have received it before the comment period began. And I felt disrespected by the fact that I consistently am unable to get the background documents, the scientific foundation. In fact, the first time I opened the SWEIS, I opened to the seismic page, and I couldn't believe that the 2006 seismic study is due to be released this year, but was not included in the SWEIS. You didn't wait to release this document until that study was put out.

And I can't understand why that is. I just don't -- I don't understand why that would be -- likewise the area of risk assessment, I understand that this document has been requested since the Cerro Grande fire, which burned over Area G, the low level nuclear waste dump at the lab, an historic waste dump that has all kinds of other stuff, including barrels of transuranic waste sitting above ground in canvas tents. That assessment, we have been waiting for it. It has yet to come out. And you say in the SWEIS that it's going to come out in 2006. Again, this is a serious site. I don't understand why it's not in the document.

Likewise, I cannot understand how this health studies are based on the ATSDR report, which is a report that the EPA has rejected. I don't see why that would be included with the EPA telling you that this risk assessment needs to be redone, why continue using it? I would actually really like this addressed in this SWEIS. I don't understand why these things aren't being done.

And I would also, then -- so to go back, ADS, sort of like, maybe the hearings are scheduled on this day as a way to bring out, you know, the historical implications of Los Alamos National Laboratory, you know, to bring that into the discussion, to actually to give our voices the sort of the import of a conscience, which I don't feel is in this document.

I would like to go back to the fact that these are -- these hearings are during the time in preparation of the days of the pueblo feast days. There are 15 of the Northern New Mexico Pueblos within a 15-mile radius. This is unacceptable for you to do that.

So if there is some level of wanting to have voices heard, why is it only our voices? Why is it only my voice and not everyone's voice, and everyone who is impacted? And I think it's just not the pueblos. There's a lot of people in this area who should be considered.

Thank you.

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**610-3**

**610-4**

LANL, including earthquakes, are described in Chapter 5, Section 5.12, and Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

**610-3** The SWEIS presents an independent assessment of public health impacts from contaminants in the LANL environment. The SWEIS does not rely on the Agency for Toxic Substances and Disease Registry (ATSDR) Public Health Assessment in any specific way for its conclusions. The ATSDR is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting Public Health Assessments at each site on the U.S. Environmental Protection Agency (EPA) National Priorities List. The Public Health Assessment is a relevant Federal agency study and it is therefore appropriate that the SWEIS acknowledge its conclusions.

The EPA did not reject the draft Public Health Assessment. The EPA comments on the draft Public Health Assessment were addressed by the ATSDR in the final assessment.

The Public Health Assessment for LANL was prepared with public oversight and review. The ATSDR released the draft Public Health Assessment for public comment on April 26, 2005, with the public comment period ending on August 8, 2005. In response to public requests, Agency for Toxic Substances and Disease Registry extended the public comment period to December 1, 2005. The Public Health Assessment was finalized and released on August 31, 2006 (ATSDR 2006). Appendix I to the final Public Health Assessment lists the comments that were received and describes how those comments were addressed in the final Public Health Assessment. The Public Health Assessment document states that the ATSDR conducted its evaluations in accordance with guidance provided in the Public Health Assessment Guidance Manual, which is available at [www.atsdr.cdc.gov/HAC/PHAManual/index.html](http://www.atsdr.cdc.gov/HAC/PHAManual/index.html).

**610-4** NNSA notes the commentor's concern that there was insufficient time to comment on the Draft LANL SWEIS. Responding to requests for additional review time, NNSA extended the comment period from the original 60 days to 75 days. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional information.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 611: Sheri Kotowski

My name is Sheri Kotowski, and the first thing I want to do is hand these letters to Elizabeth Withers on behalf of some people that couldn't make it to the hearing tonight, and these are the letters that request the comment period remain open until such time as the new public health assessment, the seismic report and the risk assessment for Area G has been released. And so I would like for Elizabeth to sign in receipt for these.

And one of the things -- let's see.

First, I want to thank -- I want to thank the DOE for giving me five minutes to make a public statement on a 1,500 page document that was released 30 days ago or that was released -- yes, 30 days ago, and my copy happened to go missing in the postal system, so I didn't get it until 15 days ago.

And the first thing I actually want to really address is the real environmental impact of a plutonium pit. One plutonium pit destroyed Nagasaki in less than a second, and so I shouldn't be complaining about having only five minutes to discuss this document because that's very -- that's the true environmental impact, and that is absolutely not addressed in the SWEIS, and I haven't had a chance to read it cover to cover, but it has not been addressed.

There are so many things to say. It's -- it's just incredible that we get five minutes, and we get a 15-day extension to review documents that aren't available. And one of the questions I have for the DOE is that if those -- the Agency for Toxic Substances Disease Registry Report is going to be available in 15 days? If the Seismic Report is going to be available in 15 days? And if the Risk Assessment for Area G is going to be available in 15 days?

The next issue I really want to address is water. Water. We live in an arid climate. Water is precious to us. With this proposed increase of expansion of nuclear weapons production at the laboratory, the laboratory already uses and dumps 500 acre feet of water per year down into the canyons, and this is water -- this is pristine water pumped up from the aquifer. It's used, it's defiled to make nuclear weapons. It's dumped into the canyons as industrial wastewater. It's not even cleaned up to human -- human health standards or environmental health standards.

With the increased pit production, it will go up to 822 acre feet per year of wastewater being dumped into the canyon systems. And so you have an understanding of how much water that is, I live in a very small community in Northern New Mexico, an agricultural community, and we use -- we're allotted 37 acre feet of water a year. It's a community of about 2,500 people, so that's a 20-year water supply for our community.

Then the next thing I was thinking about when I looked at the Rio Grande and I think about the diversion project, the drinking water diversion project in Albuquerque -- by the way, Albuquerque doesn't even have a public hearing, and we're talking about their wastewater. It's the largest metropolis in the state

**611-1** In addition to accommodating as many people as reasonable at the public meetings, NNSA provided additional means for people to comment on the Draft SWEIS including mail, email, and toll-free telephone and facsimile lines. As with past LANL NEPA documents, references were made available in public reading rooms in Los Alamos, Santa Fe, and Albuquerque. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

The Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR), Public Health Assessment of LANL was finalized and released on August 31, 2006 (ATSDR 2006). The conclusions stated in the final Public Health Assessment are essentially unchanged from those presented in the draft. The SWEIS does not rely on the ATSDR Public Health Assessment in any specific way for its conclusions. The ATSDR is the Federal agency responsible (under the 1986 amendments to the Superfund law) for conducting public health assessments at each site on the U.S. Environmental Protection Agency National Priorities List. It is appropriate for the SWEIS to acknowledge the conclusions of the Public Health Assessment of LANL because it is a relevant Federal agency study.

An update to the seismic hazard analysis was completed in June 2007 and incorporated into Chapter 4, Section 4.2.2.3, Chapter 5, Section 5.12, and Appendix D, Section D.4. Information under development that is not available for use in the Final SWEIS, such as the updated Area G performance assessment, will be considered as it becomes available, and, in accordance with the NEPA compliance process, the SWEIS impact analyses will be reviewed and supplemented as necessary based on the newly available information. See Section 2.2, NEPA Process, of this CRD for more information.

**611-2** NNSA notes the commentor's concerns regarding water quality and quantity in the LANL region and agrees that good stewardship of this LANL natural resource is extremely important. DOE and Los Alamos County have combined water rights of 1,806 million gallons (6,836 million liters) per year, of which 542 million gallons (2,050 million liters) per year are allotted to DOE. In recent years, the largest amount of water used by DOE and the County was 1,515 million gallons (5,735 million liters) in 2000, when the Cerro Grande Fire

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611-2



Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 611 (cont'd): Sheri Kotowski**

of New Mexico, less than 60 miles away, and they don't have a public hearing in Albuquerque. But anyway, so I was looking at the Rio Grande, and I'm thinking -- I mean, I live -- I live less than a mile from the banks of the Rio Grande in the Embudo Valley, in the Rio Grande Gorge, and how is this much water going to be -- how can it sustain that population? And then I thought about it, and it's why -- Santa Fe and Albuquerque are going to be drinking Los Alamos industrial wastewater. It's absolutely unacceptable to -- for us to drink somebody's wastewater. And on top of it, they have to clean it themselves. It's not even -- it's not even the DOE that's paying for the water to be cleaned to human drinking water standards.

Constantly -- and this is not just about money, it's about life, it's about integrity, but it keeps going back to, they are taking our money and running with it, and not doing anything to help any of our communities. And we need to just say you can't do this. You have to put this back into our schools. You have to put this back into vitality, into life.

One of the things in the SWEIS, you have three alternatives. There is no green alternative. You know, someone, an elected official was telling me today that you know, LANL is the crown jewel of New Mexico, and that -- and that they are putting all of this money into researching alternative sustainable energy, and that is absolutely not the truth. There is no green alternative and that's what we want. If LANL is going to be taking our money and spending it on something, we want them to be creating a healthy environment for us. We don't want them destroying our lives and destroying our water and everything we stand for. Thank you.

**611-2  
cont'd**

**611-3**

occurred. As shown in Chapter 4, Table 4-43, of the SWEIS and discussed in Chapter 5, Section 5.8.2.3, LANL water usage has been and is expected to remain below its 542 million gallons (2,050 million liters) per year allotment. Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, over the past 6 years, LANL has a very good record of complying with permit conditions. Under all alternatives, LANL would continue to meet permit conditions designed to protect water resources. In addition, NNSA operates a monitoring program (described in Section 4.3.1.5) to detect contamination that has resulted from past practices. In accordance with applicable regulations and agreements, LANL staff evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters. The radiation dose to a member of the public who only consumed water from the Rio Grande was calculated using the 95 percentile upper confidence limit values of measured radioisotope concentration from the 2005 LANL Environmental Surveillance Report (LANL 2006g). The calculated annual drinking water radiation dose from radioisotopes measured at locations upstream and downstream from LANL in the Rio Grande were equivalent and all were less than 10 percent of the allowable U.S. Environmental Protection Agency limit of 4 millirem per year. The specific radioisotopes present in the Rio Grande both upstream and downstream of LANL are naturally occurring and not indicative of any releases from LANL. Thus, impacts to biological systems would not be expected. The SWEIS also evaluated the impact of LANL operations on individuals that use surface water for ceremonial purposes and subsist on a diet that includes drinking local surface water and consuming local wildlife. The results of this analysis are included in Section 5.11. The conclusion is that such a lifestyle could result in a small increase in risk to the individual, but that the increase would be mainly due to such factors as natural background radiation, weapons testing fallout, and previous radiological releases from LANL, not from recent operations at LANL.

**611-3**

Chapter 3, Section 3.5, of the SWEIS provides a discussion of NNSA's consideration of, and decision to not analyze a "Greener Alternative" in the SWEIS. A "Greener Alternative" was analyzed in the 1999 SWEIS but was not selected for implementation. NNSA does not believe,

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Commentor No. 611 (cont'd): Sheri Kotowski

7 years later, that a “Greener Alternative” is reasonable for the future operation of LANL to meet its mission as directed by the Congress and the President, and has identified the Expanded Operations Alternative as its Preferred Alternative. In addition to LANL’s primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations, and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 612: Clarissa Duran

First of all, I just want to say hi to everybody, all my friends and all my new friends. And we're all here in Espanola, which is the place where we know how to behave and misbehave. So, for those of you who are going to speak and those of you who aren't going to speak, like my mom, who didn't sign up to speak but should have, because she has been a teacher here in this valley for over 30 years. I want to hear everybody who doesn't want the pits to come to Los Alamos, to be built in Los Alamos, to let the people know who are going to listen to this CD and maybe understand, maybe not understand, let me hear you say yes or no. Do you want them? No.

612-1

612-1

NNSA notes the commentor's opposition to pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

All right. That's what you have got to know, the people who are going to listen to this, and in Espanola we're a strong people and we're not just going to lie down and take what you're trying to give us, because that's a bunch of BS. A lot of people are coming up here and they're telling me where they're from, and I'm going to tell you that my people have been here for over 10,000 years, my great-great-great-grandmothers were from San Juan Pueblo and from Picuris Pueblo, and that my Spanish family has been here for over 400 years and we have survived a lot of things, and we're going to survive this, too, because we are not going to let you do this. We're not going to let you do this to us and we're not going to let you do this to our children, because I'll tell you this. If all the people who were here really believed that this was their home, the people who want to do this, you wouldn't be doing this because you know what? Maybe you are here, maybe your children are even going to grow up here, but what about your grandchildren? My grandchildren are going to grow up here. And the generations on and on and on, and I want to leave them the same beautiful place that I wake up to every single morning.

612-2

Chapter 4, Section 4.6.1, of the SWEIS provides detailed information on cancer mortality and incidence rates in New Mexico and all counties surrounding LANL. This data, along with the final LANL Public Health Assessment, issued on August 31, 2006, by the U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, shows that, "there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "... overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006). Chapter 4, Table 4-26, shows that some cancer rates in Los Alamos County are lower than the national average and some are higher, which is typical of any area.

When I lived in Las Cruces for seven years every morning I got up and I cried because I couldn't see my Sangre de Cristos, because I couldn't see the Jemez mountains, and because I couldn't see my people, all of you beautiful people who are out there sitting in this audience, and all the people who are sitting at home because they're tired because they worked, or maybe they are at their second job so that they can afford cars and they can afford the computers and they can afford all those things that the American -- American people, that the United States says we need to have in order to function in this country. And you know that's not true. And the people who are listening to this, you know that's not true. But this is a way to enslave us, and that's what Espanola is. Make no mistake. We know we're your bedroom community. We know you have been testing out viruses on us, because we get sick, and then you find out what it's all about by checking out our hospital statistics. We know that. And we know about the chem trails that you are pouring over us. And why, why are there so many children right here in the west side who have died of leukemia because of this spill that has never been cleaned up.

612-2

When I was a student here at Northern we had a lot of people come and talk to us, and tell us, oh, this is what we're going to do about the spill. And you know what?

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Commentor No. 612 (cont'd): Clarissa Duran

I don't believe -- I didn't believe that then, and I don't believe this now. And I don't think anybody in this audience does, either.

|| 612-2  
cont'd

So, for all the people who are sitting here tonight and all the people who are sitting at home because they are tired because they worked all day and they have to be home and be with their children, I am standing up for them tonight and I will stand up for them for the rest of my life. And what I have to say to you is no.

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Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 613: Marilyn Hoff**

I have questions, but I'm going to have to submit them later because of this time constraint we have.

My first comment on the draft SWEIS for Los Alamos is a protest on the range of alternatives the public is asked to choose between. The no change alternative, the expanded alternative, even the 20 percent reduced alternative each represents business as usual at LANL, and LANL's business as usual kills. Each alternative would continue to manufacture plutonium pits in a push to restart a nuclear arms race, raking in huge taxpayer-subsidized profit at the expense of the safety of downwinders and the stability of the volatile international political climate. Even with no change, LANL would continue to explode over four tons of depleted uranium into the atmosphere during procedures euphemistically described in the SWEIS as expanding in dynamic or hydrodynamic test. All of those euphemisms mean explode.

613-1

After the first Gulf War, LANL enamored of the murderous possibilities of dehumanisance, advocated garnering proponency of the U.S. depleted uranium arsenal in argument against environmental concerns. So it comes as no surprise that LANL would downplay the dangers of depleted uranium while at Technical Area 15 LANL weapons designers explode tons of depleted uranium in so-called hydroshots or hydrodynamic tests DARH and Building 306, during which DU substitutes for plutonium in mock nuclear explosions.

613-2

LANL postures that these 100 major mock nuclear tests per year primarily for stockpile stewardship. Even as Linton Brooks eagerly promotes new generations of usable nukes, nuclear bunker busters and many nukes -- and nuclear bunker busters is what George Bush is lusting to drop on Iran -- the DARH record of decision so that DARH explosions could prove useful in the design of nuclear weapons, and coincidentally, a new nuclear bunker buster has entered the U.S. arsenal during the regime of so-called stockpile stewardship. According to a Brookhaven report, 220,000 pounds of depleted uranium munitions were exploded at LANL prior to 1999. This is the nonnuclear, but certainly radioactive range of unlivable and sickening our own soldiers.

613-3

Does this SWEIS even tabulate the munitions currently exploded by the Department of Defense at LANL? Does the exemption of DOD munitions test from oversight by any other governmental body, thanks to the military munitions rule, mean that these explosions, probably taking place at TA-36, go unaccounted in the SWEIS? Or do the 2,600 pounds per year of depleted uranium allotted to TA-36 go to the Department of Defense munitions tests?

613-2  
cont'd

The so-called expenditure of depleted uranium munitions closely resembles the description of a war crime. Namely, that it kills indiscriminately, that it kills for generations to come, a crime LANL perpetrates on the pueblos, villages, towns and cities of New Mexico.

613-1

NNSA notes the commentor's opposition to the three alternatives evaluated in the SWEIS and preference for an alternative that does not include activities related to weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President, and is therefore not being considered in the SWEIS. Cleanup of the LANL site is, however, an NNSA priority. Chapter 2, Section 2.2.6, of the SWEIS describes progress made by NNSA in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Continuation of cleanup activities a pre-Consent Order level is included in the No Action Alternative, while actions necessary to comply with the Consent Order are evaluated under the Expanded Operations Alternative. As stated in Chapter 1, Section 1.4, of the SWEIS, however, NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. For more information about proposed activities in support of the Consent Order, refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD.

Although toxic and radioactive air emissions can potentially have detrimental impacts, the past emission levels analyzed and those projected for LANL would not be expected to cause unacceptable impacts on human health or the environment, as shown in Chapter 4, Section 4.6.1.3; and Chapter 5, Sections 5.4.1, 5.4.2, 5.6.1, and 5.6.2. In addition, airborne radionuclide emissions at the LANL site perimeter, as well as at onsite and regional locations, are monitored continually by AIRNET. Specific LANL operations and procedures, such as those with depleted uranium, are designed to control any releases of depleted uranium to the environment during tests. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information on high explosives and depleted uranium activities.

613-2

NNSA notes the commentor's opinion regarding the use of depleted uranium. The subject of depleted uranium munitions and war crimes

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Commentor No. 613 (cont'd): Marilyn Hoff

The good news is that the expenditure of LANL doesn't apparently increase in the expanded alternative. The bad news is that it is being exploded in enormous amounts already, as I said, four times per year.

613-3  
cont'd

According to physicist Marian Falk, such explosions producing nanoparticles of uranium oxides and nitrides as essentially weightless as air, upon whose whims it can travel the world over.

When inhaled, these radioactive poisonous heavy metal uranium particles can travel anywhere in the body, causing among various other illnesses, cancers and birth deformities. These DU explosions that they power the nuclear arms race, also drive the worst abomination of this current SWEIS proposal to quadruple LANL's production of plutonium pits, the core of nuclear weapons. These many pits contradict the claim of stockpile stewardship as manned solely to maintain the aging nuclear arsenal.

613-4

LANL's costly building projects gets increased activities, it's stepped up machining of the world's most dangerous element, plutonium, to make the world's most devastating weapon, is a nuclear chain reaction of greed. And as I understand it, plutonium is being extracted from spent fuel rods. Spent fuel rods is a veritable definition of remote-handled waste. Remote-handled waste by definition means you must not come near it. It will kill you.

613-5

Then probably what is happening is that the depleted uranium after the plutonium has been extracted, is being extracted from this spent nuclear waste, from our nuclear reactions, and that's why these contaminants are being found up in the fruits in Ojo Sarco, and the various contaminants that are in spent nuclear waste are probably being exploded in contaminated so-called depleted uranium.

613-5  
cont'd

Exploding DU at DARH leads to new nuclear weapons designs, leading to manufacture of more plutonium pits, leading to a ballooning of radioactive and hazardous waste production, waste pollution, even as LANL fails to clean up the mess it has already made, and has no solution for the deadly mess it plans to make, and increasingly wants to ship it onto New Mexico's treacherous highways to poison the unstable chambers of WIPP.

613-6

The unlisted alternative that I would choose for my own cause was a discontinuation of DU explosions of any kind, of the cessation of any efforts to test or design new nuclear weapons, the total dismantling, in cooperation with other nuclear nations of the world, of the U.S. nuclear arsenal, and a thorough cleanup of LANL, returning it to environmental livability.

613-1  
cont'd

Greenhouse gasses, global warning, alternative fuels, there are plenty of ethical ways to do science at LANL. None of the alternatives listed in the SWEIS are in any way beneficial to life on earth. Thank you.

is not part of the scope of the SWEIS. See the response to Comment no. 613-1 above.

613-3

Environmental remediation of sites used for dynamic experiments at LANL (firing sites) is being addressed, primarily in accordance with DOE's authority under the Atomic Energy Act, and with the requirements of the March 2005 Consent Order. Since 1989, when over 2,100 potential release sites, including firing sites, were identified at LANL, because of progress in remediation and consolidation of sites, only 829 potential release sites remained at the end of 2005. Therefore, the levels of depleted uranium and high explosives that may remain in the vicinity of the firing sites is being reduced. Additional information is in Chapter 2, Section 2.2.6, and Appendix I of the SWEIS, and in Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD. All depleted uranium currently being expended at LANL is accounted for in the SWEIS. Chapter 3, Table 3-9, of the SWEIS indicates that the maximum (on average) amount of depleted uranium used at LANL for high explosives testing annually would be 6,900 pounds (3,130 kilograms). This amount includes any depleted uranium that would be used at TA-36 as well as any of the other high explosives testing sites. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information regarding environmental and human health impacts from DARHT Facility operations.

613-4

NNSA notes the commentor's opposition to increased pit production at LANL and nuclear weapons in general. Experiments involving depleted uranium do not drive the proposed increase in pit production, but rather provide data that supports LANL's stockpile stewardship mission work. The pits that would be produced at LANL would be used to replace existing pits. The number of nuclear weapons in the Nation's stockpile has been decreasing and NNSA anticipates that future reductions will be possible. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information including stockpile reduction information.

613-5

Extraction of plutonium from spent fuel rods, or reprocessing spent fuel, is not performed at LANL or anywhere else within the DOE complex.

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Commentor No. 613 (cont'd): Marilyn Hoff

Depleted uranium is the byproduct of enriching natural uranium for use as nuclear reactor fuel or weapons. It is unlikely that the LANL experiments using depleted uranium would cause offsite contamination. See the response to Comment no. 613-1 above. LANL staff has investigated the reported contamination in a plum in Dixon, New Mexico, and found that it is probably a "false positive" result. Refer to Section 2.6, Offsite Contamination, of this CRD for further information on this incident.

- 613-6** NNSA notes the commenter's concerns regarding depleted uranium testing and its relationship to increased pit production and waste generation; however, NNSA disagrees with the allegation that it intends to generate additional waste without conducting site cleanup. In fact, NNSA intends to continue to safely manage waste and conduct its environmental restoration at LANL as it carries out its national security and other missions. Chapter 2, Section 2.2.6, of the SWEIS describes the progress made in the environmental restoration program at LANL, while Appendix I presents options and environmental analyses for conducting future remediation activities at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. All wastes generated from LANL activities will be stored protectively until they can be safely disposed of in regulated facilities. Solid wastes, hazardous wastes, and mixed low-level radioactive wastes will be disposed of in offsite disposal facilities. Transuranic wastes will be disposed of at WIPP or its replacement facility. Disposal of low-level radioactive waste may safely occur in onsite and offsite disposal facilities. Refer to Section 2.7, Waste Management, of this CRD for more information.

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Commentor No. 614: Jeanne Green

We have more, many not nuclear weapons to destroy the planet. Bechtel is in this for profit at the detriment of us all. The SWEIS document does not provide an acceptable alternative to ensure safety of the public. LANL should not be allowed to increase plutonium pit production or any additional munitions production when it has not dealt with the massive amounts of radioactive, chemical and heavy metal wastes already on site, and continuing to be released into the air, water and soil in New Mexico.

614-1

Independent monitoring of contamination has shown americium 241 in plums at Llano. Also found in the soils were plutonium, strontium 90, cesium 137. Depleted uranium is not even mentioned in the study.

614-2

Also above normal levels in local soils, beryllium, cadmium, cobalt, mercury and lead. LANL's streams are contaminated with PCBs, gross alpha, and selenium. Radioactive waste enough to fill 9,000 Olympic-sized pools is sitting aboveground in canvas tents, just ready for the next wildfire, earthquake or terrorist to come along. We must take advantage of the tremendous amount of technical expertise available at LANL and change its mission to research and development of sustainable alternatives towards energy independence from foreign oil. This will seriously reduce the need for weapons for current and future wars.

614-3

614-4

614-5

My recommendations are to implement full cleanup of the major waste sites at LANL and refrain from generating any more toxic waste. No, no, no new nuclear bomb factory.

614-1  
cont'd

The NMED LANL Consent Order for cleanup should be mandatory and immediate, not tied to increased weapons activity or plutonium pit production. DOE must adopt the removal option for all cleanup activities and apply the most recent water quality standards and current impaired stream information.

614-6

It is not acceptable to be exploding depleted uranium with explosives in the open air. This must stop. New Mexicans cannot be considered collateral damage in an eternal war against terrorism. DOE must institute a program to stop all toxic air pollutant emissions from LANL facilities.

614-7

Also, it is a grave oversight to omit the 2006 seismic hazard study information in planning for future building. DOE must make permanent disposal of existing waste a priority rather than expanding operations to generate more toxic and radioactive waste.

614-8

614-1  
cont'd

LANL's mission should be pro-life instead of pro-death, sustainable energy alternatives instead of weapons of mass destruction. Thank you.

614-5  
cont'd

614-1

NNSA notes the commentor's opposition to activities related to nuclear weapons production at LANL and concerns about legacy and new environmental contamination from those activities. Chapter 2, Section 2.2.6, of the SWEIS summarizes the progress made in the LANL environmental restoration program since 1999 when LANL staff identified over 2,000 sites potentially requiring environmental restoration. Due to remediation and consolidation, only about 800 sites remain to be addressed. Actions are underway to prepare and transport the transuranic waste currently stored onsite to WIPP for disposal. Chapter 5 of the SWEIS evaluates the potential environmental and health and safety impacts of continued operation of LANL for the three proposed alternatives. LANL operations are in compliance with regulations that protect public health and the environment, and, as demonstrated by the analyses, would continue to be in compliance. Refer to Section 2.6, Offsite Contamination, of this CRD for additional information on the potential impacts to the air, water, and other environmental media.

614-2

Appendix F of the SWEIS presents detailed environmental surveillance data for radioisotopes and chemicals in groundwater, surface water, sediment, and soil in and around LANL. The data presented in Appendix F includes specific measurements for americium-241, strontium-90, cesium-137, and plutonium and other isotopes. Depleted uranium is measured in terms of its constituent uranium radioisotopes which are specifically monitored and reported in Appendix F. The measured concentrations in soils in and around LANL between 1991 and 2005 were at the background levels expected worldwide. Appendix C presents detailed LANL radiological emissions and population radiation dose data. All radiological doses are a very small fraction of the normal background dose received by the population in and around LANL. Refer to Section 2.6, Offsite Contamination, of this CRD for information about the report of americium-241 in a plum sample in Dixon, New Mexico. Examination of the data indicates that this was likely a false positive finding. The discussion also describes how LANL staff limits releases to the air and outfall discharges from current operations to levels within regulatory limits to protect public health and the environment.

614-3

The water quality standards in Chapter 4, Tables 4-7 and 4-9, of the SWEIS have been updated to reflect standards recently issued by the



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*Commentor No. 614 (cont'd): Jeanne Green*

New Mexico Water Quality Control Commission. The new standards have not yet been approved by the U.S. Environmental Protection Agency; nevertheless, they are used in the 2005 Environmental Surveillance Report and the SWEIS in evaluating water quality data. As Table 4-7 demonstrates, LANL surface water data are compared to a variety of standards that legally apply, in order to identify contaminants and data trends that could indicate the need for corrective actions. LANL's streams are listed on the New Mexico Environment Department's 303(d) List of Impaired Waters for selenium and gross alpha. Sandia Canyon also is listed for polychlorinated biphenyls. At the levels found in these intermittent streams, the selenium and gross alpha are probably naturally occurring. Uranium and thorium (sources of the gross alpha activity) and selenium occur naturally in the soils of northern New Mexico and are being washed into LANL streams in the sediment carried by stormwater. The polychlorinated biphenyls are probably LANL-derived and are present in sediments from past activities at LANL; they also are mobilized by stormwater runoff. LANL is no longer discharging significant amounts of polychlorinated biphenyls. The environmental surveillance reports provide additional details ([www.lanl.gov/environment/all/esr.shtml](http://www.lanl.gov/environment/all/esr.shtml)). The New Mexico Environment Department Surface Water Quality Bureau is in the process of developing Total Maximum Daily Loads.

**614-4** NNSA is working to prepare all stored and newly generated transuranic waste for shipment to the WIPP. Shipment rates for 2006 have increased significantly over past years and this progress is expected to continue with a commensurate reduction in waste stored above ground. Refer to Section 2.7, Waste Management, of this CRD for additional information. As discussed in Chapter 3, Section 3.6.1, of the SWEIS, mitigation measures have been taken at LANL since the Cerro Grande Fire to minimize the potential for future fires. These include forest thinning to reduce fuel load (over 7,000 acres [2,833 hectares] thinned) as well as activities to reduce the fuel load within waste management domes in TA-54, Area G. Wildfire and seismic activity at LANL have been accounted for in the SWEIS. The estimated human health impacts from postulated facility accidents, including wildfires and earthquakes, are described in Chapter 5, Section 5.12.

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Commentor No. 614 (cont'd): Jeanne Green

- 614-5** NNSA notes the commentor's opposition to activities related to nuclear weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.
- 614-6** Decisions about the appropriate levels of cleanup for sites subject to the March 2005 Consent Order will be made by the New Mexico Environment Department in accordance with established regulatory processes and the criteria for groundwater, surface water, and soil specified in Section VIII of the Consent Order. Decisions about cleanup of sites subject to the Atomic Energy Act will be made by NNSA. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered including containment in place, treatment, or removal. Any remedy selected for a site requiring environmental restoration must meet several criteria including protection of human health and the environment and attainment of applicable cleanup standards including those for ground and surface waters. If the site is to remain under DOE ownership, then cleanup standards commensurate with a restricted type of land use may be used, provided that offsite areas are protected. If the site is to be released for unrestricted access by the public, then the site would need to meet cleanup standards for unrestricted access. Regarding the use of the most recent water quality standards, refer to Comment no. 614-3.
- 614-7** All LANL activities have valid permits as described in Chapter 6 and are conducted in accordance with applicable State and Federal laws and regulations. Radiological air emissions are addressed in Chapter 5, Section 5.4.2. The radiological impacts from all emissions, including uranium isotopes, are discussed in Section 5.6.1. Nonradiological impacts, including those from depleted uranium, are addressed in Section 5.6.2. For all alternatives, the average population dose within 50 miles (80 kilometers) of LANL is less than 0.1 percent of background radiation. LANL operations and procedures are designed to control

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*Commentor No. 614 (cont'd): Jeanne Green*

any releases of depleted uranium to the environment during tests. For more information on high explosives, depleted uranium, and associated monitoring programs, refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD.

- 614-8** An update to the seismic hazard analysis was completed in June 2007. Seismic activity at LANL is described in Chapter 4, Section 4.2.2.3, and in the 2007 seismic hazard analysis report (LANL 2007a). The estimated human health impacts from postulated facility accidents at LANL, including earthquakes, are described in Chapter 5, Section 5.12, and in Appendix D, Section D.4. These sections also include a discussion of the significance of the updated understanding of seismic hazard from the 2007 seismic hazard analysis report.

The new geological information in the 2007 seismic hazard analysis report has been interpreted as indicating that the seismic hazard at LANL is greater than previously understood. The relevance of the seismic hazard to facility accidents will undergo a rigorous and thoughtful evaluation to determine what, if any, changes are needed for planned and existing facilities. In the interim, the LANL contractor has developed and NNSA has accepted a justification for continued operation which addresses controls on operations of certain nuclear and high hazard operations that mitigate the risks from seismic activities (LANL 2007b, NNSA 2007b).

Following the NEPA process but prior to the design and operation of specific facilities, safety studies in the form of Hazard Assessment Documents and Safety Analysis Reports that include seismic concerns and take into account the most current seismic information would be prepared to address a comprehensive set of accident risks. The results of these safety studies would be incorporated into facility design and operations to ensure protection of the health and safety of workers and the public.

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Commentor No. 615: Cliff Bain

My name is Cliff Bain and I live in Arroyo Hondo, Taos County. Even if the weapons production activity of Los Alamos and dozens of other sites could be made perfectly safe and not threaten the environment and the people and the animals and the bees of Northern New Mexico, it would still be a crime against humanity, against nature. These weapons have only one purpose, and they have always had only one purpose, and that is world domination by this government for economic and military purposes. And that makes my family and everybody else on this planet immensely unsafe.

I am threatened, we are all threatened because this psychotic fantasy of world domination is going to lead to the proliferation of these weapons. Our threat will increase the rage and anger against our people, ourselves. There will be resistance, as we see across the world right now. The invincibility of the United States, the invincibility of the Israeli military is a fallacy. We will reap the holocaust, and when it comes home to us are we going to feel safe because of some homeland security?

There is no defense in these policies. This is madness, it is domination, and the fallacy of -- of that -- the notion that we can dominate is delivered to us every day as we watch the carnage across this planet. The only thing that insulates us right now is, you know, a couple of oceans. But how long will that be, you know, whether it is a car bomb, or a suitcase bomb or something else, when it comes to us, we deserve it.

We have tolerated for 60 years our boot being put on the neck of the world. And I am just absolutely stunned that the people that work at Los Alamos can maintain the level of denial that allows them to sleep, that allows them to go to work. I am stunned that we as citizens of this country can keep paying the taxes that make this happen. You know, it's going to stop someday. I don't know if it will stop when we wake up and decide that there is a path of cooperation of the sharing of resources, the putting of the intelligence of the human race to, perhaps, letting beings on this planet survive instead of die off in these -- this holocaust that we have designed and implemented. I don't know how it's going to end but, I know that we, as citizens of this country, have more power to turn things around than any other people on this planet and we are not doing it.

I just ask all of you who work at Los Alamos -- you know, so many people have said you understand what's going on. Well, you know, think clearly about what you're doing. Think clearly about where your life's work is, and think about your grandchildren, think about the children in Lebanon and Iraq and Iran, every other place that is responding to our aggression, responding to our threats by trying to maintain their culture any way they can.

You know, we all have to wake up and I hope we do it soon. And we're going to get some help from around the world, because if we continue with these policies, the shock and the awe is going to come home.

615-1

615-1

NNSA notes the commentor's statements regarding the morality of pit production and nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 616: Shannyn Sollitt

Hello. Here I stand. It feels like another exercise in futility. I have stood before microphones for years and years and years, opposing all of the activities coming from the crown jewel, Los Alamos. It is so wonderful to see young people here, and I am really grateful that the students from the University of California have brought their consciousness and awareness that this is an educational institution that is dedicated now to creating weapons of mass destruction. What has happened to our society? What has happened to our world when our educational institutions condone this kind of activity? It's truly sick.

I -- I don't live in Espanola anymore, but at the time I did live in Espanola I designed this logo because I understood that LANL was going to expand its nuclear weapons production activities. That was ten years ago, nine years ago. This logo I designed in the Santa Cruz River Valley, and it is a prayer for peace, uniting many, many spiritual paths of peace that are actually related to this particular bioregion. The prayer is to transform the laboratories creating weapons of mass destruction into institutions that engage only in life affirming research and development.

And I stand and I hold this prayer constantly. It's my, like, way of walking through the world. And when I designed this logo and held that prayer, I was holding that prayer first for the people who live here. I could walk up outside of my house and look down the Santa Cruz River Valley and see all the farms, and drive down the road and see the people selling their vegetables, and go to the farmers market and really understand what it is to be in an agrarian society where all of the life is dependent upon the earth.

And then up there, on the hill, they are putting a facility that can contaminate the entire earth. And it's up the hill. It's upstream. It's upwind. When the fires happened several years ago all of the smoke came down here and contaminated the people and the land and the food. Where is the respect?

And so we can look at the Site-wide Environmental Impact Statement and say, oh, this isn't there and this isn't there and this isn't there, and I haven't really looked at it because it's so obvious to me that you don't put a nuclear weapons production facility at the top of a mountain. What are you thinking? If you are going to put a facility somewhere, put it down where you are going to dump the waste. And I don't think you should put one anywhere. It is time to wake up to peace, or we as a species are going to be annihilated.

So, as part of the Los Alamos Peace Project idea I have created this postcard for you to send to your legislators. Essentially, it says that we have already 23,000 nuclear pits. 23,000 nuclear pits. Now we have to make new pits? Hum, that sounds like we are proliferating nuclear weapons. And the proliferation of nuclear weapons stands in direct contradiction to the nonproliferation treaty that the United States ratified in 1970.

- 616-1** The New Mexico Environment Department collected produce and soil samples from farms and communities after the fire. Concentrations of many of the metals measured were higher in predominantly upwind communities or communities out of the main smoke plume, such as Santa Fe, Peña Blanca, and Abiquiu, than in downwind communities like Embudo, Española, and Dixon. Levels measured in soil from the Jemez Mountains were similar to or greater than those measured in locations downwind of the fire. Concentrations of metals that have been used and disposed of at the site, such as barium, copper, beryllium, mercury, and silver, were either not above ambient levels or were below detection limits in soil samples. The influence of fallout from the smoke plume was not discernible in the soil samples, and the New Mexico Environment Department concluded that air pollution, background soil levels, and fertilizer application could have been responsible for the levels measured.
- 616-2** NNSA notes the commentor's concerns regarding the location of LANL and its operation. LANL's location was selected during World War II because of its isolation. The continuing mission of LANL, starting at that time, has been to support the U.S. nuclear weapons program. The focus of the SWEIS is to evaluate the environmental impacts of alternatives for operations at LANL. In the SWEIS, NNSA does not evaluate alternatives for moving LANL operations to another geographic site and is not considering ending LANL's mission of supporting stockpile stewardship. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.
- 616-3** NNSA is not expanding nuclear weapons production, that is, the United States is not increasing the number of nuclear weapons in its stockpile. NNSA is performing activities to ensure the safety and reliability of the current stockpile and is currently reducing its nuclear weapons stockpile. Operations at LANL that support the NNSA mission to ensure a safe and reliable nuclear stockpile are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

616-1

616-2

616-3

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 616 (cont'd): Shannyn Sollitt

And nuclear weapons are -- and this treaty, as we are proliferating them, is an absolute against our constitution which says that all treaties are considered to be the law of the land. And any legislator who is voting to spend the money to proliferate nuclear weapons is in violation of his or her oath of office. And essentially this is what this card says, that we are aware that you are not upholding your oath of office and, therefore, it is an impeachable offense.

616-3  
cont'd

So, I make a request that all of the people who are here, who are standing against this insanity -- you can call it nothing less than insanity -- that we all kind of, if we can, at the end of this, to gather up and hold our energy together, because this force that we are up against is the darkest side of the human soul. It is like the darkest side of the human soul that has taken over our entire government, and we need to revolt against it because it is revolting.

And I am a velvet revolutionary. That means I only stand with love. And so, I just ask that we all, if we can, gather up our forces and come together. I have gone to this hearing in Los Alamos. I am going to go again in Santa Fe. And I have 17,000 -- 18,000 of these cards that we need to get to our legislators to let them know that, you know, the buck doesn't stop up there. It stops with their allocation of the funding for this. I love you all.

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Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 617: Diane Gledhill**

We're a fairly small group here tonight, but I want to let those people out there, people know, people that are going to listen to these and respond to these hearings, I am just one person. I can tell you I represent Los Alamos Study Group. I represent Embudo Pods. I represent the Democracy Network. I represent Action Coalition of Taos. That's just a handful of folks up north. The people gathered in this room tonight represent people all over the United States who do not want to see the continuation of the proliferation of nuclear weapons. We are only a handful.

I want to add to that that I represent the hundreds of people that came to the courthouse in Taos asking for a resolution for -- following a nuclear nonproliferation treaty, and I represent the people who went to the government in Madrid and got a resolution for nonproliferation of nuclear weapons, people who are all over our state who are not here tonight. How many thousands of people, Greg Mello, signed onto the call for non? How many?

MR. GREG MELLO: More than 3,000 individuals, more than 100 New Mexico organizations, 2 New Mexico cities. There's, I think, about 400 New Mexico businesses. All of them requested the end to pit production.

MS. DIANE GLEDHILL: And I'll just add to that, I spoke to 70 businesses in Taos who are willing to sign on -- very few people questioning it, except those people who are particularly concerned about the livelihoods of New Mexicans, and I'm about to -- I have a little problem here.

I came in the door tonight and I was offered the EIS. It was like this. The EIS, it's huge, a huge document. And I ask you, did anybody in this room read it from cover to cover? And if you did, having closed the last page and gone to bed, did you put your head on the pillow and say, ah, all is well?

No flood, no fire, no geologic event, no terrorist, no jackpot crazy person is going to cause a problem. It's all under control.

You see, the problem with the EIS -- and the reason I am not even going to look at it and I don't want a copy is, there's a lot of scientific intelligence, there's a lot of analysis, there's a lot of education, but I don't see a section on wisdom. Why doesn't an EIS of this magnitude seek out the people who hold the wisdom in this world, the leaders in our time of spirituality and the wisdom for future generations? But I don't see a section on wisdom.

And my wisdom says we don't need an IRS -- an EIS to accomplish that type of faith. You need an act of faith to believe that this is safe. We need an act of faith, and I don't have it, and it's good that I don't, because I think everybody here tonight, basically whether you have the technology and the education to understand an EIS, you don't believe it. You don't believe it's a safe thing and a good thing.

617-1

617-1

NNSA notes the commentor's concerns regarding pit production and nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

617-2

Chapter 5, Section 5.12, of the SWEIS addresses different accident scenarios that would bound the most severe types of accidents that could possibly occur at LANL. Accidents that were evaluated included radiological releases from facilities, earthquakes, and wildfires. A summary of the environmental impacts from these accident analyses is in Table S-5 of the SWEIS Summary. Regarding terrorism impacts, DOE gives a high priority to the safety and security of its facilities. Security and potential acts of sabotage are integral considerations in the design and operating procedures for new and existing facilities. Chapter 4, Section 4.6, of the SWEIS has been revised to include additional discussion of the measures taken to protect assets at LANL from terrorist activities. As discussed in Chapter 5, Section 5.12.6, the impacts of possible terrorist actions have been considered in a separate, classified appendix to the SWEIS.

617-2

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617-3

In accordance with Council on Environmental Quality Regulations (40 CFR Parts 1500 to 1508) and DOE's NEPA Procedures (10 CFR Part 1021), NNSA gives appropriate consideration to environmental values, as well as other factors. All technical information available and public input is considered when making a decision.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 617 (cont'd): Diane Gledhill

I have several points that haven't been brought up that I would like to say I also believe should be a part of an EIS. It's an Environmental Impact Statement. That isn't just water and air, my friends. That's how you feel in your heart. And that's whether you maybe feel oppressed and helpless because you know the decisions were made before you came to this room.

617-4

617-4

NNSA has yet to make any decisions regarding the proposed actions and alternatives in the SWEIS. NNSA will issue one or more Records of Decision no earlier than 30 days after publication of the Final LANL SWEIS to document the decisions made by NNSA.

It's an environment, it's about issues that make us feel helpless, it's about issues that make us feel abused and used. And I would like to comment on a couple of them. Inequalities, and I would like the EIS to address and see if they can rectify some inequalities in this system. The men who make these policy decisions are the same people who have everything to gain by their implementation. They are in an industry of power and wealth that feeds on further funding and further weaponry and another and another and another. We don't get to be present during those decisions. We get to write letters to the editor and maybe a letter to your Congressman.

617-5

The issue of inequality as presented by the commentor is not within the scope of the SWEIS. Socioeconomic and environmental justice impacts, however, associated with the alternatives addressed in the SWEIS are analyzed in Chapter 5, Sections 5.8 and 5.11, respectively.

I was outraged to learn that, and I might have the name wrong because I didn't get to look at some of the facts and figures I have known over time, but I think his name is Mr. Robinson, head of Sandia; am I right? Mr. Robinson had the ear of legislators when he opposed the Comprehensive Test Ban Treaty and Nuclear Nonproliferation Treaty, and at the same time he was the head of Sandia Labs and he was in the process of joining with Lockheed to get a bid to also head up Los Alamos. Now you ask me if that's not a fox in the hen house. Why does Mr. Robinson get the ear of our legislators and it's so hard for us to be heard. I want an EIS that addresses inequality.

617-5

Second inequality. I want an EIS that's going to tell us before this starts why it is the small New Mexico Environmental Department is the sole small finance agency to defend our -- our health and the cleanliness of our environment against such Goliaths as the Department of Energy, University of California, now Bechtel? How many entire New Mexico budgets probably fit within the Bechtel budget?

One of the, and only one, and again I'm not going to give you specifics, but can I tell you when the New Mexico Department of -- Environmental Department gets onto something, then, boy, they are just bombed with lawsuits and they keep us tied up in court for years and years and years. And that's inequality. They have so much money to counter any of the people who are using their scientific and educational expertise to try to keep our environment safe, not that I feel that's the main issue.

Third inequality, why is it that Los Alamos County is one of the top and richest counties in the United States and right next door, Rio Arriba is one of the poorest? Defense spending goes up and up and up in the state of New Mexico and has for a number of years, and our rating as one of the poorest country -- poorest of the states in this United States has remained the same, right down at the bottom with just small fluctuations.



Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 617 (cont'd): Diane Gledhill**

Our representatives would have us believe that the military operations in this state, and most certainly Sandia and Los Alamos labs, are helping us financially, and that is a myth. And I am not the person to go into the details of it, but I think it speaks for ourselves that although the spending goes up we are not seeing it, and Rio Arriba County where probably the greatest proportion of people are earning their money at Los Alamos labs live, is just the epitome of poverty, the highest drug rates, the highest suicide by teenagers, the highest child mortality -- you name it, we got it, including a suffering educational system.

There are a myriad of things that surround this operation that are not always clear to the eye of the beholder, and it is terribly important that Domenici and Bingaman and Richardson and Udall understand that the military complex and Sandia and Los Alamos are not helping us financially. And if they don't know that, boy, we got a lot of information to let them know.

My quick wrapup is, we cannot be a state that pursues sustainability and simultaneously creates the most destructive weapons in the world. And I want to say, we are in Rome, the fires are burning, the fires of resource depletion and the fires of global warming, and are we going to play violin and keep piling weapons on or are we going to direct our attention to those problems, and thank you.

617-6

617-6

Chapter 4, Section 4.8, of the SWEIS addresses the current socioeconomic conditions surrounding LANL, including regional economic characteristics, demographics, income, housing, local government, finances, and services. Chapter 5, Section 5.8, of the SWEIS evaluates the socioeconomic impacts of the alternatives for LANL operations. Specifically, Section 5.8.1.3 addresses potential impacts if operations are expanded.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 618: Harvey Frauenglass*

My name is Harvey Frauenglass, and Diane is a hard act to follow, and so are those wonderful people from California, the students, and so is Carol Miller. And I want you to know I voted for you when you were running for representative.

I worked for 13 years at the DOE labs in New Mexico, Sandia and Los Alamos. And for the last 25 years I have been doing penance as a farmer. But what I want to say, whereas I agree with most -- with the feeling and most of the things that the people here have said, there's another side to Los Alamos that we need to think about. I'm not talking about the weapons production side. But there's another side that if we had maintained the original name of Los Alamos, Los Alamos Scientific Laboratory, we would be in a lot better position now.

And I am going to conclude, tell you what my conclusion is right now before I get into the specifics. I think Los Alamos should be renamed Los Alamos National Research Laboratory, not Los Alamos bomb factory.

Right now we have laughed, and rightly so, when people call Los Alamos the crown jewel of New Mexico, of New Mexico research. But that, perhaps is overdoing it. Yet, I would like to point out some of the things that should be encouraged and should be funded at Los Alamos that are happening right now, that perhaps the people who put this EIS together didn't even know about. And these are the kind of things that if we shift the emphasis and put money into that, we would be in a lot better place.

For example, the National Science Foundation's primary climate change computer code is done at Boulder, Colorado at the National Center for Atmospheric Research, which sounds right. But what we don't know is that one half of that project is done at Los Alamos. They have the expertise to predict the oceanic changes and the changes in ice melting that is worldwide. That this is a center right here for that. This is the kind of thing that goes -- that happens at Los Alamos that we don't even know about.

Another example. Los Alamos scientists have developed codes that are capable of following a million autos in large cities, city centers such as Dallas, Texas.

They also have the capability and they are just not doing enough in this, but they have the capability of understanding the complexity of our national electric grid, which is in very sad shape. It is so interrelated that it defies the mind. If something happens in Oswego and that goes down, and it goes down in Biloxi, and this is a national security risk probably far greater than someone dropping or doing a bomb or doing something like that. Terrorists could knock out the grid and we're out of production or we're out of everything for weeks, the whole country. Los Alamos has the capability and they are working on that, on understanding how you get the grid to work, what improvements, and these are very complex technical things. They can do it. They have got people there, scientists who are working on that right now.

NNSA notes the speaker's remarks.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 618 (cont'd): Harvey Frauenglass*

Another example, we have heard about avian bird flu, and we have heard about HIV and similar threats of global pandemics which are capable of killing millions of people everywhere. Because it takes time to develop vaccines, and distribute them, it's essential to limit the spread of these diseases. Los Alamos currently has the capability to simulate the global spread of such pandemics and how we can then deal with them.

I am not a scientist. I was working in communications, in publications, but believe me, I know these things are happening there and people know that.

Another thing, we're talking -- we talk about burning of our overgrown forests in the West and all over the place. This has consequences for communities from Los Angeles to Los Alamos and everywhere. Los Alamos is the only place that possesses the computer simulation codes that are adequate for understanding how forest fires work, and doing something about suppressing them.

There are other things. These are not the primary mission of Los Alamos. I know that. We all know that. But they are there, and the scientists are working on these things.

My stepson's father worked in the biomedical field at Los Alamos and developed a cell sorter where you can sort cells by volume, which is now used in medical research around the world. There are lots of other things.

I don't want to bore you with this, but the point I'm trying to make is, if we turn Los Alamos into, instead of a science center, into a bomb factory, the top people will go there to do this research, they are not going to want to go there. That's not what they want to do. The people are doing the research are proud of their research. They are proud of the science that they are working on. They don't want to work in a bomb factory where there are military people going around escorting the plutonium. That's not what they want to do.

I think one of the things that we have to consider as an effect of expanding plutonium production there is the effect it's going to have on the quality of people who are going to want to work there, and we are going to want to have -- we need Los Alamos. We need it. We need that science. We have got it. Let's encourage that side of the thing and let's just forget about making it into a bomb factory.

Now, if I really wanted to be mean, I could say -- I could tell you some other sites where we could make the bombs in other states, but why should we push that on them? Maybe we just forget about them. We don't need them, anyway. Thank you.

*Comment side of this page intentionally left blank.*

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 619: John Witham

I'm John Witham. I'm with Nuclear Watch New Mexico. My comments tonight are about the comment period itself. On May 26th, Deputy Secretary D'Agostino signed off on the SWEIS, and it was over a month later that it was actually published in the federal register, and we had a 60-day period to comment on a 1,920-page document that has many thousands of pages of reference documents. We got a two-week extension. I think it's at least appropriate that we get an extension that's equal to the time it sat after being signed before being published. So let's get at least another 30 days or 15 days to have people from all over the country, like the intrepid students from California, to have a chance to comment on something that affects all of us. Thank you.

619-1

619-1

Responding to requests for additional time, NNSA extended the comment period from the original 60 days to 75 days. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 620: Betsy Martinez

Hi. I have a letter for Ms. Withers that mirrors much of what has been said about the specific issues on the Environmental Impact Statement and why we don't want more bomb production and more pollution from Los Alamos. I am a member of Pax Christi, New Mexico, a Catholic Peace and Justice organization. We were in sack cloth and ashes in Los Alamos on the 6th asking for repentance for dropping the bomb, and I'm here to speak against making more bombs and parts of them.

I am also a healthcare provider in Northern New Mexico for 27 years. We have many of the same comments that have been made in this letter that I will give to Ms. Withers, but I would just like to read the last paragraph, which has also been said, but it needs to be said again and again and again?

"We strongly believe that Congress must change the mission of LANL. LANL could lead the world in research and development of renewable energy such as solar, wind and biomass, and cleanup technologies that support the environment and public health. The SWEIS must include a fourth alternative that focuses on these activities. The security of the United States will be strengthened by clean energy independence rather than by accelerating the arms race. The economy of New Mexico and the nation would be improved by focusing on these life affirming priorities." Thank you.

620-1

620-1

NNSA notes the commentor's opposition to pit production. Environmental impacts from current operations and the alternatives for continued LANL operations are described in Chapters 4 and 5 of the SWEIS and summarized in Table S-5 of the Summary.

620-2

620-2

NNSA notes the commentor's belief that the Congress change LANL's mission. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 621: Bonnie Bonneau

So, this one section here in Volume 2, Book 1, about H40, H64, and on for about 20 pages, is about the transuranic waste and the WIPP, and they have a whole list of facilities which they say they are going to need to deal with to send transuranic waste to WIPP and they want a bunch of buildings constructed, and I am curious if those buildings already exist. You know, have they done most of this work already and they are just asking for approval after the work is all done, because I have heard them saying they want to start shipping in December. There is no way in the world they can get all this stuff by December also. The decision powers, I want to know if somebody here can tell me, if these buildings that are mentioned in this section about how to handle waste from WIPP already exist, even though I don't think the decision has even been made on that, let alone on this? And do they exist? Does anybody know?

621-1

MODERATOR ROBIN BRANDIN: I'm sorry, but we are not in a position to answer questions here. If you would like to ask Ms. Withers afterwards she can answer the question, or you will see the answer in the Final Environmental Impact Statement.

MS. BONNIE BONNEAU: I mean, it seems pretty disingenuous to pretend you need to study the environmental impact of something that you have already spent the money and to plunge ahead and get into it, and they are actually planning on shipping this stuff already this year, I believe, or the first of next year, and -- how can you do -- you know, you are so far -- if you haven't just made this decision yet, and do these buildings exist, you -- I bet they do.

621-1  
cont'd

I think that a lot of times that everything that we get in here isn't the real truth of all information and there's a lot of fudging and a lot of distortion of all the statistics, and there always have been regarding the environmental impacts of the Laboratory on our environment. And here, Section 4.0 is called Affected Environment, and I think it should be called the Afflicted Environment, and they sort of describe the very close region around Los Alamos yet, you know, it contaminated about four states, and there's research and studies that prove that it's contaminated huge areas. And, you know, most of us live fairly close to you and you are afflicting the whole area with this pollution, like the 25,000-year plague or something, you know, and it doesn't go away and you can't see it and it just keeps on accumulating and accumulating and getting into the -- more and more into the water and the air and the soil and, you know, the cumulative impacts can never really be known but, you know, it may almost be too late to actually change the inevitable, you know, genetic mutations and things that have been set in progress already, because every day you just contaminate our environment more and more.

621-2

And there's no way these books could really begin to cover all the pain and suffering you cause and plan to continue to cause here, and then you go up and they charge into one country and another and, you know, be a plague here or

621-1

The environmental impacts of LANL facilities that currently support transuranic waste operations were evaluated in the *1999 SWEIS*. Existing facilities supporting the processing, certification, and shipment of transuranic waste currently in storage domes in Area G, and newly generated transuranic waste, are described in Appendix H, Section H.3.1, of the *SWEIS*. The *SWEIS* evaluates the environmental impacts of proposed new facilities that would be required to manage transuranic waste. As described in Appendix H, Section H.3.2, new modular units are proposed to accelerate the processing of contact-handled transuranic waste from the fabric domes. The new modular units would help NNSA meet the schedule requirements of the Consent Order entered into in March 2005, that requires closure of MDA G by the end of 2015. Closure of MDA G may require removal of high-activity transuranic waste from 33 shafts. Because no equipment or facilities currently exist at LANL to remove this waste from these shafts, NNSA proposes to construct and operate a remote-handled transuranic waste retrieval facility as described in Appendix H, Section H.3.2.2.1. The transuranic waste retrieved by this new facility would be processed and prepared for shipment to WIPP using existing facilities. Also, because all waste management operations in a 63-acre portion of Area G will cease by 2016, in accordance with closure schedules, a new facility will be needed to process transuranic waste. As described in Section H.3.2.2.2, this new TRU Waste Facility would process newly generated transuranic waste and would consolidate all transuranic waste processing needs in one location. Other options, as described in Section H.3.2.3, evaluate the impacts of possibly storing and processing currently stored transuranic waste at the TRU Waste Facility if this waste cannot be processed and shipped to WIPP on a schedule allowing closure of MDA G in compliance with the Consent Order.

621-2

NNSA and the LANL contractor monitor emissions from ongoing operations and from media (water and soils) that would show an effect from past operations (legacy waste). The monitoring results are reported in the annual environmental surveillance reports and are summarized in Chapter 4 of the *SWEIS*. Emissions from ongoing operations are well within regulatory limits and permit requirements and are expected to remain in compliance under any of the proposed alternatives. There is no evidence of extensive contamination of four states or huge areas as

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 621 (cont'd): Bonnie Bonneau

there for a few years, and then move on to another country, but it's been here in New Mexico for 60 years, the same, you know, plague. It's just a continuing.

And I would like to mention another subject you never considered is the mental health, you know, of our communities, and the mental health of the people, and how much crazier the world seems to be getting because the people in power are crazy, crazy, you know, with their power, and they are just obsessed with some kind of mad sense of wanting to destroy things. I don't know really what's wrong with them, except that's sort of what power makes you want to destroy things.

621-3

But there's a dangerous bunch of stuff going on, and we, the people, have so little to be able to -- what can we do about that? What can we say? We can stand here and talk and they can say, well, this isn't really a referendum on national policies, you know. This is just we are supposed to look at these documents and tell you what's messed up about it, a few words on pieces of paper, and there is no forum for the national policy. There is no place. They say, well, you can vote. Well, you can vote, you know, for people who are all involved in the same -- the same web of lies and power and violence.

And I think that mental health issues and physical health issues go well beyond the small areas mentioned in that section. And that it's why there is so much violence in our communities and in our families, and it's because we are a government that says violence is good and power is good and, you know, kill anybody you don't like. I mean -- and it's going to come back and bite us and, you know, you can't really expect it not to, just like that's the -- look at New York City and all the other little tiny terrorists. But we're terrorizing the whole world. Go over there and bomb this and go over there and bomb somebody else, somebody bombed us back. Surprise, like, hello?

621-3 cont'd

Anyway, it's -- you know, it's bad karma or whatever. I don't know what you have to not believe in to not -- to think that there is anything good about it at all. And the main purpose of all these things is to make money, and the more money they can spend and the more money they can make and the more money they can get, the more it's all about economics and, like, money is some great goal where there's no reason. It's the things like solar energy or wind energy, they don't get the attention because nobody is going to make enough money on them. And they can make a lot more money making bombs and have a lot more power, too, apparently, or whatever.

But I think of the gross national product and the mental health issues and just the whole focus and the way society is aligned behind the superficial unhealthy goals is -- is a really important issue that isn't exactly addressed in this document. And --

Okay. Well -- so, we went up to Los Alamos about 10, 15 years ago and did some on-the-ground environmental studying with little radiometers. We had three different radiometers and we went around and we tested. First we did a background in Redondo Canyon, and then -- in the woods there, and then we

621-4

stated by the commentor. Refer to Section 2.6, Offsite Contamination, of this CRD for more information.

621-3 NNSA notes the commentor's concerns regarding general mental and physical health issues and their influence on subsequent community behaviors. The Council on Environmental Quality NEPA regulations require that EISs evaluate environmental impacts of major Federal actions. In 1983, the U.S. Supreme Court ruled (Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766) that "psychological effects" are not included among the environmental impacts required to be analyzed in EISs.

621-4 NNSA is following the Consent Order with the New Mexico Environment Department that stipulates that groundwater will be protected and that groundwater cleanup levels will be protective of human health. In addition, the NNSA operates a monitoring program (described in Chapter 4, Section 4.3.1.5, of the SWEIS) to detect contamination that has resulted from past practices. NNSA evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters at LANL, in accordance with applicable regulations and agreements. NNSA intends to continue to safely manage waste and conduct environmental restoration activities at LANL as it carries out its missions. Refer to Section 2.5, Water Resources, of this CRD for responses to comments regarding groundwater and surface water contamination and groundwater monitoring. Over 1,200 species of arthropods (a group that include insects) have been identified at LANL as discussed in Chapter 4, Section 4.5.1.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 621 (cont'd): Bonnie Bonneau*

went and we studied, tested the outflows, the little gullies, all kinds of little dry washes where you can see, like, during rainy times. And every time we put the radiometers -- we had three different varieties, and every time it just went over the top when you tested it from the soil, on the regular forest to the soil in the drainages. And those drainages are going straight all over our state, and they are also getting into Los Alamos aquifers. And it's just right off the top, and they told us very proudly that there were no bugs in Los Alamos. And there aren't any bugs in Los Alamos because they have short life cycles and the radiation has killed them all already. Like, hello? How can brilliant people, like, be proud of the concept of their working with something that's already killed all the little insects that God put down on God's green earth.

And I hope that they just wake up and say, hey, we don't want to do this anymore and we're going to work for a healthy world, and God wants us all. Amen.

*621-4  
cont'd*

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Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 622: Julie Sutherland

I am here today to commemorate Nagasaki Day, and I feel this is a travesty that this is happening. And I would like to speak for those that aren't here, and that, in fact, so many people that died because of nuclear bombs and I -- I am just very distressed that the children -- do any of you have children that -- that -- that you care about and have some feeling as to whether they are going to have a world to live in and that is healthy and safe and beautiful? Please, there has been -- there's so much that the youth can do positively if we just give them the -- the ability to -- to -- to do the work that they were born to do. And I pray that -- that as Bonnie was saying, that the mental illness and the drug abuse that is so prevalent in our society can -- to cover up the feelings of despair that a lot of you have, and I just pray that you can see the light and -- and to give the youth and the rest of the creatures of the earth a chance to -- to -- to be happy and not desiring to end it all.

I was at a memorial this morning for a youth that committed suicide because he was just hopeless. There's just so -- we need to drop all the hopelessness. But how do you do it when you are going to increase plutonium pit production and take us all down the road of destruction.

And I would just like to end by, like Shannyn said, with a circle, and I hope that we can, you know, stand strong and say no to this. We said no to Rocky Flats. Why are we proceeding to totally contaminate the sacred lands of the pueblo people forever more? And just visualize good things happening and life-affirming -- there's so many great things that Los Alamos could do, like, for -- come up with cures to all the radiation sicknesses or, you know, do alternative energy instead of nuclear.

Thank you.

622-1

**622-1** NNSA notes the commentor's concerns regarding pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

622-2

**622-2** NNSA notes the commentor's concern regarding contamination. LANL operations are in compliance with the regulations that protect public health and the environment. The potential environmental, health, and safety impacts of continued operation of LANL under the three proposed alternatives are analyzed in Chapter 5 of the SWEIS, including management of radioactive and chemical wastes, monitoring air emissions, and treatment or monitoring of wastewater discharged through NPDES-permitted outfalls. These analyses demonstrate that LANL can continue to operate safely and remain in compliance with applicable regulations under any of the three alternatives. Refer to Section 2.6, Offsite Contamination, of this CRD for additional information on the potential impacts to the air, water, and other environmental media.

622-3

**622-3** NNSA notes the commentor's desire for activities at LANL to be focused on areas other than those related to nuclear weapons production. In addition to activities supporting NNSA's Stockpile Stewardship mission, research on alternative energy and many other areas is conducted at LANL. This research is part of current operations and is identified in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 623: Melissa Larson

I'm here. I want to thank everyone that spoke before, because there's a lot of things that were said, and I don't want to be redundant. Besides, I don't have all the education to say what everybody said. But one thing that I do is at work, with the recycling, and I feel like that's one of the things that Los Alamos Laboratory could be doing, and in particular, about their waste. There are so many industries and stuff that just are -- especially in America, that are just throwing their waste down the drain, and it's all being -- polluting the earth. And I don't think we can go about business like that anymore.

623-1

623-1

NNSA agrees with the commentor regarding the importance of recycling materials to reduce the amount of waste to be disposed of. NNSA has instituted a pollution prevention and waste minimization program at LANL, as described in Chapter 4, Section 4.9, of the SWEIS. Source reduction, including materials substitution and process improvements, is the preferred method of reducing waste. Recycling and reuse practices, and volume reduction and other treatment options are also used to minimize the amount of waste generated.

And if Los Alamos is going to produce things that are toxic to the environment, then they better learn how to balance them all so they don't ruin the rest of the earth for everybody else. But in the meantime, they shouldn't be doing this work because it's destroying the earth for all the people. And we need the earth to survive.

623-2

623-2

NNSA notes the commentor's opposition to LANL operations due to its impact on the environment. Environmental impacts are evaluated in Chapter 5 and are summarized in Summary Table S-5. These potential impacts will be factored into any decisions made by NNSA when issuing any related Records of Decision.

And if we want to be great New Mexicans and be loving of the earth and have a home for the future, we need to take care of it, and one of the ways to take care of it is to look at the waste that we are creating and let's stop doing that and really trying to figure out what we're going to do about all the waste that we have already created so that the earth can survive still beyond the things that they are going to destroy with if we let them, you know.

So, I think that we have to stop, stop the war machine, and we have to start making peace in the world and stop allowing war to go on, because it's a crime against humanity, and every war is, and especially the aggressive wars of the United States and Israel, that huge Israeli lobby that allows the media to say that the war is okay, that the killing of people, innocent lives is okay, that disability, deaths are okay. This is just war and war is okay. But war is pollution, the worst pollution of the earth. If anybody cares about the earth, then the pollution that's created from war is the worst on the earth.

And if anybody cares about ecology, then the pollution of war is the worst on the earth, and we have to stop that, and we have to stop making the weapons of war and the war machine, and stop it now.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 624: Evelyn Witt**

I am going to be brief, because there are many words that have been said tonight. I think the words we need to think about are where is this beginning, who is responsible for this. Where did it come from? We have got elected officials that have gone along with it in Washington. We have a corporation called Bechtel who is running this show, and Bechtel got a contract for seven years to run Los Alamos, over 500 million dollars, and they in their statement have said, we are in the business of making money. Now, what do you think that means, people?

I'm really sorry that a lot of people left because I wanted to put fire in their belly, the kind of fire I got in my belly. I'm fed up. And Greg Mello said it at the beginning. You have got to go to the House, go to the Congress, you have got to do it now, every one of you. I don't believe the DOE, and neither should you. I mean, it's obvious that this is formulated to fail as far as comment goes. The comment period isn't long enough, or inundated with all kinds of extraneous information, and we are supposed to make a judgment? I don't think so.

I made my judgment. I know what's going on. Number one, we have got a government that is placing fear in people, scaring them half to death since 9/11. Oh, well, gee, we've got to get weapons. We've got to do this now. And so, we have a nation of sheep. What leads sheep? What drives sheep? Fear.

So between the fear, and a corporation that has money, and they don't have a very shining record, if you take a look at their record, of what they have done in Iraq. They haven't cleaned up Iraq. They got a big contract from the United States government to clean up Iraq. Did they clean up Iraq? No, they haven't cleaned it up. Do you think they are going to clean up the mess up there at Los Alamos, the waste that we're going to get when all that crap begins? Do you think that Bechtel cares about what happens to you and your family? They don't care. What they care about is money. They said it. They don't make any bones about it. They said it.

And I want you people to get angry. I want you to get real angry, because being nice just hasn't worked. We went along with them for a long time, and it's time to get angry and it's time to do something, and the time is now.

These young people that spoke from California, I got something to tell you. I have lived quite a while. I have seen this nation go from a moral nation to really dealing in some immoral, egregious things, and it's time to put a stop to it. And everybody that goes out from here, I want you to tell everybody, to write their Congress, to make a noise, a big noise. I don't know how much good it's going to do, but we better start now before it's too late, because the machine is moving and it's not going to stop, and you get in the way and it will run over you. You have got to start doing something now. Thank you.

624-1

624-1 NNSA notes the commentor's concern that there was insufficient time to comment on the Draft LANL SWEIS. Responding to requests for additional review time, NNSA extended the comment period from the original 60 days to 75 days. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

624-2

624-2 NNSA notes the commentor's concerns about the wastes from proposed LANL activities and about environmental cleanup. NNSA intends to continue the environmental restoration program at LANL and safely dispose of waste while LANL continues activities to support NNSA's national security mission. Chapter 2, Section 2.2.6, of the SWEIS summarizes the progress made in the LANL environmental restoration program since 1999. While LANL staff identified over 2,000 sites in the early 1990s potentially requiring environmental restoration, due to remediation and consolidation, only about 800 remain to be addressed. Decisions about environmental restoration will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order that was entered into in March 2005. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. Waste Management activities at LANL are addressed in several places within the SWEIS, including Chapter 2, Sections 2.4.12 and 2.4.14, Chapter 4, Section 4.9, and Chapter 5, Section 5.9, and portions of the SWEIS's appendices. Refer to Sections 2.7, Waste Management, and 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for additional information.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 625: Charles Kading*

Hello. I live up in Taos County, and I just want to say that this evening has been quite a blessing. It's a rare time in the United States that a person can sit in an auditorium, even a dimly lighted gym, and listen to heartfelt testimonies. And heartfelt is what I have sensed here tonight, and I just feel like it's just -- it's just been a wonderful experience.

Now I have been an environmental consultant in various forms of environmental activism for over 30 years. I guess in most of it I have not been paid for, at which -- because it's a real passion of my heart. I believe a couple of people have mentioned here that just, you know, our created order, how beautiful our created order is, and I feel very close to -- very close to our earth that God created, at least I believe that God created.

And I have traveled quite a bit around the world, and I have been in the Middle East, Northern Africa, Central America and Alaska, and various parts of just about all of the states. Well, the other day I had the opportunity and the blessing to be at Hiroshima Day here in Los Alamos, had a wonderful conversation with a man from the Netherlands, and he approached me and he said, where are the folks? He thought there would be absolutely thousands and thousands of people commemorating the anniversary, the 61st anniversary of the bombing of Hiroshima. And I said, you know, how long have you lived in the States? He said, I just came over here for a visit. I had a goal in my life to bicycle across the United States. Well, as I approached Los Alamos, having known quite a bit of the history of Los Alamos, being from the Netherlands, of course, we get a little bit better education about the history of the United States than those that live in the United States oftentimes, and he said -- so we had a great chat just about a number of things, but it just brings to mind as I was sitting in the group here with many of whom are friends of mine, and I have worked with on various -- various passionate activism, what I would like to call gentle activism, because that's the only kind of activism that ultimately resonates for us. We can be angry in our hearts, but angry sometimes has a reverberation effect of alienating too many people, and I don't think that alienating is really, at least the way I would like to see us go. I see a lot more getting done one-on-one, getting to know folks, much the same as Kathy Kelly suggested to us at Hiroshima Day.

But I noticed in sitting here in this auditorium, with the lights around the periphery and none over us, it almost seemed like something of a little bit of a tomb. Well, that had some symbolism in terms of what we are talking about here today.

But I wanted to -- I took note of the fact that about 8 -- when this -- when all of the people were standing -- were sitting here, about 8 percent were represented by the state of California in the form of our good friends from California, the students. And I thought, how could that be? 8 percent of a New Mexico public hearing gathering from another state. We're glad to have, we would like to have this filled up with representatives from every single state, but the fact of the matter is, is that the word about these meetings, which I believe should have been -- should

NNSA notes the speaker's remarks.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 625 (cont'd): Charles Kading*

have been put forth as a public service because the Department of Energy, the EPA, all government officials, when they sign on and start receiving their checks from taxpayers, are public servants, and I think they all believe that they are doing good service. The problem is that I think we have forgotten that our taxpayers are our servants, and they have a responsibility to us as our servants to do the very best for the citizenry of this country. Now, I think that's something just to think about and to take to task, all of our friends relatives, representatives -- more in the eyeshot of everybody in the media -- these are our public servants. I would venture to guess that apart from the public servants that are actually getting a salary, and for Northern New Mexico probably a fairly decent salary, just -- not that that's a bad thing in itself, I'm not saying that -- but all that our government officials, whether they are state, county, federal officials, these are our servants, and we owe it to them, as much as we are able, to share our thoughts and our visions for what -- how we can see this country as being a wonderful place to live. And I suspect to say that most of us would agree that there are some not so wonderful things in -- going on here. But I -- I just wanted to say, like I said in the beginning, I so enjoy being around people that are heart felt and passionate.

The problem I found here tonight, and as I have for the last 30 plus years, from the Vietnam period on, was that I believe that our public education system has been cloning an oil-addictive consciousness in our minds, and it's inculcated, it's so permeated the very fabric of the culture that passion for life itself is just diminished to such a level, that so often we are blinded by the very stuff of life itself. And it's passed us by.

But, boy, I hear it tonight, and I just feel very thankful to be here with you all tonight, and let's, like, like everyone has said, the only way we can -- we can kind of -- we have to pray and use every part of our potential to -- to create. And I think this is as much education -- and that is education in the larger sense, not the confines of what we call public education -- of enhancing our potential for critical thinking. I think we were created to be -- have a wonderful potential for critically thinking about the life around us.

And once again, just -- I'm going too long here. I have so much to say but, thank you all very much. It's just a blessing to be here with you all.

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Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 616 (cont'd): Shannyn Sollitt (comments continued from page 3-974)

My name is Shannyn Sollitt, and I would like to bring up the environmental impact of -- the psychological impact that it has. Many people have mentioned that Los Alamos has the highest teen suicide rate, and I would just like to mention that Columbine High School was less than the distance between here and Los Alamos, and I really feel that the reason why Columbine happened is because they were in the midst of a society that found that making weapons of mass destruction was acceptable, so blowing up a high school somehow, to those young minds, wasn't such an egregious thing to do, and I would like to see an environmental impact that relates to the psychology of, especially young people, related to nuclear weapons production facilities or any production facilities that are creating weapons of mass destruction. Thank you.

616-4

616-4  
cont'd

616-4

Council on Environmental Quality regulations and DOE procedures require that EISs evaluate the environmental impacts of major Federal actions. In 1983, the U.S. Supreme Court ruled (Metropolitan Edison Co. v. People Against Nuclear Energy, 460 U.S. 766) that "psychological effects" are not included among the environmental impacts required to be analyzed in EISs.

Also see NNSA responses to other comments which are provided on page 3-973.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 600 (cont'd): Greg Mello (comments continued from page 3-939)**

For the NNSA, and Lab people here, I -- you may not know what a small federal presence there is in the nuclear weapons program. It seems like an odd thing to say, but there actually is less than 4 percent of federal -- the Federal Government accounts for less than 4 percent of the spending in the nuclear weapons program. The rest are contractors, and the spending is concentrated in just a very few contractors, as Evelyn and other people have said. If you look at the wall here, the percentage of federal effort in the nuclear weapons program is significantly less than the percentage of mortar joints in that wall. The rest is Bechtel, BWXT, WGI. Over half of the Department of Energy's total budget is spent by just nine companies, and this is a dramatically increasing phenomenon.

So I want to suggest that we have to be careful if, as federal employees -- and I was a federal employee once -- that we are not just facilitating money-making by a very small group of companies. We're sort of doing a federal Environmental Impact Statement, but it's not very federal.

Now, I want to say something tactical to our colleagues who are here. We need to work with Congress to defeat these plans, exactly as Evelyn and others have said. Evelyn anticipated several of the points I wanted to make. That's great.

Please, do not go away from this room and think that making comments to the Department of Energy is going to accomplish anything. We have to remain energized and get more energized. It's not going to be enough to be nice. I want to be really clear that the public relations practices of the Federal Government and its contractors have advanced tremendously since the early 1990s, when I started this work. Their job is to make sure your effort goes nowhere. So, there is a misuse of civility in this process. And this is a message to Jan, who is a very nice person, but I want to tell you that we, ourselves, in New Mexico, must galvanize ourselves for a resistance action that puts the pressure on until we succeed.

Now, we defeated this plan twice before. We defeated it in 1990, when this country still cared about the budget deficit. Los Alamos Laboratory proposed a special nuclear materials research and development laboratory that was a complete boondoggle. Congress cut it because of citizens, like you here, getting out there and making your voice known at a pivotal moment and in a way that Senator Bingaman and members of Congress couldn't forget. Congressman Sprat from South Carolina years later said, I saw my name in New Mexico papers vilified because I promoted pit production in New Mexico. That's what we have to do again. We can't let this go by.

We defeated this again in 1997 because there was an active earthquake fault under the CMR building. It had to be taken out of the pit production plan. That's twice here.

Trish, my wife, and the farmers at Pantex defeated it at Pantex. It was defeated multiple times in multiple places. The Department of Energy is running scared. They have not been able to make pits for 17 years. We can't let them restart

600-8

600-8

The production level of up to 80 pits per year is consistent with the ROD for the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (DOE 1996) and is independent of past proposals. See the response to Comment no. 600-4 above.

600-8  
cont'd

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 600 (cont'd): Greg Mello** (comments continued from page 3-939)

this process and transmit the ideology of nuclear weapons to a new generation of young people who are malleable, and whose careers are in the hands of the managers of Bechtel. There are two billionaires running Bechtel, and if that doesn't tell you where this thing is running nothing else does.

So I beg you to leave this place inspired, work with each other, don't let your passion die away in loneliness and isolation. Reach out to your friends. Form a group. Have a house meeting and share information. Ask one of the people from the organizations that are working on this to come and talk to your group, talk to your church, talk to your real estate organization, because they are going to be affected, talk to your city council, talk to your state representative. We have got to start putting the pressure on and we can't let our shyness about the Democratic party or the Republican party get in our way.

We have to make people understand that it's not going to be okay to sell Northern New Mexico down the river and let the state become a colony for pits in the North, uranium enrichment and waste disposal in the south. It doesn't have to be that way. We can make a sustainable economy in this state by a genuine response to the real problems, the real security problems of peak oil and global warming, and the other genuine national security problems.

And this greed-oriented run on the treasury has to be stopped. And I know that a lot of nice people are involved in it, but that's all it is. And we can stop it again. We have done it twice and it's been done in other places, so let's get on it and let's have a good time doing it.

600-9

600-9

NNSA notes the commentor's concerns regarding facilities located in New Mexico related to the nuclear fuel cycle and national defense; however, the SWEIS only addresses environmental issues related to the alternatives for continued operation of LANL as described in Chapter 3 of the SWEIS.



Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 610 (cont'd): Kalea Matsakis (comments continued from page 3-959)

I am Kalea Matsakis, and I just want to let everyone know who is here that Concerned Citizens for Nuclear Safety and the Embudo Valley Environmental Monitoring Group have a letter in the back which is requesting an extension of time until the Area G Risk Assessment, the Seismic Hazard Report and the Health Assessment have been properly done and allowed for a public comment and review. And I would really appreciate it if you could all come back on your way out and pick up a copy and sign it, so that we can try to get some real science behind it. Thank you.

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Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

**Commentor No. 611 (cont'd): Sheri Kotowski (comments continued from page 3-961)**

I'm part of a group that's called the LANL Water Watch. We are a network of many citizen groups in the area around Los Alamos, and we put together a shared value statement among other things. And this is -- I'm inviting everybody to participate in this. There is a copy of it that you can sign in the back, and I'm just going to read to you what it says. "All people in our communities are intricately tied to the health of rivers, acequias and other water. Historical and ongoing activities at Los Alamos National Laboratory threaten our cultural, spiritual and ecological survival. To ensure that the good health of watersheds downstream and downwind from LANL and the good health of the Rio Grande to provide safe drinking water, clean water for irrigation, and pure water for sacred ceremony now and in the future, we acknowledge and assert the following: All people that live downstream and downwind from LANL require and have a right to clean water for drinking, sacred ceremony, growing food, raising animals, recreating and overall well-being.

"Number 2, traditional indigenous cultures that live downstream and downwind from LANL require and have a right to pure water for sacred ceremony.

"Number 3, wildlife and ecosystems living downstream and downwind from LANL need and depend upon clean water for their survival.

"Number 4, healthy communities require clean rivers, groundwater and watersheds to achieve a strong economy and sustainable future.

"Our local, federal, and state government agencies have a duty to protect the health and welfare by setting and enforcing laws and regulations that protect water resources downwind and downstream from LANL.

"Healthy communities and ecosystems require clean, innovative and life-affirming science and technology that will benefit the economy, the future and health of all.

"Number 7, we recognize and respect that flowing water does not seek or uphold political, social, cultural or economical boundaries.

"Based on these values, we assert that historic toxic waste must be cleaned up now to protect drinking water, and life-threatening pollutants that are the byproducts of ongoing LANL activities must be kept from contaminating our watersheds and tainting the Rio Grande.

"Adequate funding must be provided to clean up contamination at LANL to achieve these shared values."

A copy of this is at the back if you would like to sign it and support the LANL Water Watch. This is a way your whole community can get involved in stopping pit production, the expanding activities at Los Alamos National Laboratory, and form a solidarity that's absolutely necessary for us to keep modern pit production from happening in our state or anywhere. Thank you.

**611-2  
cont'd**

**611-4**

**611-4** NNSA intends to conduct operations at LANL in accordance with its assigned missions while continuing the LANL environmental restoration program summarized in Chapter 2, Section 2.2.6, of the SWEIS. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Appendix I of the SWEIS presents options and environmental analyses for conducting future remediation activities at LANL primarily related to the Consent Order that was entered into in March 2005. Decisions about environmental restoration for any contaminated site will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for the Consent Order. To arrive at a decision about remediating a contaminated site, several alternative remedies may be considered including containment in place, treatment, or removal. Any remedy selected for a site requiring environmental restoration must meet several criteria including protection of human health and the environment and attainment of applicable cleanup standards including those for ground and surface waters. Cleanup criteria for sites subject to the Consent Order are given in Section VIII of the Consent Order. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS.

Comments from the Española, New Mexico, Public Hearing (August 9, 2006)

Commentor No. 614 (cont'd): Jeanne Green (comments continued from page 3-969)

I just wanted to state for the record that I did not see a single announcement about these public hearings other than from activist, peace activist groups. I did not see a single announcement, and that is gross negligence.

614-9

Also, we're speaking to a brick wall. And why aren't the people who wrote SWEIS here to answer our questions? We're speaking to a brick wall.

614-9

NNSA notes the commentor's statement regarding announcements of the public hearings for the Draft LANL SWEIS. NNSA announced the availability of the Draft LANL SWEIS and public hearings in the *Federal Register* and in newspaper announcements in Albuquerque and northern New Mexico.

*Comments from the Española, New Mexico, Public Hearing (August 9, 2006)*

*Commentor No. 626: Arlene Maestas*

Arlene Maestas. I am really happy to see this card out. And before you leave tonight, pick up four, mail them to your representatives in Congress, imagine getting 18,000 cards like this. It's Bingaman, Udall, Dominici and who else? Heather? Haliburton Heather? If you can get these cards to them, I think you would make an impact on them. So, I don't know who -- I don't know who has the cards --

Okay. She has got them. I think this would be the beginning of the impact. Thank you.

NNSA notes the speaker's remarks.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 700: Geri Jaramillo

Basically I'm just really against the idea of creating more destruction, adding more bombs and more death, anything more that adds to more death in the world. We have so much technology out there today, we have so many brilliant people in the world that are so capable of creating worthwhile things for this planet so that we can all live in harmony, so that we can all live on a planet that we will enjoy.

And the way we can enjoy is by getting those brilliant minds to create worthwhile, clean, green planet-friendly inventions and give us better ideas to live harmoniously. And everybody in the world deserves to live with clean water, good shelter, a job, be able to live in harmony without having to fear for their lives because of a war or because of hunger.

And we have the capability of creating such a world today. And why bring more chaos, that is unfathomable.

700-1

700-1

NNSA notes the commentor's opposition to nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 701: Tim Origer

So what I wanted to address, I want to have them address or LANL address, I read in documentation that every year they're planning to release up to 6,900 pounds of depleted uranium into the open air, which will go down over San Idelfonso Pueblo and be carried on the wind.

And the government hasn't done adequate research as yet on the long-range impact of depleted uranium on human beings. We have several troops that are coming back from Iraq and Afghanistan that have been exposed to depleted uranium that are having cancers occur and genetic mutations that are believed to be connected to exposure to depleted uranium.

They have a 700 or 7,000 percent increase in leukemia in Iraq due to exposure to depleted uranium. There's been research done throughout Europe, Germany, and England in specific that shows a connection between these cancers and exposure to depleted uranium.

How can they release -- if this is a toxic material, how can they release that in a public area, onto the public, onto civilian populations downwind from the lab. That's my question. And that's one of the things that I want addressed.

I think that's something that, before they can produce more or release more, that's something they should definitely have researched more. So there should be extensive studies on the impact of depleted uranium on human beings.

701-1

701-1

Chapter 5, Section 5.4.2, of the SWEIS provides information on radiological air emissions from LANL for all three alternatives. These emissions include all uranium radioisotopes that are present in depleted uranium. Chapter 5, Section 5.6.1 provides public radiological impact information for all emissions including uranium isotopes under all three alternatives. For all alternatives, the average population dose within 50 miles (80 kilometers) of LANL is less than 0.1 percent of background. LANL programs and procedures are designed to minimize any releases of depleted uranium to the environment during tests. Chapter 4, Section 4.6.1, provides detailed information on cancer mortality and incidence rates in New Mexico and all counties surrounding LANL. These data, along with the final LANL Public Health Assessment, issued on August 31, 2006, by the U.S. Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, shows that, "...there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "...overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006). Chapter 4, Table 4-26, shows that some cancer rates in Los Alamos County are lower than the national average and some are higher, which is typical of any area. The SWEIS presents all environmental impacts of the expanded operations alternative. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for additional information regarding testing using depleted uranium.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 702: Matthew Ortiz

I want to thank the moderator for giving me the ability to make my comments at the front of the meeting and I beg the indulgence of the crowd for jumping ahead of you in essence. And I want to make my comments for the record.

Last night I introduced a resolution objecting to the proposed expansion of nuclear weapon activity. You know, folks, I need you to be quiet. And then the way that the mayor does it at city council is, after I'm finished, then you give a big round of applause for everyone and then it doesn't cut into my time. Okay.

So last night I introduced a resolution objecting to the proposed expanded nuclear weapons activity including plutonium pit production at the Los Alamos National Laboratory and directing the City Clerk to inform federal authorities of the objections.

702-1

This resolution is cosponsored by Councilor Carmichael Dominguez, Councilor Ron Trujillo, Councilor Rebecca Wurzbarger, Councilor Chris Calvert, Councilor Patti Bushee, Councilor Miguel Chavez, and Mayor David Coss.

Because again this is a draft resolution, it will be adopted by the governing body at our regular meeting on Monday, August 28th. I do want to read, however, the perfunctory findings paragraphs, I want to read the proposed actions that we want to take, and then I want to give a brief conclusion or summary on those proposed actions that we're going to take.

The findings that we make or that are proposed to be made is that the National Nuclear Security Administration, the semi-autonomous nuclear weapons agency within the Department of Energy, has announced its plans to expand a nuclear weapons activity at the Los Alamos National Laboratory and that these expanded activities are in addition to nuclear weapon activities previously expanded in 1999.

And these expanded activities include the planned quadrupling of plutonium pit production from 20 to 80 per year with the near doubling of related radioactive wastes and that the plutonium pits are used to trigger existing nuclear weapons and will be used in future new design nuclear weapons.

And the use of plutonium creates health and environmental hazards. And the governing body of the City of Santa Fe does not support the creation of further health and environmental hazards related to nuclear weapons for the citizens of Northern New Mexico.

The NNSA took 18 months from its formal notice of intent to final release of its plan through a draft site-wide environmental impact statement for continued operations at the Los Alamos National Laboratory, but it granted the public only 60 days to comment on approximately 1,700 technical pages and hundreds of referenced documents.

702-1  
cont'd

702-1

NNSA notes the commentor's objection to pit production and nuclear weapons activities and the commentor's concerns about health and environmental hazards. Please refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, and Section 2.6, Offsite Contamination, of this CRD for more information. Besides the public meetings, additional means of commenting on the Draft SWEIS were provided, including U.S. mail, e-mail, a toll-free telephone line, and a toll-free fax line. The comment period was extended from the original 60 days to 75 days based on requests from the public. NNSA believes that 75 days for public review of the Draft LANL SWEIS is sufficient and consistent with established practices.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 702 (cont'd): Matthew Ortiz

It is the declared policy of the United States government to help constrain the proliferation of weapons of mass destruction but should lead by concrete example.

The resolution paragraphs are the following: "That the governing body hereby states its objection to the expansion of nuclear weapons activities at the Los Alamos National Laboratory including increased plutonium pit production; and that the governing body objects to the insufficient 60, now 75-day public comment period and strongly advises the NNSA to grant a 30-day extension; and that the governing body would direct the City Clerk to send copies of the resolution to our Congressional delegation, our governor, the Department of Energy, and NNSA."

702-1  
cont'd

I would like to say, as it relates to the last one, that's an obvious. We need to send it to the officials who are in charge.

"As it relates to our objection to weapons activity, Santa Fe is downstream from the lab; we always have been, we always will. We are, therefore, as a city very active and very interested and very concerned about the missions, both currently as well as proposed, of the Los Alamos National Laboratory."

And, as it relates to the insufficient time period, we, myself and all the members of the governing body who have cosponsored this resolution, would like the information that is in this draft statement to be easily accessible and complete. Hundreds of documents referenced and three minutes of time is an insufficient time period for us to make our comments as we are directly affected by the Los Alamos National Laboratory.

702-1  
cont'd

I want the public, I want my constituents, I want my city staff to be able to review materials and -- review materials so that we can present substantive concerns and comments.

I believe, therefore, that the comment period -- an additional comment period is necessary. Again it is my hope that this resolution that is sponsored by all the members of the governing body with the exception of my colleague whose husband works at the lab who did not sponsor it, that it would be passed unanimously on Monday, August 28.

Again I thank the moderators for giving me the time to speak in advance of the public comment and I thank the public for your active and involved participation.

*Comment side of this page intentionally left blank.*



Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 703: Matt Miller

My name is Matt Miller. The Congressman felt it was important that he be represented here tonight. I thought I was going to have five minutes.

I would like to second what the gentleman back here said, three minutes is completely insufficient. If you guys want to be heard here, we need to do this in two nights with five minutes per speaker.

But our constituents have raised a number of concerns with us. I wanted to go over two of them here tonight. One is the reference materials in the SWEIS, as mentioned at the previous two meetings that I attended in Espanola and Los Alamos, there are literally hundreds of pages that are referenced in the SWEIS that are not in the SWEIS. And they're only available at the Los Alamos reading room, they are not available online.

That means if you're coming from Taos, even Santa Fe, and you really want to get into the SWEIS, you're going to have a hard time doing this because you have to go to Los Alamos and read hundreds of documents.

We requested they be made available online so everyone who really wants to get through the SWEIS can read the referenced documents in addition to the SWEIS itself.

The second thing I want to comment is the comment period. As you all know, the original comment period was 60 days. Congressman Udall on July 31st sent a letter to Ed Wilmot at the DOE, at the LASO office, requesting that the comment period be extended a full 30 days to October 5. Now, as all you know, since Tuesday the comment period was extended. But it was extended 15 days instead of 30 days.

This is a great big tome, I mean this is three tomes here totaling 1,500 pages. We do not feel it is an unreasonable request that the comment period be extended a full 30 days, to October 5, to get through this SWEIS.

As I say, given the size of the room, we feel this is unreasonable. There is no statute in place that limits the amount of time for the comment period that the DOE has. If they wanted to, they could extend the comment period 100 days, if they felt like it.

In addition to that, as mentioned earlier by Matt and by people at the previous meetings, it took a year and a half to get the SWEIS out. And now the DOE is expecting our constituents to somehow read through this year and a half thing in the making, this 1,500 pages at least, in 75 days. And we feel it's just not sufficient.

We don't think it's an unreasonable request that the comment period being extended a full 30 days, to October 5. So for the record we would like to ask the DOE, please extend the comment period a full 30 days to October 5.

703-1

703-1

NNSA recognizes that in light of electronic capabilities now available, commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in Los Alamos, Santa Fe, and Albuquerque. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional information.

703-2

NNSA believes that 75 days for public review of the Draft LANL SWEIS is sufficient and is consistent with established practice.

703-2

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 704: Michelle Hawkins Ortiz

It's Michelle Hawkins Ortiz and I'm Congressman Tom Udall's state director. Matt is the congressman's aid for Los Alamos National Lab.

I just wanted to touch on one additional concern which is with regard to the increased risk of health effects under the expanded operations alternative. Needless to say, our office is inundated with claimants for the Energy Employees Occupational Illness program, the EEOICPA program, which is dysfunctional at best.

And we would like to formally request a briefing, any kind of information that can be shared with us about the potential health effects to the worker as well as the community. And, in looking at volume -- at least one of the volumes, there's these cryptic references to some of the health effects. And we just -- we need some sort of communication that doesn't require a degree in health physics.

704-1

704-1  
cont'd

704-1

Chapter 3, Table 3-19, of the SWEIS presents a side-by-side comparison of all environmental impacts, by area, for each of the three alternatives. Under the area of human health, this table presents the annual risk of a latent cancer fatality to the offsite population, maximally exposed offsite individual, and workers for the No Action, Reduced Operations, and Expanded Operations Alternatives. Appendix F has been revised to include a discussion and data on all measured chemicals in the soil, sediment, surface water, and groundwater in and around LANL. This data is compared to appropriate Federal allowable limits. Appendix C presents the health consequences and risks from continued operations at LANL. The calculated radiation dose and health effects from radioactive and chemical substances presented in Appendix C are well below all applicable regulatory limits.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 705: Cathie Sullivan

My name is Cathie Sullivan. I want to read my comments since I don't think rapidly on my feet.

Since that new iconic date, 9/11, a date that the Bush Administration treats like December 7, 1941, an information iron curtain has descended between the American public and its government. Our rights to government information are under attack.

At the lab and the Department of Energy, documents formerly available are now hard to get. Nor does the public have access to laboratory scientists, the people actually doing the work, the people with knowledgeable answers, the people who are not trusted to speak to us.

705-1

705-1

During the comment period, NNSA made the SWEIS references available in three DOE Public Reading Rooms. NNSA is evaluating the possibility of making the references available on the Internet. In this time of heightened concern about issues of security, however, placing information, including data, in the public domain has to be considered carefully. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

Since Former Attorney General John Ashcroft advised federal agencies that his office would back up to the maximum extent of the law any agency that stalled or denied federal Freedom of Information Act requests, getting unclassified documents has become an endurance contest between the gatekeepers and the people.

705-1  
cont'd

705-2

NNSA notes the commentor's request to extend the comment period. NNSA believes that 75 days for public review of the Draft LANL SWEIS is sufficient and is consistent with established practice.

At LANL I understand that all accident and occurrence reports have disappeared behind the post-9/11 information iron curtain. Why? Will it strengthen al-Quada to know about a lab forklift accident or an injury to a graduate student from the carelessness of a senior LANL investigator.

The lab and the Department of Energy would be embarrassed by these disclosures. And their insecurity and vanity is harming our right to know. Secrecy is toxic to good government and democracy.

Unless preventive medicine in the form of openness and transparency is given soon in large doses, we all may be attending the funeral of our democracy, dead for lack of public participation and an informed public.

These SWEIS hearings offer a small crack in the informational iron curtain I've been describing. Let us open that crack and reach in for more information on critical issues such as expanding the pit production plutonium at LANL, lab cleanup, future LANL water demands, and details regarding safety planning for the new biosafety laboratories.

705-2

My second point concerns the short EIS comment period, by now even a familiar topic. A diligent but underpaid and often volunteer activist community is working hard to digest and constructively comment on this year long 2,000 word document, 2,000 page document as are some individual citizens. They deserve enough time to do a good job.

In fact, many in the activist community believe that their independent comments are used by the Department of Energy to call agency attention to neglected and

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 705 (cont'd): Cathie Sullivan

overlooked issues which, if left unaddressed in the SWEIS, could form the basis of future court lawsuits.

We will be glad to help keep you out of court. But we need time to do so. And no, there is no charge. We act out of patriotic self interest. The draft SWEIS is a monster of almost 2,000 pages with I understand multiple CDs worth of backup documents.

In light of my earlier criticisms, I gratefully acknowledge this trove of documentation. But there is no need to rush because of an arbitrary deadline set by DOE. In defense of granting a significantly longer comment period, note the following dates relevant to this draft EIS.

A notice of intent for a supplemental site-wide EIS was printed in the Federal Register in January of '05. This was later changed to a full site-wide EIS. And on May 26 the draft was signed by Deputy Director of the National Nuclear Security Administration Dr. D'Agostino.

But close to six weeks elapsed before this was presented to the public on July 7. DOE implementing regulation 1021, section 1.313, mandates the 45-day public comment period for average length documents. But this draft SWEIS is huge.

And I urge extending the comment period to reflect this length. We in the activist community have fewer resources and people than does the Department of Energy. We need more time.

The final SWEIS can only be strengthened against inadvertent omissions, error, and challenge if afforded a reasonable comment period. DOE has the authority to make this happen. Please extend the comment period to a date the activist community can work for at least late 2006. This will produce the best possible SWEIS, a goal we all share. Thank you.

705-2  
cont'd

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 706: Chris Mechels**

Good evening. My name is Chris Mechels, I'm retired from Los Alamos for those of you who know me. The first thing I would like to draw your attention to is this very important note at back table which is where you can find the references on the CDs.

Unfortunately, and I have talked with Ms. Withers about this and she's been helpful in clarifying it, they will -- if you request CDs, even if you belong to let's say the DOE oversight bureau, they will not provide a copy.

I, therefore, thoroughly support Tom Udall's office's position, put these things online. I think the reason offered for not providing them is they cost \$200 a pop for a CD set. These sets of these cost \$100 a pop. ||

706-1

It really needs -- rather than putting them -- burning a bunch of CDs which I would support doing, it's much easier to put them online and let people get them. You do have to get them to understand this, this is a very poor document. ||

706-1  
cont'd

I have managed to get the references and I've been looking at them. And, for example, some of the problems of this document, and by no means an exhaustive list, is, for example, on their super computer complex, they claim to be using a 50-teraops machine and they're going to use 7.2 megawatts of electricity in its current usage. ||

I just finished looking at their document, their environmental assessment which was provided courtesy of Ms. Withers when I couldn't get it any other way. They show -- they show the usage in that document as 63 million gallons per year. ||

706-2

Contrast that with what they say here, where they don't even give you a figure for current usage. And then they go on to say that the expanded usage will be 15 megawatts and 51. So, in fact, the 51-million gallon expanded usage is less than current usage per their own documents. That's the kind of mischief which is going on in the SWEIS. ||

Another one in the same set is they claim to be using 51 million gallons which is 19 million liters. If you do the sum, it doesn't work out. Liters are smaller than gallons. It's just full of errors. And you're not going to catch the errors unless you look at the reference documents. And right now the reference documents are not available in any convenient way. Please put them online. And, after you put them online, extend the comment period as the Congressman asked so that we might have a chance to use them and correct this document which is highly needful of corrections. ||

706-1  
cont'd

Another one, for example, is high explosive processing facilities. They're currently doing 15 safety mechanical tests a year. They're talking about doing a 20 percent reduction which is 12 or a slight increase on expanded operations to 500. It's ridiculous on the face of it. And you can't prove it's ridiculous unless you have the reference documents which we don't. It just goes on and on. ||

706-3

**706-1** NNSA notes the commentor's request to put all materials related to the LANL SWEIS on the Internet for public review and extend the comment period. NNSA believes that 75 days for public review of the Draft LANL SWEIS is sufficient and is consistent with established practice. NNSA also recognizes that in light of electronic capabilities now available, commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in Los Alamos, Santa Fe, and Albuquerque. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional information.

**706-2** As discussed in Appendix J, Section J.2.1, of the SWEIS, the *Environmental Assessment for the Proposed Strategic Computing Complex (SCC EA)* was originally completed in 1998 to evaluate the projected impacts of constructing and operating the facility now referred to as the Nicholas C. Metropolis Center for Modeling and Simulation (Metropolis Center) (DOE 1998). The *SCC EA* conservatively estimated that operation of the facility would require approximately 7.1 megawatts of electricity, and 63 million gallons of water per year. Actual operation of the Metropolis Center has shown that significant increases in computational capability have correlated to only moderate increases in electricity and cooling requirements. As shown in Table J-4, the Metropolis Center presently requires approximately 5 megawatts of electricity and only 19 million gallons of water per year, with the proposed expansion of computational capability projected to require 15 megawatts and only 51 million gallons of water per year. Summary Table S-4 of the Draft LANL SWEIS presented the metric conversion of 51 million gallons to be 19, rather than 193 million liters. This typographical error has been corrected in the Final SWEIS.

**706-3** Descriptions of the alternatives appear in Chapter 3 for each Key Facility. As discussed in Chapter 1, Section 1.3, of the SWEIS, the No Action Alternative consists of decisions stated in the ROD for the 1999 SWEIS (64 FR 50797) together with decisions for other LANL actions based on completed NEPA reviews. Therefore, activity levels for the No Action Alternative are generally the same as those from the

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 706 (cont'd): Chris Mechels

The other thing I draw your attention to is the fact that there are three major facilities with obvious things missing. The Los Alamos super computing center shouldn't be in Los Alamos. When you log onto AOL, you don't care if it's from Virginia.

When you log onto this computer complex, you shouldn't care if it's in New Mexico. If it is in New Mexico, it's maxing out their water and it's maxing out their power which are slightly over 100 percent of their expanded operations.

LANSCE should not be here. They just finished the neutron source out east which was supposed to take over most of the LANSCE. Now we've discovered we want to keep LANSCE apparently forever. The biggest contaminator, huge use of power, huge use of water, it shouldn't be in New Mexico, there's no reason for it to be.

Lastly, DARH. They make no mention of the fact that DARH is violating all the containment regulations. They're using this ad hoc pile of foam containment mechanism which is not allowed in their BEA and shouldn't be in use. No mention made of any of this. This is a bad piece of work. And it needs correcting. Thank you.

706-4

706-5

ROD for the 1999 SWEIS. The No Action Alternative is the basis for the two action alternatives of the SWEIS. Newly proposed changes directed at reducing some operations conducted under the No Action Alternative are evaluated under the Reduced Operations Alternative, while newly proposed changes reflecting increased activity levels or new activities at certain facilities are evaluated under the Expanded Operations Alternative. These levels are the maximum levels for which environmental impacts have been evaluated and so could be implemented. This does not mean that these levels would be either achieved or sustained, although from an environmental impact perspective, they could be.

706-4

NNSA notes the commentor's concerns regarding the location and operation of the Nicholas C. Metropolis Center for Modeling and Simulation (Metropolis Center) and LANSCE, and specific concerns for their water and electricity use. The Metropolis Center and LANSCE provide critical infrastructure to help ensure a safe and reliable nuclear stockpile in support of LANL's national security mission. As further described in Appendix J, Section J.2.1, LANL's Advanced Simulation and Computing Program supercomputers allow researchers to integrate past weapons test data, materials studies, and current experiments related to the physics of a nuclear detonation. The analysis presented in the Final SWEIS addresses the expansion of these capabilities at LANL. However, NNSA is not revisiting the conclusions reached in the SCC EA or the siting of these expanded capabilities at sites other than LANL. LANSCE is a unique asset that enables proton radiography experiments for the Stockpile Stewardship Program. As described in Appendix G, Section G.5.2.3, moving the LANSCE mission to another facility was considered as part of the analysis for the LANSCE Refurbishment Project. This was ultimately dismissed in part because no single facility or combination of existing DOE facilities was identified that could fulfill the mission of LANSCE without a new investment several times the cost of LANSCE Refurbishment. Utility demand projections have been updated in this Final SWEIS. This is based on the latest trend analysis and projections that include the use of calendar year 2005 data for LANL and for other Los Alamos County users. These conservative projections include other Los Alamos County users that rely upon the same utility system as LANL. The projections are compared to the

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 706 (cont'd): Chris Mechels

current (baseline) capacity or authorization limits of the respective utility system, as appropriate, and do not include any proposed or future upgrades or capacity increases. For water, it is currently projected that LANL operational demands combined with the larger and growing demands of other Los Alamos County users could require up to 98 percent of the currently available water rights, as presented in Chapter 5, Section 5.8.2.3, of the SWEIS. However, LANL's projected water demands under the Expanded Operations Alternative would remain within LANL's water use target ceiling of 542 million gallons (2,050 million liters) per year, as discussed in Chapter 4, Section 4.8.2.3. Refer to Section 2.8, Water Use, of this CRD for more information on water use, available water rights, and water supply planning at LANL. Similarly, up to 96 percent of the electric peak load capacity of the Los Alamos Power Pool could be required to support LANL operational demands combined with the growing demand on the part of other Los Alamos County users, as discussed in Chapter 5, Section 5.8.2.3. As also noted in Chapter 5, Section 5.8.2.3 and detailed in Chapter 4, Section 4.8.2.1, of the Final SWEIS, ongoing upgrades to the electrical power transmission and distribution system, including construction of a third transmission line, would allow the import of additional power and support a higher electric peak load in the future.

**706-5**

Design, construction, and operation of the Dual Axis Radiographic Hydrodynamic Test (DARHT) facility is in conformance with the DOE ROD for the DARHT Final EIS (60 FR 53588). This ROD requires a DARHT mitigation action plan, which has been developed and is being followed at DARHT. For certain tests at DARHT, a steel containment vessel will be used to minimize releases to the environment. Aqueous foam is an interim mitigation measure that has been found to be effective in reducing air emissions from tests and meeting intermediate mitigation goals in accordance with the mitigation action plan. The DARHT mitigation action plan specifically addresses measures to reduce impacts to soil, air, water, endangered species, archaeological sites, and Native American cultural resources through the use of designs, procedures, operations, and monitoring. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for additional discussion regarding the use of foam at the DARHT Facility.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 707: Sister Elaine Prevoyay

My name is Elaine Prevoyay, I'm a Sister of Loretto in Santa Fe. As long as 28 years ago, the Loretto community declared and published our commitment to an end of the production of nuclear weapons and nuclear energy.

|| 707-1

We are particularly committed we said 28 years ago to encouraging and assisting in the urgent work of educating ourselves and others to the perils of the continued proliferation of nuclear power and arms.

The very next year the entire body of 300 Loretto members gathered for general assembly, wrote by consensus, and published the following statement: "Rooted as we are in our Judeo-Christian heritage, we view our opposition to nuclear weapons and nuclear energy as an urgent moral imperative. We recognize that the burden of leadership in this regard falls not only on concerned persons throughout the world but especially on the community of faith. We consider this a very serious matter of conscience."

I want to mention also that over 200 persons from our community signed the petition that Peace Action will submit this evening.

707-1

NNSA notes the commentor's opposition to pit production and nuclear energy based on moral and religious principles. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. The production of nuclear energy is not within the scope of the SWEIS, which evaluates the environmental impacts of the continued operation of LANL.



Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 708: Sister Patricia Jean Manion

My name is Patricia Jean Manion. And I first came to Santa Fe in 1952. And, of course, you probably know that our first sisters came here in 1852. So we've been around for awhile. This is the Vatican's statement that was made in 1997. Archbishop Renato Martino, the Vatican's representative to the United Nations, issued the following statement to the UN. "Nuclear weapons are incompatible with the peace we seek for the 21st century. They cannot be justified and deserve condemnation."

708-1

708-1

NNSA notes the commentor's opposition to nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 709: Sister Penelope McMullen

I'm Penelope McMullen, I'm a Sister of Loretto. The Loretto community opposes the plan to increase production of plutonium pits. We request that we now spend one minute in quiet prayer and that this time of prayer be recorded in the hearing proceedings.

We suggest that we who are gathered here use our breath as prayer, breathing in light, grace, and healing from God, Great Spirit, or the universe, and breathing out that light, grace, and healing to each other, Los Alamos, and our troubled world. And I would ask Ms. Hale to put up the blue card when one minute is over.

709-1

709-1

NNSA notes the commentor's opposition to increased plutonium pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for information on the need for pit production.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 710: Tom Troth

Good evening. I just have a comment about fissile material, which plutonium would fit in that category. Kofi Annan, the Secretary General of the UN, on May 30, 2005, in an op-ed article on the nuclear proliferation treaty, after a review conference that happens every five years, stated that a fissile material cutoff treaty for all countries is indispensable.

Also the current pits that they have I've heard and read from watchdog information have an expected working life that lasts until 2038. So I'm not sure why we're projecting us to need those pits that far into the future.

The proposed ones are untested and they'll need to be tested. I'm not sure how that process goes. But also Kofi Annan stated in that op-ed article that all countries should affirm their commitment to a moratorium on testing and a comprehensive nuclear test ban treaty should be enacted. This new plutonium pit is going to apparently be a different type and have a longer life. So that's something to keep in mind.

And I think that ends my comments. Thank you.

710-1

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710-1

NNSA's estimate for minimum pit lifetime is 85 years and is being continually reviewed; however, at this time NNSA projects a need for production of up to 80 pits per year, as described in Chapter 1, Section 1.3.3, of the SWEIS, in order to maintain the reliability of the current nuclear weapons stockpile. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for reasons why plutonium pit production is necessary despite the increased plutonium pit life expectancy. The production of certified pits requires activities to fabricate new pits to replace existing pits, activities to modify the internal features of existing pits, and activities to recertify or requalify pits. A new plutonium pit is in the design phase and is not part of the current stockpile. Section 1.3.3 has been revised to update the information on the strategy for the future weapons complex. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 711: Dustin William Olson

Thank you. We are here right now because the people are allowing us to be here. The people are allowing this comment period. The people are allowing Los Alamos to exist. Now, we live in a nation where there's a rule of law and order. No one is above the rule of law and order. And this is under the Constitution of the United States of America.

Okay. The bottom line that gives Los Alamos a reason or a rationale to exist is the National Security Act of 1947. If that act is ever repealed, you have no more bottom line to exist. We're not talking about pit facilities or anything, just existence.

Okay. Now, most people are concerned about environmental impacts and stuff. I mean I'm concerned about environmental impacts too. But I'm more concerned about the shutdown of electric devices during the three to five days of darkness when the planet gets shut down. Okay. That's number one.

Does Los Alamos, can they function without electricity. A directed energy weapons attack on the pit facility site or the waste storage site, no one seems to have any idea about a protection umbrella anything. That seems like that might be a problem.

If there is an escalation of the coming nuclear war in the Middle East, someone told me, oh, they don't think that LANL is a prime target. No, it's probably a secondary target.

Then there's the plate movement, a movement of the rotational axis when the let's call it the ionosphere, the electromagnetic sheath shifts, and we have a new rotational axis. And so we're going to have a lot of earthquakes.

What kind of -- does your -- I haven't read this booklet. But does it address the predicament that we would be in due to earthquakes and shut down the power, transportation, et cetera, et cetera. That's all I want to say.

SPEAKER: The Jemez volcano erupting above Los Alamos.

711-1

711-2

711-1 The LANL electric power system and proposed upgrades are presented in Chapter 4, Section 4.8.2.1. Emergency power generators are used at many LANL facilities to provide backup power to run systems critical to safe operations in the event of a loss of normal electric power sources.

Measures are taken at LANL to protect against potential attacks. Improvements in controlling access to the site are currently being implemented with the establishment of guard stations on Pajarito Road and access controls around TA-3. In addition, Appendix J of the SWEIS evaluates the environmental impacts of a proposed project that would provide additional access controls to the nuclear facilities along Pajarito Road. Chapter 4, Section 4.6, of the SWEIS has been revised to include additional discussion of the measures taken to protect assets at LANL from terrorist activities. As discussed in Chapter 5, Section 5.12.6, the impacts of terrorist action have been considered in a separate, classified appendix to the SWEIS.

Sitewide seismic accidents are analyzed and resulting consequences are presented in Chapter 5, Section 5.12.3. LANL site seismic activity is discussed in Chapter 4, Section 4.2.2.3. The accident analyses presented in Section 5.12 considers a wide range of accident scenarios including site-wide fires and earthquakes.

711-2 An evaluation of the volcanic hazard from the Jemez Mountains volcanic field was reported in the 1999 SWEIS and was reevaluated as part of this SWEIS, as indicated in Chapter 4, Section 4.2.2.2. As stated in the 1999 SWEIS, a significant volcanic event would be preceded by years of seismic signals. NNSA continues to review seismic data to see if there is any sign of increased volcanic risk to LANL facilities, but the data do not indicate any greater potential for volcanic activity than identified in the 1999 SWEIS.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 712: Rebecca Procter

My name is Rebecca Procter, I'm a resident of Santa Fe County. I'd like to make a short overall statement to begin. And that is that I believe backing the preferred alternative which involves dramatically expanding production of pits that form the cores of the actual nuclear weapons as well as the outright dismissal of consideration of the so-called green alternative which was focused on science and waste management are both actions that I view as putting the U.S. in direct violation of the nuclear nonproliferation treaty.

712-1

Now, regardless of the stance that the current administration takes regarding any treaty into which the U.S. has entered, the people of the United States are overwhelmingly in favor of honoring the requirements of nonproliferation.

The ethical and moral stance that the current document espouses is completely indefensible. Creating massive new amounts of weapons of mass destruction is not clearly not a formula for promoting peace on the planet.

Now, I'm going to spend the rest of the time that I have just pulling a couple of very brief examples from my initial reading of the document which admittedly is still superficial and I hope to spend more time with it. I'm hoping to pinpoint a couple of items that I think highlight issues that should be addressed.

My first example is taken from the estimated environmental effects of the expanded operations alternative. And that is that it is estimated that the bulk type low level radioactive waste will increase under this alternative to a level that would be somewhere between five and 23 times greater than is currently being generated.

712-2

In addition, the so-called packaged low level nuclear waste would increase under that estimate to a level somewhere between 2.5 and 5.25 times greater than is currently being generated.

Now, the issue I'm raising here is not whether LANL will deal with that waste in some manner. The issue that I want to be considered is whether it is acceptable to the people of New Mexico to have this much more radioactive waste being generated and possibly moved through the state to holding facilities. I personally believe that that is ethically unacceptable.

To take another tack that has to do with public health, we don't know from this document exactly how the estimates of risks of various accident scenarios was generated. The statistics provided are not backed up by an explanation of methodology.

712-3

To take just one example, and this is -- keep in mind that the example I've chosen is an accident scenario that is not considered to have the highest possible risks to the off-site population, it's just one of many possible scenarios.

And this comes from the estimated consequences of a radiological accident

712-1 Operations at LANL that support the NNSA mission to ensure a safe and reliable nuclear stockpile are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. Chapter 3, Section 3.5, of the SWEIS provides a discussion of NNSA's consideration of, and decision to not analyze a "Greener Alternative" in the SWEIS. NNSA does not believe that a "Greener Alternative" is reasonable for the future operation of LANL to meet its mission work assignments as directed by the Congress and the President. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

712-2 NNSA notes the commentor's opinion regarding the ethical nature of generating more radioactive waste at LANL. Impacts related to waste management and the transportation associated with disposing some of this waste offsite are identified in Chapter 5, Sections 5.9 and 5.10, of the SWEIS. The estimates for operational waste generation are based on projections in the 1999 SWEIS, which were increased as necessary in this SWEIS based on actual generation rates and recent waste generation forecasts. The projections for waste generated by routine operations are designed to be conservative, providing an upper bound by which impacts may be measured. In addition, much of the waste projected for the Expanded Operations Alternative is attributable to remediation actions; the actual amount generated will depend on future regulatory decisions by the State of New Mexico. As such, the estimates of waste generation are conservative and actual generation rates may not approach the projections. All wastes are stored onsite, primarily at TA-54, and managed protectively until disposed of. The disposal facility is selected based on the type of waste. At LANL, some low-level radioactive waste is disposed of onsite at TA-54. Other radioactive wastes are transported offsite for disposal. For example, transuranic waste is disposed of at WIPP, which is regulated by both the New Mexico Environment Department and the U.S. Environmental Protection Agency. Hazardous waste is sent to offsite commercial facilities for treatment and disposal. All disposal facilities are designed and operated in accordance with standards developed specifically for the waste type accepted. Refer to Sections 2.7, Waste Management, and 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information related to this comment.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 712 (cont'd): Rebecca Procter

deriving from a plutonium facility storage container release at the TA-55 facility which would be the facility that's developing plutonium pits.

And they state this risk to be an increase in latent cancer fatalities of .223. So that means less than one fatality per 100 people. But think for just a moment about that ratio and think about that in terms of 10,000 people.

If that estimate is correct, we would be looking at an increase in latent cancer fatalities of more than 22 people out of 10,000. When viewed from the larger perspective of the actual population that could be affected in Los Alamos and Santa Fe Counties alone, this is an unacceptable risk from this type of accident.

Further, we can't tell right now from the SWEIS if the risk of such accidents, and there are many other possibilities mentioned in the document, has been assessed in a scientifically defensible manner.

Now, I'm going to indulge my professional interest for the last few seconds that I have, and that is that I am a professional archeologist. And I may be only one of a few that will comment on this document. So I just want to point out that it is recognized that there will be adverse effects to certain cultural resources from the expanded operations alternative.

This involves the destruction or alteration of certain buildings, some of which are eligible for the National Register of Historic Places. There will be some effects to known archeological sites. And there will be potentially some effects to traditional cultural properties which have religious and cultural significance to tribal peoples in this area.

And in that case it has to do with the view shed, the view from these traditional cultural properties, which in most cases are sacred places. Thank you for the time and thanks for your attention.

712-3  
cont'd

712-4

712-3

The value of 0.223 latent cancer fatalities in the event of a plutonium facility storage container release accident at TA-55-4, as shown in Appendix D, Tables D-4 and D-7 of the Draft SWEIS, is not for an individual but rather for the entire population out to a 50-mile (80-kilometer) radius from the facility, which is shown in the table footnote to be 301,900 persons. This means that, in the event of this accident, there would be no additional latent cancer fatalities in the entire population of 301,900 persons since the calculated risk is much smaller than 1. This can be translated to mean that for an average individual in the population, the likelihood of latent cancer fatality if this accident were to occur is 0.00000074 (1 chance in 1.3 million). The risk to the total population for this accident was obtained by multiplying the frequency of this accident, which is one in a million per year, by the 0.223 which gives  $2.23 \times 10^{-7}$  per year of operation as shown in Tables D-6 and D-9 of the Draft SWEIS. The methodology for estimating the consequences and risks of accidents is described in Appendix D. This methodology is used for all DOE EISs.

712-4

NNSA thoroughly reviewed and analyzed impacts to cultural resources in the SWEIS. Specifically, impacts to cultural resources (including traditional cultural properties) from the Expanded Operations Alternative are presented in Chapter 5, Section 5.7.3 and summarized in Table 5-29, of the SWEIS. More detailed information is presented in Appendices G through J.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 713: Don Bennett

Thank you. I'm in awe of the sophistication and the detailed research and care of my colleagues in this community. The local environmental impact of dramatically increasing nuclear weapon triggers at Los Alamos National Lab is indeed a valid concern. But there is a larger danger.

Spending billions to expand the U.S. stockpile of nuclear weapons will not improve our national security in today's world. More likely it will degrade global security by keeping the U.S. in the forefront of the unending proliferation of nuclear weapons.

And the integrity of our global environment will be further impaired if Los Alamos fails to reassess its national security role. The billions of new dollars, this pool of scientific talent, and an enlightened new Los Alamos mission should be aggressively applied toward the development of nonmilitary nuclear alternatives to fossil fuels.

Our insatiable use of oil has led the U.S. into dangerous military adventures, political confrontations in the Middle East, thus decreasing our security. Our always expanding fossil fuel use is leading to major environmental degradation as well.

Just imagine how much constructive good and goodwill Los Alamos could contribute to our national security, economy, and the environment by developing safe new generations of commercial nuclear power plants, small and economical nuclear plants for the world's Merchant Marine fleets, for example. As the United States' power generation was weaned from fossil fuels, the environmental degradation would certainly moderate.

I prefer that the National Nuclear Security Administration and Los Alamos take the lead in finding nonmilitary constructive solutions to our new national security problems and environmental threats rather than spend time, talent, and treasure, our treasure on tasks and products that will escalate the global nuclear arms race and contribute nothing toward global environmental solutions. Thank you.

713-1

713-1

NNSA notes the commentor's concerns regarding the proliferation of nuclear weapons. The United States is not expanding the nuclear weapons stockpile. Pit production is necessary to maintain the existing nuclear weapons stockpile. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and confidence in the nuclear stockpile is likely to remain important in future arms control negotiations as the Nation moves to further reduce the size of the overall stockpile. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

713-2

713-2

Cessation of NNSA's core mission activities in support of NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. Therefore, ending these activities at LANL is not being considered in the SWEIS. In addition to performing these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 714: Carl A. Smith

My name is Carl Smith, I live in Santa Fe. I do not support any increases in nuclear weapons research. And that's really what I'm here to say. The previous two speakers have articulated this so well that I really am hesitant to say anything more.

But I have three points, quick points I hope. One, the first point is that, if you have them, you want to use them. So why do we still have them? And we have -- well, on July 25, 1945, when President Truman ordered the delivery of the special bomb on the day where the weather permitted it over one of four possible targets in Japan, the whole thing escalated. It became like a toboggan running down a hillside.

They had two bombs ready. They used the first one and that was really all that was necessary. They didn't even give the Emperor of Japan time to respond to the ultimatum. And they went ahead because they had the second bomb ready, they went ahead and used it.

Isn't that the nature of war? Isn't that the way these things work? I say we don't need them. The second point is somewhat like that. Our leadership in this nation started the Iraq war looking for weapons of mass destruction, to get rid of them. All the time they were right here in New Mexico.

I think we ought to set up a tour bureau to bring people here to find the weapons of mass destruction. They could paint them and name them and do all kinds of things with them. These serve no destructive life-enabling purpose. They are illegal. So let's get rid of them versus trying to improve them.

The last thing I want to say is personal and a little bit pejorative. And I keep asking myself why, why are we doing all this, why are we trying to improve these weapons of mass destruction, why are we keeping them? Why is Los Alamos so focused on all of this, why? And I came up with my own answer and realized we've got to keep jobs for those folks. This is a massive welfare system. The military, corporations that serve this are massive welfare systems.

Now, I personally do not mind that. I personally don't mind subsidizing people to do useful work. But we need these people in Los Alamos, the engineers and scientists, to do constructive work like our previous two speakers said. There are useful things to be done in this country. Let's get on with it.

714-1

714-1

NNSA notes the commentor's opposition to increases in nuclear weapons research. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

714-2

NNSA notes the commentor's support for continued operation of LANL to support non-weapons research. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. Stockpile stewardship is important to maintain a safe, secure, and reliable stockpile. Even in the post-Cold War period, international dangers remain, and nuclear deterrence will continue to be a cornerstone of U.S. national security for the foreseeable future. In addition to these activities, however, research is conducted at LANL in areas not related to nuclear weapons production such as renewable energy and global climate change. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

714-2



*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

***Commentor 715: Paulette Frankl***

My name is Paulette Frankl and I'm a resident of Santa Fe. I'm a mother and a grandmother and somebody who is very concerned about nature, the environment, water, air, animals, Native Americans, and habitats and health of all sort. To continue this quest for bigger and better weapons is not the way.

It isn't Los Alamos that just decided, well, we're going to sort of clean things up a bit and make things newer and better and bigger. That's not what's going on. This was authorized somewhere right at the top. Los Alamos isn't making these sort of improvements all of its own accord.

And I heard that, if New Mexico were to secede from the union, it would be the third largest or one of the three largest nuclear powers on the planet. Please understand this. We are living next to an accident waiting to happen. As Helen Caldicott said, if you live next to a nuclear power plant, you don't need a war, all you need is an accident.

And accidents happen. Among other things where is all this waste, you know, where is it going to be taken out of? Before I came here, I came from Las Vegas, Nevada, well Yucca Mountain, that's over there somewhere, who cares. These are going on the roads that we drive on. And again an accident waiting to happen to Yucca Mountain, if not here.

Yucca Mountain has right next to it a Native American reservation that's one of the largest in the country. Most people don't care about that. I care very much about what happens to our native people.

It is happening to all of us. We are it. And just to kind of get down to the basics as a mother and a grandmother and a person who cares about life on earth and peace in the world, you don't fight for peace, you live it. There is only as much peace on earth as there are peaceful people.

Certainly we're seeing that right now in Lebanon. How much more hatred and destruction do we need to turn the tide of our own mentality to say enough, we're just not going to do this anymore? And even though I'm very grateful for this hearing, I wondered, are our voices really going to make a difference. And, if not, we need to make sure that they do. Thank you very much.

715-1

715-1

NNSA notes the commentor's statement regarding the occurrence of accidents. There are no nuclear power plants or nuclear reactors of any kind at LANL. Recognizing the possibility of accidents, the estimated health impacts from postulated facility accidents at LANL are described in Chapter 5, Section 5.12, of the SWEIS. The risks from accidents, which include consideration of the probability that such accidents occur, are also included in that chapter. NNSA and the LANL contractor use the results of analyses in the SWEIS and safety analysis documents to evaluate accident scenarios and determine ways to reduce the possibility of accidents occurring and to mitigate their effects. This includes incorporating features into facility design and operations to protect the health and safety of workers and the public.

715-2

715-2

NNSA notes the commentors concern regarding the generation of wastes and their transport to disposal locations offsite. The SWEIS evaluates the impacts from transporting the generated wastes to various disposal locations in and outside of the State of New Mexico. The impacts are detailed in Chapter 5, Section 5.10, and summarized in Chapter 3, and the Summary of the SWEIS in terms to doses to the public and fatalities from potential traffic accidents. The results indicate that the potential impacts are very small.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 716: Betty Kronsky

My name is Betty Kronsky, I'm a member of People for Peace, a peace organization that was formed during the first Gulf War in response to people feeling very helpless and very upset about what was going on. And since that time we've had several other wars to react to and to talk about and to try to study.

We had an interesting conversation with one of the experts outside. He was really very engaging and helpful. We were standing in front of the poster that advertised the new plan for the plutonium pits and the plutonium facility.

And I noticed, on the bottom line of the poster, the comment that this was meant to satisfy mission objectives. And I asked him what was meant by mission objectives. And he really didn't know, that wasn't his -- you know, his province. The objectives are set by the politicians and not by the scientists.

And I wondered about these mission objectives. And, of course, it's been said here before. Does it have to do with increasing weapons for waging nuclear war and what would be the rationale for war? Is there a moral justification for using nuclear weapons?

The way that the wars in Iraq and Lebanon are being waged today imply to the world that it is okay to kill civilians, to destroy infrastructures, and to contaminate the environment.

My understanding is that this kind of war is morally wrong. Any kind of war is morally wrong. But certainly the kind that is being waged today, it's only an inch beyond what's happening in Lebanon today to use nuclear weapons.

We've already used them -- I mean we've already used depleted uranium on warheads. And without really knowing what the result is going to be in terms of human lives and cancer production.

Certainly it's obvious that, if we have them, we will use them, that there will be demagogues, political leaders that will convince us the way they did in the mid-forties, that it was okay to use them against the civilian population. So I think that many people here believe as I do, that we do not want to increase our capability of nuclear weapons. We would like to get rid of the ones we have. And the expert who was talking to us said that we actually are burning plutonium to get rid of it. Then why are we wanting to produce so much more? It just doesn't make sense. Thank you.

716-1

716-1

The mission objective for LANL is to provide support for maintaining a safe, secure and reliable nuclear weapons stockpile. Specific LANL assignments, as summarized in Chapter 1, include production of war reserve product, assessment and certification of nuclear weapons stockpile, surveillance of war reserve components and weapons systems, ensuring safe and secure storage of strategic materials, and management of excess plutonium inventories.

716-2

NNSA notes the commentor's concerns regarding nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. The operations at LANL do not produce more plutonium, but use existing plutonium to produce pits.

716-2

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 717: William Christison

My name is William Christison. I don't want new plutonium pits produced here or anyplace else in the United States. I have lived in New Mexico for 25 years. It is just as important that new nuclear pits and expansion of the production of nuclear weapons not occur anywhere else in the United States as well as here.

717-1

717-1

NNSA notes the commentor's objection to pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Now, why basically are we doing this? And I want to tell you a little bit about my credentials. I worked for 28 years for the Central Intelligence Agency. I wrote two or three of the first national intelligence estimates produced on the problem of nuclear proliferation worldwide.

717-2

Operations at LANL that support the NNSA mission to ensure a safe and reliable nuclear stockpile are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size.

And the situation is just about as bad now as it was in the 1960s and the 1970s and the 1980s and the '90s and now. Israel by the way got its first nuclear weapons 39 years ago with the help of the United States.

India who now has nuclear weapons recently signed a treaty with the United States that is going to allow India to expand its nuclear weapons with assistance from the United States. Maybe not money, but the money from us will go for peaceful uses. And the money as you know is wholly fungible and will give India more money to expand its own nuclear weapons program.

So here we are. We are helping our own government expand its nuclear weapons, we are helping two other countries, India and Israel, expand their nuclear weapons. This is in total violation of one of the basic policies that the United States should be implementing as enunciated in the nonproliferation treaty signed in 1969 or 1970.

717-2

And so that means, in effect, every single person working in Los Alamos and participating in the program of expanding nuclear weapons production in this country is going to be a criminal under international law. I wonder if the people who work there realize that fact.

Now, one other thing I want to say. The nuclear weapons program of the United States and what Los Alamos National Laboratory is going to be asked to do in the near future, expanding production of plutonium pits means that it's going to make it easier for the United States to carry out all the rest of its foreign policies, its very aggressive foreign policies which have resulted in more hatred of the United States.

All of these things are really very closely related. The Israel-Palestine issue, the present slaughter of innocent people in Lebanon, the present slaughter of equally innocent people in Iraq, killing of people in Afghanistan continues. All of these things are very closely related.

If we people who want to change U.S. policies in the nuclear field can do that, then it's also a step toward helping us change our foreign policies in all of these other areas. And that is what needs to happen if we're going to have anything like a peaceful world in the coming decades. Thank you very much.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 718: Bud Ryan**

Hi, I'm Bud Ryan, I'm with Pax Christi New Mexico which is part of Pax Christi International and the Catholic Peace Group.

Okay. So why are we planning on making pits here? Does this not break Article VI of the NPT treaty? Linton Brooks, the administrator of the NNSA, has said publicly that the plan is to eventually replace all our nuclear weapons.

718-1

We as a country have already wasted seven plus trillion dollars when adjusted for inflation on these weapons. So, even though we have never used these weapons in anger since 1945, when we became the only country to do so against the innocent civilians of Hiroshima and Nagasaki, I say we have killed many people here and around the world by wasting the seven plus trillion dollars on nukes when it should have been spent on decent housing, food, good schools, and hospitals for all the people of the earth.

718-2

Clean up Los Alamos, stop weapons production, and use our scientists who are some of the best and brightest the U.S. has to offer to invent things to benefit all humankind. Let the U.S. lead the way in getting all nuclear weapon states to live up to the NPT treaty and maybe the U.S. can begin to repair our reputation that has been trashed since 9/11, when the Bush Administration highjacked our country and became to many people around the world the greatest terrorist state on the planet.

718-1  
cont'd

The manufacture of weapons of mass destruction is a blasphemy to God, The Creator, and it is something that we, the people, must stop.

718-1

Operations at LANL that support the NNSA mission to ensure a safe and reliable nuclear stockpile are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

718-2

NNSA notes the commentor's desire for activities at LANL to be focused on areas other than those related to nuclear weapons production, especially on cleanup of the LANL site. In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Chapter 2, Section 2.2.6, of the SWEIS describes progress made by NNSA in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Continuation of cleanup activities at a pre-Consent Order level is included in the No Action Alternative, while actions necessary to comply with the Consent Order are evaluated under the Expanded Operations Alternative. As stated in Chapter 1, Section 1.4, of the SWEIS, however, NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. For more information about proposed activities in support of the Consent Order, refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 719: Peggy Prince

Good evening. My name is Peggy Prince, I'm with Peace Action New Mexico. And in my hand I am holding well over over 500 signatures on a petition which reads "I vigorously oppose the proposal for LANL to continue or expand its nuclear weapons mission. It is dangerous for the health and safety of the environment and all life in Northern New Mexico."

719-1

So I was intending to submit these petition signatures tonight. But this petition has gotten such a groundswell of interest that what I'm going to do, what we're going to do is we're going to leave the petition open for signatures until the first part of September and then submit these petitions to become part of the formal comment in the final SWEIS.

So it's really important. So, if you would download this off of our web site and circulate it, there's a return address on there. And you can send it back to our office. And we will make sure that all of your names, signatures, and this petition go into the final SWEIS document.

And, you know, to say one more thing, I'm kind of a bottom line kind of person. And the bottom line here is that we need to stop this. There is no other choice. We have to stop this terrible experiment in trying to ramp up our nuclear weapons production.

719-1  
cont'd

You know, they're trying to put one over on us. And they're hoping that we're so afraid about getting on a government list or something like that as some people have said to me, we're so afraid of that that we are being scared into silence. And we need for that not to happen. Now is the time for courage. Thank you. Mr. Coghlan.

719-1

NNSA notes the commentor's opposition to LANL's nuclear weapons mission. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. The environmental and human health impacts of the continued operation of LANL are presented in Chapter 5 and summarized in Table S-5 of the SWEIS.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 720: Jay Coghlan**

My name is Jay Coghlan, I work for Nuclear Watch New Mexico. I have either the honor or hassle of doing this stuff for a living. Others have spoken about the process to date, the truncated period of time that the NNSA has given for the comment period. I'm quite familiar with it. But I simply echo those remarks.

720-1

With respect to the reference documents, some speakers have noted how important they are. And indeed they are. And a couple of weeks ago we called up the Los Alamos reading room which is like the official repository for those documents. And first we went to their web site and they had a web site that was still dated as being February 2006.

720-2

And on that web site they said coming soon, online documents. So we're going great, we call them up. You got the SWEIS documents? No. And then they thanked us for bringing their attention to that statement on their web site saying that there would be online documents. And they go, oh, that statement is really confusing. Tell you what, we'll take that statement off.

So the end result is no online documents. However, we're not ones to take this laying down. I say screw NNSA. Nuclear Watch is going to put those reference documents up on our web site. That will happen by midweek.

You just go to www.nukewatch, that's n-u-k-e-w-a-t-c-h, dot org. They will be there, the 19 CDs that Los Alamos did give us. And hopefully this will shame them into providing online access to these documents in the future.

Right now I'm going to take what might be an unexpected twist. I not only look at Los Alamos, but I look at the nuclear weapons complex as a whole. And previously and, in fact, the last round of hearings a couple years ago was over a facility called the modern pit facility. And this would be a super bomb plant in the NNSA's hopes and desires capable of a production capacity of 450 pits a year.

720-3

I have worked hard on that issue. Others in New Mexico have and others across the country have. The end result is that super bomb plan has been defeated for two years running. That is a very important victory. And we have to make sure that the modern pit facility never comes into being because what that facility is is a full-scale return to industrial production of nuclear bombs.

Now, I repeat again, an extremely important victory. That, of course, has a negative boomerang effect on Los Alamos. But they have fallen for our grand strategic plan. That is to keep pit production surrounded here at Los Alamos, and then it's going to be a death by 1,000 cuts.

You know, pick this SWEIS apart. But this SWEIS is only one small step. There has to be a much broader social and political and legal movement towards the eventual eradication of weapons of mass destruction in this state. It has to start here. Forty-three percent of the total national budget DOE for its nuclear weapons activities take place in this state alone.

720-1 NNSA notes the commentor's statement regarding the NEPA process. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional information related to many of the public's questions regarding the process.

720-2 NNSA also recognizes that in light of electronic capabilities now available, that commentors would like the references to be available on the Internet. For security reasons, NNSA exercises caution when making decisions about posting documents on its website. Consistent with established practice, NNSA made the Draft LANL SWEIS and the reference material available for public review in DOE Public Reading Rooms in the general vicinity of LANL. Those reading rooms are located in Los Alamos, Santa Fe, and Albuquerque. See Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional discussion.

720-3 NNSA issued a Notice of Intent in October 2006 to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (71 FR 61731). NNSA also announced cancellation of the planned Supplemental EIS for a modern pit facility, for which a draft Supplemental EIS was issued in June 2003 (67 FR 59577). Consequently, a modern pit facility is no longer included as a reasonably foreseeable event in the SWEIS. In January 2008, NNSA issued the Draft *Complex Transformation SPEIS* (73 FR 2023); it includes alternatives in which LANL would be the site of a new consolidated plutonium center or a new consolidated nuclear production complex. The impacts from the Draft *Complex Transformation SPEIS* are included in Cumulative Impacts section of the Final SWEIS. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of the CRD for more information. The potential impacts of locating a new consolidated plutonium center or a consolidated nuclear production center at LANL will be evaluated in the *Complex Transformation SPEIS*. As noted in Chapter 1, Section 1.0 regarding LANL Support of NNSA Missions, nuclear pit production takes place on a limited scale at LANL and that mission is unlikely to change over the next several years.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 720 (cont'd): Jay Coghlan

Now, to drive this home -- and, you know, I'm obviously I'm going to run out of time real soon. But, in order to make it real, our President has stated that all options remain on the table when it comes to dealing with alleged uranium nuclear facilities.

If there were to be a nuclear strike against Iran, the most likely weapon of choice would be an earth penetrating weapon that is a variant of a Los Alamos design that was engineered by Sandia right outside of Albuquerque. So the consequences are immediate, especially given the broad foreign policies that other speakers have alluded to.

And then, to tie this in, there was going to be a huge explosion using 700 tons of ammonium nitrate fuel oil in Nevada. And the folks in Nevada and also Utah rose up and have defeated that. That test is now being delayed into March, April, thereabouts, to 2007. The bad news is the most probable location for that test is White Sands right here in our own state.

So what you end up having are two weapons laboratories developing weapons that have a decent probability of use in an actual nuclear war. And then we will have the real -- the test, the practical test of that earth penetrator likely to be here in White Sands.

New Mexicans should not stand for it. We should better organize. We are actually absolutely pivotal to this not only for our country but for the entire world.

720-4

720-4

Comments regarding the potential use of nuclear weapons and the test explosion using ammonium nitrate are not within the scope of this SWEIS, which focuses on the environmental impacts of LANL operations.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 721: Michael Collins

Someone once said where does it say in the Constitution that it's free speech, but it's only three minutes. My understanding is we're going to be doing -- not we. They want to do the same work as Rocky Flats, exact same work, same process, same mess, same need to clean it up. So why isn't it going to be closed?

Let's close the Los Alamos weapons production. I don't see any need for it. Maybe we have to close the whole thing to do it. I don't know. We might not be able to do alternative work if people don't seem to get the message. We've been telling them for years and years.

I was going to say I'm tired of you guys [expletive deleted] around with this, but that would be obscene. What's obscene is what you guys do. It's totally an obscenity, the production. You've been terrorizing New Mexico, you've been terrorizing the world for 60 years. And we're sick of it.

It's a total obscenity. Talk about -- is this why we crawled out of primal ooze, solely to take chromium and eight times toxic chromium and put eight times the safe limit in our Rio Grande and our drinking water? Right.

I think it should be a Superfund site, except they don't fund Superfund sites anymore. The stockpile is way over. I really think that it should be looked at as far as the fact that it is the exact same thing that's happened in Rocky Flats and it should be closed for the exact same reasons.

Someone said that the decision is going to be made by some hullabaloo, somebody, some muckety-muck in DOE. Congress makes the decisions, not DOE. Congress makes the decisions, not as George Bush says. Congress is the decider, not George Bush.

721-1

721-2

721-3

721-4

721-1

721-2

721-3

721-4

NNSA notes the commentor's opposition to pit production at LANL. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information. While pit production is the same activity that was conducted at the Rocky Flats Plant, the interim production capability at LANL, up to 80 pits per year, is much lower. The facilities used are also different. Refer to Section 2.12, Comparison to Rocky Flats Plant, of this CRD for more information regarding the relationship of LANL operations to Rocky Flats.

Refer to Sections 2.5, Water Resources, and 2.6, Offsite Contamination, of this CRD for more information related to this comment.

Section 2.12, Comparisons to Rocky Flats Plant, of this CRD describes why NNSA believes that operations at LANL would not result in a similar outcome as Rocky Flats. LANL operations are in compliance with Federal and State regulations for protection of human health and the environment, and, as shown in Chapter 5 of the SWEIS, would remain in compliance even under the Expanded Operations Alternative. Chapter 5 describes the impacts for each resource area and Section 5.14 presents mitigation actions to address adverse effects.

As discussed in Chapter 1 of the SWEIS, the missions of NNSA are established by the Congress and the President. NNSA is responsible for determining how best to implement those missions. As discussed in Section 1.4, NNSA is the official responsible for deciding on the level of operations at LANL and the implementation of proposed projects analyzed in the SWEIS after considering the environmental impacts and other factors such as programmatic needs, cost, and schedule. Implementation of these decisions is contingent on funding as approved by the Congress on an annual basis.



Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 722: Jack Frenkel

My name is Jack Frenkel. I am confronted here with a tremendous problem. And, discussing in three minutes, I felt that we should just use common sense since we won't solve it very quickly.

So releasing vaporized depleted uranium from weapons tests in the air near Los Alamos or manufacturing plutonium pits a few miles from Santa Fe are not attractive for tourists to come to Santa Fe and New Mexico nor for the people who live here.

722-1

722-1

NNSA notes the commentor's concerns related to the effect a major accident would have on New Mexico's economy as a result of reduced tourism. The SWEIS impact analysis considers socioeconomic impacts of operating LANL on the general New Mexico economy of which tourism is a part. Chapter 5, Section 5.12, of the SWEIS analyzes the potential impacts from a variety of accident scenarios on members of the public, which would include visitors to the area.

If at all necessary, such activities should be moved to White Sands Proving Ground or the proposed waste disposal site at Yucca Mountain in Nevada or near the uranium enrichment plant in Eunice or an abandoned mine or another remote facility far from population centers.

722-2

722-2

NNSA notes the commentor's suggestion to move activities currently performed at LANL to another location. LANL's location was selected during World War II because of its isolation. The continuing mission of LANL, starting at that time, has been support of the U.S. nuclear weapons program. The purpose of the SWEIS, however, is to evaluate the environmental impacts of alternatives for operations at LANL and does not evaluate alternatives for moving LANL operations to another geographic site.

Accidents do happen. And radioactively contaminated air is very difficult to decontaminate as we learned from the contaminated canyons near Los Alamos and in Rocky Flats which just mentioned had to be abandoned. Why take such risks in the scenic and economically productive tourist population center. Thank you.

722-1  
cont'd

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 723: Seely Solomon

Hello. I'm Seely. I used to be Suki and now I'm Seely. I'm both I guess. I'm going to talk about the grandfather exemption. It should not be applied to all facilities at LANL which began operations before December 31st, 1988, because there are many of them. And the continued release of polluting gases adds to the burden of harmful toxins which the plants, animals, and people of Northern New Mexico are exposed to.

723-1

Grandfathers may be special people. But polluting facilities are not. And they can't get away with hiding behind the image of a grandfather in order to poison the environment.

Instead I propose the grandmother clause. That older facilities which began operations before December 31st, 1988, be the first ones to be required to clean up their act, making the changes and filters and scrubbers on their exhaust gas carrying capacity to bring them into compliance with the latest safety codes.

723-1  
cont'd

We grandmothers feel strongly that no one should be allowed to be exempted from the rules. We certainly can't fool the natural world into believing that it's okay because its healthy function depends on clean pure air and water.

And grandmothers want everyone including grandfathers to set a good example for the younger generations because we are all responsible for our actions and want to pass on the best world we can to our kids. That's the way they will learn how to manage this world properly, by following our good example.

So let's not get it [expletive deleted] backwards. Let's straighten this out. Should we make more plutonium triggers for nuclear weapons at LANL? Absolutely not. One plutonium trigger is too many. After all the suffering in this world, we don't need to plan on ways of increasing it. Once again we've got our priorities [expletive deleted] backwards, putting destruction ahead of support for life.

723-2

Instead of wasting precious resources, time, and energy and, oh, yes, tax dollars on making weapons of mass destruction, we need to join together to solve the pressing problems of today's world which is global warming, renewable energy production, and clean alternative fuels. Like the bumper sticker I saw recently says it, strengthen life, death takes care of itself.

723-3

723-1 All LANL operations currently comply with State (New Mexico Air Quality Control Act) and Federal (Clean Air Act, Toxic Substances Control Act, DOE, and U.S. Environmental Protection Agency regulations, and Executive Orders) regulations and have valid permits as described in Chapter 6 of the SWEIS. The Title V operating permit includes requirements for monitoring air pollutant emissions from sources at LANL and recordkeeping for these sources with which DOE regularly complies. Radioactive air emissions from activities at LANL are subject to the limits of the National Emission Standards for Hazardous Air Pollutants for Radon Emissions from DOE Facilities (40 CFR Part 61, Subpart Q); and the National Emission Standards for Hazardous Air Pollutants for Radionuclides other than Radon from DOE Facilities (40 CFR Part 61, Subpart H) with which DOE complies. Although toxic, hazardous, and radioactive air pollutant emissions can potentially have detrimental impacts, the past emission levels analyzed and those projected from uses at LANL would not be expected to cause unacceptable impacts on human health or the environment (Chapter 5, Sections 5.4.1.1 and 5.6.2). Toxic air pollutant emissions estimated from the use of chemicals are generally below the levels for which New Mexico State would require a permit for a new source under the New Mexico permit regulations for toxic air pollutant emissions (NMAC 20.2.72.400 - 502). The Title V operating permit limits the emissions of hazardous air pollutants such that operations at LANL are below the major source threshold for hazardous air pollutants. Emissions of hazardous air pollutants are monitored and reported annually to the New Mexico Environment Department as required by the permit. Some sources of air pollutant emissions at LANL do not have permits under 20.2.72.400-502 NMAC because they were constructed prior to December 31, 1988. Further information can be found in Appendix C, Section C.1.2.2 that discusses the health effects of the different radionuclides and Chapter 4, Section 4.6.2.2 that discusses the risk of toxicity and carcinogenicity affecting the region.

723-2 NNSA notes the commentor's opposition to pit production and nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

723-3 NNSA notes the commentor's opposition to activities related to nuclear weapons production. Cessation of LANL's primary mission activities

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 723 (cont'd): Seely Solomon

supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 724: Greg Mello

Thank you, Suki. Seely I meant. This is the third hearing on the subject that I've been to this week. And I'm surprised that not one single person testifying at any of the locations including Los Alamos spoke in favor of increasing pit production. And, in fact, no one spoke in favor of retaining a nuclear deterrent.

Now, in the past I would have expected somebody to step forward and sort of defend the nuclear deterrent and the need for safety, reliability, and so forth. But it didn't happen. Not yet. Maybe tonight.

We're all here and so we have kind of voted in a way to invest this process with our faith. So we -- but we have to be careful with this. Few I think here, certainly few last night, felt that this was a good faith process in which the policy choices facing the country would be adequately heard, you know, in the three minute comment period and so forth, which deals with a tiny, tiny, sliver of the issues involved as Bill Christison pointed out so very well.

724-1

So in a way I've already said my peace as far as the oral testimony to the NNSA. I want to talk to us as a community.

We have to be careful about our own focus and our own energy level and our own commitment to this because this isn't a good faith process. And, if we fall into without really thinking about it the idea that by coming here and saying our peace that this is going to stop pit production here in Northern New Mexico, we will be making a very, very big mistake. In fact, there are a lot of people who would like us to make that mistake.

724-1  
cont'd

Now, whoever organized the -- who talked to the city councilors and got this draft resolution which follows one passed last year which was even stronger, but this one is quite timely, did a very good thing. And that can be generalized to other cities.

The Town of Madrid has also passed a resolution. The Town of Taos has considered a resolution. The County of Taos has heard the subject and has thought about it. I urge you to get involved in reaching local officials just like someone did so effectively in the City of Santa Fe.

Get to those officials, get to the state legislators. It's going to affect our economy, our society, our culture, our morale, our mental health, everything. And, by appealing to the neoconservatives in the Bush Administration, that's what Linton Brooks is, we are not going to -- it's not going to come out well.

And that's what this process is, it is an appeal within the executive branch. So that's fine, we're here, we are speaking out strongly. But this has to be an inspiration for us and not something that we go away from and think, ah, we really told them something.

724-1  
cont'd

724-1

NNSA reviews and considers all public comments (for example, oral and written) in compliance with NEPA regulations and DOE procedures, as described in Section 1.0, Overview of the Public Comment Process, of this CRD. Besides the three public hearing meetings, NNSA also accepted public comments via U.S. mail, e-mail, a toll-free telephone line, and a toll-free fax line. The Final LANL SWEIS incorporates revisions in response to comments to make factual corrections and to supplement, improve, and modify the analyses.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 724 (cont'd): Greg Mello*

We have to organize within ourselves, within our friendship networks, and support the organizations who are working on this. Get involved, put your energy there, put your life there. Freedom has never been as they say defended just by kind of like a hobby, like, oh, maybe after a latte. We have to really care.

Now, I'd like to take the logic that Bill Christison mentioned about the relationship of these nuclear weapons to our foreign policy and take it back. For us in New Mexico, this is the most effective thing we can do for many of us, to affect the foreign policy of the United States and limit its violence.

Just as Bill said, it's absolutely essential for the United States to have nuclear weapons as the ultimate guarantor of the safety of our expeditionary forces. Nuclear weapons are what make war possible.

In the Middle East, usable nuclear weapons are what make -- nuclear deterrents and nuclear coercion are compellants, they use the word compellants now, the Defense Science Board. That's what makes that possible.

Those usable nuclear weapons are the objective together with the so-called responsive infrastructure. Well, that's not responsive to us, it's responsive to Linton Brooks and The White House. We once built -- these facilities are not really controllable by Congress.

This process is an attempt to prejudice and make an end run around the Congressional decision-making process, put hundreds of millions -- billions of dollars of projects, get the environmental approval, and a kind of an executive branch commitment while we still have George Bush in The White House and before the full impact of debt and war begins to settle in in Congress.

These facilities and this agenda is already very controversial in Congress. And so, by speaking out and committing yourself to fight it, you are joining with a lot of people in Congress who are already fighting it. This is a conservative activity.

Now, I know my time is up, but I just want to say -- okay. Just one more thing then. Much of what has been said tonight has focused on the increase in pit production activity at Los Alamos. And in a way that's proper because that is what this EIS is about.

Innovation and new capacity is absolutely essential for the maintenance of the nuclear weapons program. You can't have a huge complex project like a nuclear weapons complex and have it just idle for year in and year out, decade in and decade out.

The weapons managers are desperate to restart this because they fear that the tacit knowledge and the ideological certainty in the younger generation won't be there to continue the nuclear weapons mission into a new generation. They're right, they're absolutely right.

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 724 (cont'd): Greg Mello

It's not really about an increase in capacity, it's about continuing at all. And a vote, an effort to keep Los Alamos from making plutonium pits condemns -- the nuclear weapons program puts it on a path toward oblivion.

We should be very clear about that so we don't get suckered into a technical argument with people who have a lot of classified information in their back pocket. So it's only by -- as has been done by many speakers here this evening, we clarify our moral and our evaluative stance.

We can make common cause with people who are working for education, for healthcare, for the type of values which could create sustainable economy in New Mexico; because this has not brought us prosperity, it has hurt us economically very badly.

We will be putting ourselves in an economic cul-de-sac, committing ourselves to a path of economic decline, increasing economic disparity when we could be looking at real national security challenges and building sustainability, community, and putting our economics together with our spirituality in a way that makes sense so our kids won't kill themselves.

724-2

724-2

NNSA notes the commentor's concern that LANL operations have negatively impacted New Mexico's economy. The economic benefits from LANL operations are felt throughout the state. Although the SWEIS focuses on those counties most directly affected due to the large number of LANL employees that reside in them, benefits accrue throughout New Mexico, including the other counties of northern New Mexico as the income of LANL workers spreads through the community and LANL purchases are filled through local businesses. Nevertheless, as indicated in Chapter 1, Section 1.2, of the SWEIS, the purpose of the continued operation of LANL is to provide support for DOE's core missions as directed by the Congress and the President. NNSA's need to continue operating LANL is focused on its obligation to ensure a safe and reliable nuclear stockpile. Cessation of these activities would run counter to national security policy as established by the Congress and the President.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 725: Will Parrish*

My name is Will and I'm a graduate of University of California-Santa Cruz class of 2004. And the University of California as many of you know was the manager of the Los Alamos National Laboratory from its inception until very recently, when it partnered with Bechtel and Los Alamos Security, LLC, to privatize the management of the Los Alamos Laboratory. And the University of California also managed the Lawrence Livermore National Laboratory from its inception.

Every nuclear weapon in the United States arsenal was designed by an employee of the University of California. Now, I'm here tonight all the way from Santa Barbara along with five other students and recent graduates of the UC basically for the reason that we want to be here in solidarity of every single person in this room who opposes the production of new nuclear weapons and is working for nuclear disarmament.

And we want to be in solidarity also with everyone everywhere who is working for disarmament of nuclear weapons and production of new nuclear weapons materials. The reason that we're here tonight is that we think that there is no more important place to be in the struggle to disarm the United States nuclear weapons arsenal than right here right now.

And like Greg Mello I have been to each of the hearings that the NNSA has conducted over the past three nights. And like Greg mentioned there has not been a single person who has risen to this microphone and spoken in favor of production of new plutonium pits. There has not even been a single person who has spoken in favor of the U.S. having a so-called nuclear deterrent.

Every single person who has spoken out in the last three nights has opposed the production of new plutonium pits. So I think that the sentiment of people of New Mexico has been made pretty clear.

And, with that in mind, I would propose that we actually -- some of us take on a little different mode in the discussion for the rest of this evening, because the question isn't any more what we think about plutonium pit production.

The people at the NNSA aren't really listening to us anyway, they don't value our opinions very much anyway. What they do respect and what they do value is when we organize ourselves politically to make a stand.

And with that in mind I propose that, in contrast to the process that's taking place right now, that we have somewhat of a genuine democratic process where we actually talk about what we're going to do to stop the production of new plutonium pits in New Mexico for the rest of the night.

So, with that in mind, I invite some of my colleagues and other people to come up here and make some proposals about how we are going to come together and stop production of new plutonium pits and do so as a step toward nuclear disarmament in the U.S. and around the world. Thank you very much.

725-1

725-1

NNSA notes the commentor's opposition to nuclear weapons, pit production, and the process for developing the SWEIS. Refer to Sections 2.1, Opposition to Nuclear Weapons and Pit Production and 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for more information.

725-2

NNSA considers NEPA a vital part of the decisionmaking process. NNSA considers all public comments, whether oral or written.

725-2

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 726: Andrew Culp

Hello. I'm kind of a geek for kind of participatory interactions and all that kind of stuff. So I'll start this out. Good evening.

Okay. So first things off, I think we should give props to the court reporter. So, as my colleague Will brought up, it's fairly unanimous, the people's sentiment here. And so I really encourage people to come and talk if they have interesting and new things to say about pit production. But I want to take this to the next step because I feel that this great convergence of people is not something that always happens and it's something that we have to take into consideration because we're here right here and right now. And there is some wonderful energy and we can go really far with it.

So the first thing I want to do is just up the energy just a little bit more. I've got a little chant that I really like. Okay. It's the people united will never be defeated. Okay. And let's do that three times. One, two, ready, go, the people united will never be defeated, the people united will never be defeated, the people united will never be defeated.

So, in using this forum as kind of a safe space for people who don't always come together, I want to open it up to more of a question and answer, more of a forum, less of a hearing, and see what people might propose.

Now, it's not a propose what we should do in ten years, what the policymakers should do. I want to know what the people should do because we're the people, we're not the policymakers. So who is a person who would like to give me a proposal so we can talk about it?

SPEAKER: Fire all Congress.

MS. BRANDIN: Excuse me. Please, let's not do this. The purpose of the meeting --

ANDREW CULP: I think this is my free speech.

MS. BRANDIN: You're allowed to be up there but not to take testimony from other people in the audience.

ANDREW CULP: I think it would be important testimony for the people to decide what to do about plutonium pit production. So anyone else have an idea?

SPEAKER: I think that everybody should call their Congressman or Representative, every single person.

ANDREW CULP: Every person should call their Congressman or Representative, every person. So how can we do that, how can we ensure that everyone is going to be calling their representatives and that they have a focused goal in mind?

SPEAKER: We have postcards out here, that you can send the postcards.

NNSA notes the speaker's remarks.



Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 726 (cont'd): Andrew Culp

ANDREW CULP: There are postcards outside that people can pick up. And where can they pick them up? Shannyn has them.

SPEAKER: Give them to all your friends.

ANDREW CULP: And I would like to hand it off to my colleague to continue this conversation.

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 727: Sophia Ritchie

My name is Sophia Ritchie, I'm also signed up to speak. I'm going to dedicate my three minutes as well to opening up this room so that we can discuss together. Does anyone else have anything they would like to add or propose?

SPEAKER: Remind all our elected officials that they all took an oath to protect and defend the Constitution of the United States and of New Mexico and we will hold them accountable. It is time that we hold them accountable.

SPEAKER: There is a 1-800 number that you can use to call any member of Congress. You call, they ask you who do you want to talk to, and that's the best number to use free. That number is 888-355-3588. That's all you need to call any member of Congress.

SPEAKER: Repeat it again.

SPEAKER: All right. 888-355-3588.

SOPHIA RITCHIE: I encourage everyone to write this number down and give it to your friends and people in your community.

SPEAKER: Shannyn has the postcards right here that you can give out to your friends.

NNSA notes the speaker's remarks.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 728: Astrid Webster*

I've heard rumors that the Department of Tourism and our illustrious governor want to have a peace conference in New Mexico. And I think we should help him do that, because there are some things that aren't well understood; and that is how important Los Alamos is to our present future, et cetera, how important Eunice is to our present and future, and how important Carlsbad is.

So, if we're going to mention peace in New Mexico, by God, we ought to take people to see all of our nuclear installations, because that would say the word peace and New Mexico don't go hand in hand.

We have diplomacy by trident here. And so I think we should let all the tourists who come to New Mexico know that Los Alamos really is the pits.

NNSA notes the speaker's remarks.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 729: Christy Escobar

We're also going to be passing around a contact info sheet for everyone in this room that would like to be further involved in the rest of the process. And that will be passed around throughout the remainder of this hearing.

SPEAKER: Maybe we could develop a pledge like there is a peace pledge now about Iraq. Maybe we can develop one about this issue here and promise civil disobedience if something is not done.

SPEAKER: I do want to mention quickly that there is a call for nuclear disarmament. Everyone please sign it. We all are here for this process. We do all want nuclear disarmament. Let's all work together please to support this.

SOPHIA RITCHIE: The woman in the back mentioned civil disobedience. And I would just like to propose that as an option. I know that once we go back to California, we will be participating in nonviolent civil disobedience and solidarity with the people of New Mexico until pit production is stopped and not continued further in this state.

And, if anyone has proposals at this time for other things that we could do, solid ideas, we can take those or open up the floor.

SPEAKER: We need a moratorium to stop all nuclear activity in the state of New Mexico and the United States. We also need an independent investigation of all the nuclear facilities here in New Mexico and around the United States.

They have grossly contaminated the ecosystems of the world. And we are drinking radioactive water. You know, it needs to stop. We do need a moratorium, it's got to stop. I've been an activist 16 years and it has escalated instead of dying down. So it is time that we get a moratorium throughout the United States.

NNSA notes the speaker's remarks.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

**Commentor 725 (cont'd): Will Parrish** (comments continued from page 3-1032)

I'd like to take just a little bit of our remaining free speech time to talk about a few proposals that some of us talked about before this hearing began.

And a few of those included -- and I want to see a show of hands of people who support these when I say them, please. These included organizing car pools to meet with Congresspeople to express our opposition first of all to the process by which this SWEIS is being carried out and also to express our opposition to production of new plutonium pits and to other activities in the Los Alamos National Laboratory.

So who favors going in car pools to meet with Congress people about that?

So what we're going to do -- we happen to be working with the Los Alamos Study Group which many of you may have heard of, I assume most of you have. And, if you sign up on the Los Alamos Study Group sign-up sheet, we promise that we will be in touch with you about any of these plans that we propose over the course of the time that we're here.

We're here through August 18 working with the Los Alamos Study Group. And we would also love to work with the other wonderful community organizations in New Mexico who would like to be a part of these plans also. Okay.

So another plan that we talked about was performing nonviolent civil disobedience. I don't want to go into too much detail beyond that right now because some of those things should probably be worked out privately. But engaging in nonviolent civil disobedience to help bring about a halt to plutonium pit production at Los Alamos Laboratory.

Who is interested in that idea? Great. Okay. So those were the two ideas that we were most in favor of. Thanks to those of you who are interested in those, we will be in touch with you. And, in our remaining free speech time, we'll give it over to other people in the audience who have ideas.

SPEAKER: I'm going to state again, Shannyn has these postcards and the labels for Udall, Bingaman, and Domenici. All you have to do is give them to ten people. And she's got the labels for those ten people, three to each person with the label. She's got them. This is a really good opportunity to make a difference. She's got them already, she has thousands of them.

SHANNYN SOLLITT: I printed 18,000.

SPEAKER: This is an important move that she's made here, she worked really hard to get these together. So I encourage everybody to get their stack of ten with their labels. And give ten to each person with the three labels.

NNSA notes the speaker's remarks.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 730: Kamara O'Connor*

My name is Kamara O'Connor. And I just want to bottom line everything that we as a community took democratically to discuss in this incredibly undemocratic process to note that we decided, one, that everybody in this room was going to sign one of these postcards and send them in.

Two, that everybody in this room is going to sign your name and carpool with us to sit in on Congressional offices and let them know what we think about the nuclear weapons production. And three, we're going to, I don't know, block Los Alamos, shut that place down. Like are you guys ready to do this?

The NNSA needs to understand that the New Mexican community is united to defeat this together, forget all the petty stuff, this, that, and the other, we're all going to work together and we can then succeed. Thank you so much.

NNSA notes the speaker's remarks.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 731: Floy Barrett

I'm a member of Albuquerque Center For Peace and Justice and I have been active in all of this issue for many, many years. I think everyone who has spoken before has put my sentiments out there already about the whole issue of the new site environmental impact statement.

I support all of that. What I would like to do tonight is just to reflect a moment about the great minds that are up at Los Alamos. The people who invented and came up with this horrible, horrible nuclear bomb have got some intelligence that could be used for very positive things.

I think we should challenge them to use their great minds to come up with renewable energy for all of us, to come up with many ways of using the technology to clean up everything out there that's in nuclear waste and also to use their great minds to work with our communities to develop the very best that is possible in health.

I think that they have the brains to think of all kinds of technologies that could be used in the health field. They've already done something with lasers for eyes and a few things. But it's just a sad affair that they're wasting those great minds on destruction instead of something that could be constructive. And I think that's what I'd like to challenge the scientists to do.

731-1

731-1

NNSA notes the commentor's opposition to activities related to nuclear weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 732: Judith Kidd

Hi, I'm Judith Kidd with the Albuquerque Center For Peace and Justice. And I really appreciate all the information that I have learned from all the excellent speakers tonight and the organizing ideas that have come out of our friends.

I feel so strongly about some of the same ideas that the preceding speaker just gave. And I'm not going to repeat all that. But we do, we need to work on getting Los Alamos -- let those people work on things that support our future. I'm thinking of our children, our grandchildren, our grandchildren's children.

What will those people, what will those young people think of us down the road if we haven't put energy at this critical time into sustainable environmental living, into climate control, into all the kinds of things that are going to create a better world. We really need to focus on that.

And I hope all of our energies, our organizing energies, are speaking to the people in Los Alamos, get us to work together on that. We must work to create a peaceful sustainable world for those future generations. Thank you.

732-1

732-1

NNSA notes the commentor's desire for activities at LANL to be focused on areas other than those related to nuclear weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.



Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 733: Bob Anderson**

My name is Bob Anderson, I'm from Albuquerque, I'm with a group called Stop the War Machine. And our group's focus is the military industrial complex which runs the state of New Mexico and most of this country ever since World War II.

And we try to broaden it out a little bit past nuclear weapons. But we want to speak to what's happening with this EIS and the process of it. Two things I want to point out on that.

One, there's a big silence of why there's no hearing in Albuquerque for this process, the largest city in the state, the state that's down river from where all this crap is going to be washed out and has been washing out for 50 years up there downstream into our water supply.

733-1

There's no hearing scheduled for that. And I have written and asked for that. And no word, no response to it why Albuquerque has been omitted from this.

Santa Fe and Albuquerque and all the places downstream are going to be switching to drinking surface river water. We know that because our aquifer has been drained. The water quantity question has become a water quality question also.

And we know that, with the expansion of production in Los Alamos with this pit production, we're going to have a problem like a super Rocky Flats. If there's an accident, a volcano, an earthquake, or an accident in production or waste transport or whatever, that stuff is going to all come downstream.

733-2

And I don't think any of the politicians care about the people who are going to be drinking this stuff. I agree with everything everyone else has said about this is a nonproliferation issue, we should be stopping this, we shouldn't be continuing it. So, in terms of process, I want to bring that into it, that the EIS has some very serious omissions in it.

Also I want to point out some other omissions in the process and the draft statement. In a sense all that's preceded us here tonight is a political statement in a lot of ways. An environmental statement should look at not just health and water but should look at environment, the social environment we live in, the political environment we live in, the military environment we live in in the world.

733-3

Those should all be in there. There's none of that in that. None of this will be reflected in the statement unless you can bring it in in some technical kind of way. And we have to expand it out from that. In a way this is sham. But in a way it's a preparation for us to be able to try to organize ourselves.

The reason they're pushing this thing is Pete Domenici, he wants the pork for the state, the military people want the jobs and the money. But the military of the country is facing global resistance to our empire that they're trying to build.

**733-1** NNSA notes the commentor's desire for hearings in Albuquerque. Although there were no public hearings in Albuquerque, other means of providing comment on the Draft SWEIS were provided consistent with past practices. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional information.

**733-2** The SWEIS evaluates the continued operation of LANL, including varying levels of pit production; however, the maximum level of up to 80 pits per year is vastly lower than the levels performed at the Rocky Flats Plant. Refer to Section 2.12, Comparison to Rocky Flats Plant, of this CRD for more information. Design, procedural, and operational experiences at the Rocky Flats Plant formed the basis for many lessons learned that have been used throughout the nuclear weapons complex to increase protection of public and worker health and safety. At LANL, there have been numerous advancements in facility design, operations, equipment, procedures, and training to minimize the risk to the public, workers and environment as a result of LANL activities. The accident analyses included in the SWEIS consider a range of possible initiating events that could result in the release of materials to the environment. These events include earthquakes and other natural phenomena as well as those hypothesized to occur during production or waste transport. Detailed analysis is then focused on the most significant of those accidents based on potential consequences and risks. Thus, although all accidents or failures may not be addressed specifically, impacts from the accidents analyzed in Chapter 5, Section 5.12, of the SWEIS are expected to result in impacts that bound those that would result from other reasonably foreseeable events. NNSA and the LANL contractor use the results of analyses in the SWEIS and safety analysis documents to evaluate accident scenarios and determine ways to reduce the possibility of accidents occurring and to mitigate their effects. This includes incorporating features into facility design and operations to protect the health and safety of workers and the public.

**733-3** NNSA notes the commentor's opinion regarding topics to be included in the LANL SWEIS. The SWEIS has been prepared consistent with the Council on Environmental Quality NEPA regulations (40 CFR Parts 1500-1508) to "insure environmental information is available to public officials and citizens before decisions are made and before actions are taken." National policy is not within the scope of the SWEIS.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 733 (cont'd): Bob Anderson

And they're resorting to all kinds of devious destructive weapons. The B-61, like Jay Coghlan was talking about, if they use that weapon on a small scale and they breach the threshold of the horror of using nuclear weapons in warfare on a global situation in the world, that opens the door to a whole new horrible world that none of us want.

We're living in a state I think that is very much like the people of Germany in World War II, when the Nazis were preparing the global war machine. That's where we're at. And it's not just nuclear weapons. That's the most horrible thing. But there's a whole family of weapons and systems that they're developing here.

And I just want to draw your attention to the green flier that we produced about the beam weapons that they're developing here in the state between Los Alamos, Sandia, and Kirtland Air Force Base to control and kill people with laser weapons, microwave ovens, directed energy weapons. This is the new generation of where they're headed.

We've got to stop all that. It's got to be people like us right here in the state. I just want to say that we've got to get this hearing down in Albuquerque, there should be a hearing for it down there on the plutonium pit production and the environmental problems of it.

And most of all it's a criminal enterprise. The politicians behind it are criminals and they should be put in jail and this project should be shut down. Thank you.

733-1  
cont'd

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 734: Janet Greenwald

Hi, I'm Janet Greenwald, and I'm one of several coordinators of Citizens for Alternatives to Radioactive Dumping. We deal mostly with issues of contamination of people and land and water and potential contamination.

When I first joined CARD, which is the acronym, I lived in Dixon, New Mexico. And my family has a farm there and that's where two of my children still live. They have other jobs, but they also farm like most people in the area.

They sell their produce at farmers markets and so forth. And a lot of our organic produce comes from that area of the world, in New Mexico and outside of New Mexico.

After the Los Alamos fire, a friend of mine, Carol Miller, sent samples of her broccoli to Los Alamos. And they tested the broccoli and found that it was high - - had unusually high levels of americium. And the broccoli -- Ojo Sarco is the next valley over from Dixon, it's kind of up from Dixon.

734-1

And then I went to the resulting meeting. And at the meeting the state and Los Alamos said that, given the average consumption of an American of broccoli per week, that a little bit more americium there in the broccoli was fine.

But, of course, we know, those of us who have lived in the country or live in the country know that, when your broccoli comes in, you eat a whole lot of broccoli, you feed your children broccoli, you take broccoli to your grandmother, you take a lot of broccoli to the farmers market, and so on and so forth.

In Ojo Sarco there was also -- right after the Los Alamos fire, there were aberrations in animal birth, goats, chickens, and horses. And also those same aberrations were seen in Sapello which is north of Las Vegas and in Gallinas which is north of Las Vegas.

734-1  
cont'd

There was a young woman who just came into the state who had a metals body count before she came in. And she didn't really know about Los Alamos, she was camping. And the ash started falling like it did in Ojo Sarco and Penasco and many places. And she just took videotapes of it, wow, this is really a trip. So then afterwards she had a metals body count. And her body was full of all kinds of metals.

So, due to that information and other information that is still coming in unfortunately about contamination of soil and plants, our organization believes that an environmental injustice has been done to the low-income, resource-light communities, mostly of color communities surrounding Los Alamos and especially downwind from Los Alamos.

734-2

And we believe that, to put an additional burden on people who are already stressed, whose health is stressed, environment is stressed, is an environmental injustice and also violates Title VI.

734-1

Low concentrations of americium are found throughout the environment, mainly as a result of past releases to the atmosphere from above-ground nuclear weapons tests. As measured by LANL during the fire, positive americium sample results existed only at TA-54, Area G, where it is not unexpected to observe elevated americium-241 concentrations in air. The New Mexico Environment Department Oversight Bureau data, however, showed elevated values for americium at two unexpected offsite locations on the eastern boundary of LANL, and it is possible that these values were caused by americium released during the fire. In the Environmental Surveillance Report for 2000 (LANL 2001a), LANL reported the analysis results for foodstuffs samples from the LANL and surrounding perimeter areas, including several Native American pueblo communities. The concentrations of radionuclides in foodstuffs collected from the LANL and perimeter locations were generally consistent with regional background concentrations and, for the most part, were statistically indistinguishable from the concentrations in foodstuffs collected before the Cerro Grande Fire in 1999. Anecdotal reports notwithstanding, the New Mexico State Department of Agriculture Veterinary Diagnostic Services Division stated that it did not see any pattern of adverse livestock health effects in northern New Mexico that could be correlated with exposure to smoke from the Cerro Grande Fire (Taylor 2006). Because Sapello and Gallinas are some 60 air miles (96 kilometers) from Los Alamos, on the lee side of the Sangre de Cristo range, and not in the direction of the prevailing winds during much of the fire, it is unlikely that any health impacts from the smoke plume would be seen at those locations.

The Cerro Grande Fire is estimated to have consumed more than a million tons of wood containing hundreds of tons of different metals (for example, 150 tons of aluminum, 130 tons of iron and 100 tons of manganese) and released about 7,500 tons of particulate matter to the atmosphere (RAC 2002). The metals and many of the other compounds in smoke are components of the particulate matter. The New Mexico Environment Department collected produce and soil samples from farms and communities after the fire. Concentrations of many of the metals measured were higher in predominantly upwind communities or communities out of the main smoke plume, such as Santa Fe, Peña Blanca, and Abiquiu, than in downwind communities like Embudo,

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 734 (cont'd): Janet Greenwald

So this is another approach that we can use to fight back. And I urge us to develop that approach. I think that in this modern age environmental justice is very important because, if you cannot dump on the resource-light people of the earth, can you really have a second nuclear age? What do you think? Thank you.

Española, and Dixon. Levels measured in soil from the Jemez Mountains were similar to or greater than those measured in locations downwind of the fire. Concentrations of metals that have been used and disposed of at the site, such as barium, copper, beryllium, mercury, and silver, were either not above ambient levels or were below detection limits in soil samples. The influence of fallout from the smoke plume was not discernible in the soil samples. The New Mexico Environment Department concluded that air pollution, background soil levels, and fertilizer application could have been responsible for the levels measured.

**734-2** As discussed in Chapter 5, Section 5.11, of the SWEIS, no disproportionately high and adverse impacts on minority or low-income populations would be expected to result from LANL operations under any of the alternatives. This analysis reflects changes to the environment that resulted from the Cerro Grande Fire. As discussed in Section 5.4.1, the impact of nonradiological air pollutants resulting from LANL operations on the public would likely be minor. As discussed in Sections 5.6.1 and 5.6.2, radiological and hazardous chemical risks to the general population resulting from normal operations would be small. As discussed in Section 5.10, the risks associated with transporting radioactive waste offsite for disposal would result in less than one excess latent cancer fatality among the exposed general population along the shipping routes. To the extent that there is a potential for adverse impacts, the analyses have determined that most of the impacts would affect all populations in the area similarly. The greatest impacts would generally affect those living closest to LANL, for example those within Los Alamos County, which has a low percentage of minority and low-income populations. Refer to Section 2.11, Environmental Justice, of this CRD for additional information.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

***Commentor 735: Dorie Bunting***

Janet Greenwald has devoted about 20 years of her life to this issue and at great sacrifice. My name is Dorie Bunting, I'm from Albuquerque. And I'm just saying that Janet has spent years and years on this issue starting with the WIPP facility down at Carlsbad.

I would just like to say that, looking back over of years of these hearings, many years, we've come to a point in our history here in this country that is apocalyptic. And I think that's what we're saying here tonight, that we stand on a precipice.

And I think we are up to drawing back from this precipice. We all have strength and ability to do this. And we can do it. All during the Cold War we said that the Soviet Union -- we couldn't make treaties with the Soviet Union because they wouldn't abide by them. And this evening we're talking a lot about the nonproliferation treaty to which we are party.

And that you have to realize that our country up to before this administration put in a great deal of effort into coming to agreements and trying to stem the nuclear holocaust. And that's what we have to get back to, to a civilized approach to the world community.

And also I want to urge you to watch the media in your communities and look for openings to use the media because the media as we know is being more and more taken over by the corporate interests and leaving us out in our opinions.

So I just want to say that the Tribune and the Albuquerque Tribune in the last couple of years has moved quite a bit toward publishing a lot of opposition to the nuclear issue. And, if you watch that and then respond and encourage them to do that, call them.

And these are two headlines from 2003 at the time of the previous hearings. A bomb factory That's the Pits. And Deadly Silence on Nukes. And they recently had an editorial about Sue Dayton, a very complimentary editorial. So don't give up on the media, write letters to the media and use that as a means of communicating to your community. Thank you.

NNSA notes the speaker's remarks.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 736: Sarah Miller*

My name is Sarah Miller and I am part of -- I'm an intern at the Los Alamos Study Group this summer which is a great organization, much like all the organizations that you all work for. And I urge you strongly to unite and support each other in this process, in this major event coming towards us recently to disarm Los Alamos, New Mexico, the U.S., and the world.

We must unite, we must support each other, and in that support bring an end to this atrocity that is nuclear weapons that is being supported by LANL and the DOE and the U.S. We must end this. So please, I call you all to urge everyone that you know to stop nuclear weapons, to stop arming the U.S., to stop this increase of militarization, please, please do what you can, please.

NNSA notes the speaker's remarks.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 737: Dominique Mazeaud*

My name is Dominique Mazeaud and I'm from Transylvania, I'm not from here originally, you can hear that. I became an American citizen in 1989 because I started coming to these hearings. And I decided I had to become one. I have been brought up by a French father who really was so grateful to America for what America had done for Europe and the world. I believe totally in the American soul as put out by our forefathers and foremothers.

However, today my heart is really feeling very broken because I wonder about where our soul is going. And in terms of -- I agree with everything that has been said. I don't want to add anything on those hearings.

But, in terms of actions, September 21st is International Peace Day as put out by the United Nations. And every year more and more people are marking and taking that day very seriously. And there is a call for all women and, of course, bringing along with us our men to really unite and speak up and share some of the things that we've been speaking about tonight.

So I keep tuned and let's all get together on the 21st of September. We have enough time to get organized and unite and we are. Thank you.

NNSA notes the speaker's remarks.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 738: Shama Beach

I have three simple sentences. And I thought that -- I have been coming to these meetings for 15 years. And I just thought of another simple sentence to add to the other three which was that, if 15 years ago they had listened to the good people who were speaking at the hearings, we would have shut down the lab at Los Alamos as we know it and we would have a first class institute creating alternative clean energy and all the other good stuff we need.

738-1

So these three sentences I decided to write so that my five year old grandson could understand them. I think we are drowning in words.

I say no to Los Alamos National Lab's plan to quadruple plutonium pit production. We have enough triggers for nuclear warheads that will be reliable for the next 60 years. Under the nuclear nonproliferation treaty which our country signed, we should be dismantling what we have.

738-2

Yes, it is very polluting. It is polluting our atmosphere, our drinking water. What else did I say here? Oh, so we are polluting more. Quadrupling the plutonium pit production is bad, it is a bad thing to do. You know it, I know it, and everyone in this room knows it. So, as an elder in this community, I ask you to do the right thing. Dismantle and clean up. We will help.

738-1 NNSA notes the commentor's opinion that LANL should be closed. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President, and is therefore not being considered in the SWEIS. In addition to these activities, however, research is conducted at LANL in the area of alternative clean energy. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

738-2 NNSA notes the commentor's opposition to increased pit production at LANL. U.S. efforts to ensure a safe and reliable nuclear stockpile, including activities conducted at LANL, violate none of the terms of the Treaty on the Non-Proliferation of Nuclear Weapons. Cessation of these activities at LANL would be counter to national security policy as established by the Congress and the President, and is not being considered in the SWEIS. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

The potential environmental, health, and safety impacts of the continued operation of LANL under the three proposed alternatives are analyzed in Chapter 5 of the SWEIS. Increased pit production would result in greater amounts of radioactive and chemical waste as well as increased air emissions and wastewater discharges, but as demonstrated by these analyses, these increases can be safely managed.

Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites consolidated) such that only about 800 remain to be addressed. Continuation of cleanup activities at a pre-Consent Order level is included in the No Action Alternative, while actions necessary to comply with the Consent Order are evaluated under the Expanded Operations Alternative. As stated in Chapter 1, Section 1.4, of the SWEIS, however, NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS. For more information about proposed activities in support of the Consent Order, refer to Section 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD.



Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 739: Erich Kuerschner

Boy, I like the way this -- the way this direction is going. Just as a background, my father worked for weapons all his life starting working out working for Hitler on the V-2, the guidance system, and came to this country and worked on weapons systems until he retired in 1978 including doing national intelligence estimates.

So I think it's all clear to us now, whether we have democracy or not, it's always been hard to try to explain to my children Hitler came into being. And it ought to be clear when we can't have a democratic process on how best to determine the future role of Los Alamos in our communities.

But some outsider that we don't know tries to tell us how to do it and we have unanimous consent. I mean it should be clear that it's not a matter of keeping democracy, it's a matter of regaining democracy, because, you know, let's be clear here, we do not have a democracy.

The first thing that I want to state is that I want to make a formal request for an extension of time. I would like hearings, new hearings to begin one week after -- I mean 30 days like they're supposed to be after the EIS became generally available. So that makes a new set of hearings happening on September 5th and then we have a comment period until October 5.

739-1

739-1

NNSA notes the commentor's request to extend the comment period. NNSA believes that 75 days for public review of the LANL SWEIS is sufficient and is consistent with established practice. Air quality and waste management impacts are summarized in Table S-5 of the Summary.

Now, I've worked on EISs almost from the very beginning with Skip Mornings and Merrills. So I know what an EIS is supposed to look like. This is a sham. The sad thing is the economics of this thing, if it were done properly like we did EISs back in the seventies, it would be so obvious that all these things you guys are saying would be so clear.

739-2

Chapter 4, Section 4.8.1, of the SWEIS presents numerical information on the current socioeconomic environment for those counties most directly affected by LANL operations. Chapter 5, Section 5.8.1 presents the projected socioeconomic impacts for the various alternatives under consideration. The socioeconomic impacts associated with these alternatives are expected to be limited as discussed in Sections 5.8.1.1 and 5.8.1.2, respectively, because there are no large changes in employment projected under the No Action and Reduced Operations Alternatives. Greater detail is provided for the Expanded Operations Alternative in Section 5.8.1.3 because this alternative would be expected to result in increases in LANL employment over current levels and, by extension, have greater socioeconomic impacts over the other alternatives analyzed.

There's no numbers in socioeconomics. I mean there's a few dribbly sentences by someone who has one year as PR. I mean there's plenty of Ph.D.s in the military and in Iran and everywhere that could laugh at this. So this is really an issue of three boys or a small group of men just like Hitler wanting to see how far they can get an empire in their lifetime before they pass away. Let's just really be clear about that.

739-2

So it's really a question of like either extending these hearings and let's all work on the same side and hopefully we're all in the same country. Except for a small group of people, everyone is unanimous on this. So let's extend these hearings and have a legitimate process.

739-1  
cont'd

The second part I wanted to make, if you look at the impact, the earlier speaker implied that the greatest impact here is air quality and waste management. I mean it's nonsense. We all know it's pit production and weapons production, I mean that's the really big issue.

739-3

739-3

NNSA notes the commentor's opinion regarding the priority of economic analyses in the SWEIS. The purpose of the SWEIS is to evaluate environmental impacts of the continued operation of LANL. The economic tradeoff evaluations suggested are not within the scope of the SWEIS.

This needs to be quantified. If somebody really thinks pits are useful -- and I mean my understanding is that, by the time we could possibly use these pits, the building

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 739 (cont'd): Erich Kuerschner

which we're proposing to build from it will be obsolete. They won't come into play after that building is no longer -- I mean the whole thing is absurd.

739-3  
cont'd

And, if one were to quantify this and treat economics with the seriousness that one, you know, addresses chemical and air quality, I mean it would just be so obvious. And the sad thing is the person who coined the term voodoo economics, ridiculing Reagan's nonsense use of lack of numbers or quantification, was George Herbert Bush.

Anyway there's no evidence to support pit production, and any honest scientific study would make that really clear. So anyway let's go to what we can do. I mean I do suggest that we try to force reason and science back into our society and we do use -- this EIS statement addresses the real thing.

If it were done in good faith, we would have those extra 30 days after we get the EIS and so a whole new set of hearings. And, if we don't get those, I mean it's time for litigation or civil disobedience.

739-1  
cont'd

And so let's just make it clear that maybe it's more cost-effective to talk this out like adults and let's secure the national defense for our children and for the future and let's all work on the same side. I mean the sad thing is, if you read carefully what the mandate of LANL is, one of them includes providing for the national security, another one is disarmament.

I mean a real EIS would give you a table, give you numbers, give you marginal products and say an extra dollar spent in pit production relative, an extra dollar spent in disarmament, or an extra dollar spent on non-nuclear proliferation or whatever.

739-3  
cont'd

You know, it would be obvious, there's no numbers there because there aren't any. It's nonsense. And that's what it is. But I still think we should take an honest step to address this rightly before we go into litigation and civil disobedience.

And one way we can do it is just start right now. I like the tone that the Los Alamos Study Group took in terms of saying whose meeting is this, who are we deciding for. I mean does Bush get to decide how this country goes and whether we have nuclear arms?

I mean let's face it, World War III has started. I mean with Iraq, if you look at what happened in Germany, I mean we are in this. And the real issue now is are the Americans -- do they value freedom enough, are they willing to fight for what our forefathers did, a democracy, and return democracy back to America.

I saw the rubble, I saw the destruction, I know, any one is welcome to come to my house and look at the evidence of what Hitler had. He had much more superior military hardware than this country has at that time. But look what happened. In the end, like Eisenhower said, it's not the size of the dog in the fight, it's the size of the fight in the dog.

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*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 739 (cont'd): Erich Kuerschner*

And this is not a fight that we can win. You know, so we're on a precipice here, whether we open up this nuclear Pandora box and go in that direction or whether we have the guts and courage to stand up for our kids and secure the kind of country that we want.

I mean they're doing the same thing now that happened to the Native American population, it happened to the Spanish population. It's always a bunch of people saying this is mine, I get to decide process, I get to decide what we do, where we go.

Let's be clear about this. This is what Skip Morings and Merrills on their first EIS back in 1970, the Baltimore Beltway group. May I talk for a few minutes? It's not your country, please. I mean it's our country, the people get to decide what this process is, this is none of your business quite frankly. Do we have a democracy here or do we not? I would like the record to reflect that the facilitator said we do not have a democracy here.

Let's have a vote on who is being democratic. Am I being democratic? Is the facilitator being democratic? Anyway, what I suggest we do is we keep this thing as a start of our commitment. I mean we saw how things changed in Vietnam, those of you who saw that. We've got civil rights. I mean that's what gets you anything, it's the guts that you have and the way that you show them, your willingness to stand up for what you believe in.

So, as a beginning of that -- and I like a lot of the suggestions that the Los Alamos Study Group had. But, in addition, I'd like to suggest that we keep -- I talked to the hall monitor. He said we can keep this building open and this room open as long as we like.

So I think we can show the public like who is really interested in making America secure, who is really interested in America's defense. Is it the people who want to try to collect their knowledge and work together on this problem or is it a facilitator who just wants to go home and call it a done deal. Thank you very much.

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 740: Andrew Tongate

My name is A.J. Tongate. And I must appreciate and respect everybody here for doing what they feel they need to do. I have a lot to say and I don't really know to where to begin.

But I want it to be known that I am one individual, but my voice is for my community. It is not solitary. I'm here on behalf of everyone at my community, Santa Fe, New Mexico, the United States, and the world. The entire world.

We do not want increased production, we do not want production of any kind of nuclear weapons. This is no way to grow, this is no way to behave, let's all be adults here. Come on.

So that being said I must appreciate you for bringing me here because I was very much unaware of what was going on. And without this meeting I probably wouldn't have taken action for a long time.

And now that I am here, I need to say that this is not enough, this meeting will not accomplish anything. We must keep growing, we must keep acting, we must bring this to a halt. We must do something.

Do not leave tonight feeling you have accomplished something, because you have not. We have not accomplished anything until we see the complete collapse of this horrible, horrible industry.

It's taking me a lot of effort to smile tonight. I am smiling because I do have hope, because I see so many people coming tonight and expressing their desires for peace, for love, for humanity.

And I just need to say that I value my life and I imagine everybody here values their life. And, if that is true, think of the people on the receiving end of each one of those nuclear weapons. They must value their lives as well. There's no other reasoning. If you value your life, you must value theirs because they do as well. Thank you.

|| 740-1

740-1

NNSA notes the commentor's opposition to pit production and nuclear weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 741: Linda Wiener**

Hi, I'm Linda Wiener, I am with Concerned Citizens for Nuclear Safety. I would just like to agree with most of what's been said tonight and just add a little bit. I'm just going to tell some things that have been -- these are the things that have gotten in the newspapers in the last six months about Los Alamos' environmental record.

We have it was mentioned the hexavalent chromium found in the monitoring well that they had concealed for two years. By the time we knew about it, it had doubled.

There are PCBs in our water, there's perchlorate in our water. Over 1,000 discharge sites at Los Alamos that should be monitored under the law, under the Clean Water Act, they fail to monitor.

There's an issue of the fake monitoring wells. This is my favorite. \$125 million spent on monitoring wells almost all of which failed to monitor. They filter out the heavy metals and the radionuclides before monitoring. And so it always looks fine. It's everything is always fine.

SPEAKER: They're a bunch of criminals.

LINDA WEINER: And this is just the stuff that's been in the newspaper. Imagine what doesn't get in the newspaper.

So considering this record, their failure to obey environmental laws, their failure to monitor, their failure to protect our air and water, doesn't it seem insane that we should increase the kinds of activities that Los Alamos does. I think it's pretty clear that they're incapable. Thank you.

741-1

741-2

741-1 NNSA notes the commentors' concerns about groundwater contamination at LANL. Some of the groundwater data, particularly associated with certain multi-screen monitoring wells constructed after 1999, are believed to need reassessment due to potential residual drilling fluid effects. The drilling fluid effects are quantitatively assessed in the 2005 Well-Screen Analysis Report. LANL staff are addressing the quality of the set of wells in question and the data resulting from these wells. As well quality issues are clarified and resolved through additional sampling, well rehabilitation, or well replacement, the set of groundwater data will increase in size and improve in quality to support ongoing monitoring, investigations, and decision making. Chapter 4, Section 4.3, and Appendix F, of the SWEIS and Sections 2.5, Water Resources, and 2.6, Offsite Contamination, of the CRD discuss current data sampling results with regards to polychlorinated biphenyls, perchlorate, and hexavalent chromium, and also, the plans for improving monitoring well construction, sampling data collection, and reporting.

741-2 NNSA notes the commentor's opinion regarding the failure to obey environmental laws, to monitor, and to protect the air and water at LANL. NNSA is committed to operating LANL in accordance with applicable laws and regulations and to managing activities to be protective of public and worker health and the environment. Chapter 4 of the SWEIS discusses the environmental monitoring of air, soil, liquid discharges, surface water, and groundwater that is conducted at LANL and in the vicinity. The results of this monitoring are reported annually in environmental surveillance reports (available at [www.lanl.gov/environment/all/esr.shtml](http://www.lanl.gov/environment/all/esr.shtml)). The reports show that LANL operations generally comply with the applicable environmental regulations. NNSA does not agree with the inference that there are unmonitored discharge sites, which is assumed to be referring to the LANL solid waste management units.

As described in Chapter 4, Section 4.3.1.3, of the SWEIS, the LANL contractor had managed stormwater runoff from its solid waste management units under a Multisector General Permit Program, and then transitioned towards management under an individual National Pollutant Discharge Elimination System industrial activity permit. Chapter 5 of the SWEIS evaluates the potential environmental and health and safety impacts of continued operation of LANL for the

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 741 (cont'd): Linda Wiener

three proposed alternatives. LANL operations are projected to remain in compliance with the regulations that protect public health and the environment and, as demonstrated by the analyses, can continue to operate safely and remain in compliance even under the Expanded Operations Alternative. Refer to Section 2.6, Offsite Contamination, of this CRD for additional information on the potential impacts to the air, water, and other environmental media.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 742: Miguel Pacheco**

I could have been -- I wanted to be in 100 or 200 different places than this tonight. But I had to come here. I grew up here, I've been here all my life, and I've seen the disrespect, the lack of respect that is happening.

That's why certain mentalities wanted to create nuclear bombs, nuclear power. A lack of respect, lack of respect for life and for the health of the people who live here.

The last lady that spoke, it's true, there's been so many coverups. We've been so polluted and full of toxins. But this so-called government of ours is so busy trying to oppress people throughout this world. They started here, they oppressed the local people.

And now why else would they want to bring these toxic chemicals and heavy metals, uranium curtain. A woman spoke of the Iron Curtain. It's a uranium curtain here. Sixty years, they buried all those toxins up in Los Alamos.

|| 742-1

There are 15, 20 arroyos and rivers that go down to the Rio Grande. What's that? 10 million people plus are taking that water. The air after the fires that happened. No one is immune to this.

|| 742-2

|| 742-3

All this money that could be -- people have talked. Where could this money be directed. It could be directed to health, education, just helping people grow, helping people survive. Too many people I have talked to, they couldn't come because they're too busy surviving, no gas money. That's criminal.

The Department of Energy, it's like a department of capturing energy, capturing the people's energy. It's time to rise up. You know, we're all in poverty, we're all being enslaved. Why? Because of certain invisible elite that want to take over the world. Okay.

They talk about weapons and space, right, nuclear weapons and space. Who needs one bomb? Who can really justify that dropping one bomb anywhere? What's happening in Lebanon? Mainly innocent children, women, children, old people. Iraq, depleted uranium. Who is going to take this waste?

|| 742-1  
cont'd

The whole cycle from uranium. And the Navajos and the Hopis, the Denai, they mined that uranium. That was the first initial step. What happened to them? The lungs, the cancers.

|| 742-4

Our water, you know, the limited water here has been polluted. It doesn't make sense. So it's a game to enslave people. It takes more energy to create this nuclear power, nuclear weapons. Why? To enslave people. So let's rise up. It's time to say no more. It's insane. We shouldn't even have to be talking about this.

|| 742-2  
cont'd

We were given a beautiful earth, a beautiful world. A certain mentality has no respect. And how can we allow them to carry on? They're not our leaders. They have led us to destruction, to death. And why do we permit them to carry on?

742-1

NNSA notes that waste materials have been buried in LANL disposal facilities throughout LANL's history. In the past, disposal of waste was conducted in a manner consistent with standards in effect at that time. As standards have evolved, waste disposal practices have also evolved. The disposal of waste is addressed in Chapter 5, Section 5.9, of the SWEIS. Future disposal of waste at LANL will be performed in compliance with applicable regulations. DOE currently manages the material disposal areas and potential release sites in compliance with all Federal and State regulations. For many years, NNSA has conducted a program of remediating sites potentially contaminated by past operational practices. Refer to Sections 2.7, Waste Management, and 2.9, Compliance Order on Consent (Consent Order) and Environmental Restoration Activities, of this CRD for more information related to this comment.

742-2

Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, of the SWEIS, over the past 6 years, LANL has a very good record of complying with permit conditions. Under all alternatives, NNSA would continue to meet permit conditions designed to protect water resources at LANL. Most of the treated effluent discharged to the canyons infiltrates into the ground before it leaves LANL property.

There are no rivers that flow through LANL property. In addition, about 80 miles (130 kilometers) of the 85 miles (140 kilometers) of watercourses within and upstream of LANL within Los Alamos Canyon are dry most of the year. These watercourses flow offsite only during snowmelt lasting a week or more each year and stormwater runoff lasting from less than an hour to several days. Therefore, the flow of surface water from LANL to the Rio Grande produces relatively small impacts to the water and sediments in the Rio Grande.

Water quality data from upstream and downstream of where LANL surface waters enter the Rio Grande were compared in the 2005 Surveillance Report (LANL 2006g). This report states "All base flow samples from the Rio Grande had concentrations below drinking water standards and standards for the protection of aquatic life, wildlife

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 742 (cont'd): Miguel Pacheco

One bomb, no. Plutonium, we could go into the volumes and volumes. That's not important. No more bombs.

All these Superfunds are not being funded right there in Los Alamos, all over the country. The Columbia River, all the salmon are dying. Why? Because all those barrels are rotting into the Columbia River. Savannah, South Carolina, North Carolina, all over this country.

You people, the Department of Energy, the Department of Defense, believes they're above the law. They're creating death all over and we still permit them to do that.

So I'm just saying that we have to stop this. I think we should have more hearings. We need hearings in Albuquerque, down south, you know. And then one more thing. The nuclear fuel processing plant in Eunice, New Mexico, set up by the four, five European powers, right. Great Britain, Dutch, German, help me, Netherlands, and France bought into it. || 742-5

When Los Alamos delivered a couple hundred pounds of plutonium, the next day they bought over a half interest. Something is going on. Why are we funding the dictators of the world? Do you trust the leaders in this country? What are they doing? They're killing the world's population. We're not immune to it, we're no better than them. We're next. We have been next. In fact, no more bombs. Let's stop them.

habitat, and irrigation. Radioactivity in these samples was low. None of the radionuclide concentrations commonly associated with LANL operations were detected, except for uranium. Uranium concentrations, (0.5 to 2 micrograms per liter) were well below the Federal drinking water standard of 30 micrograms per liter.”

Contaminants from LANL that historically have been detected in the Rio Grande are mostly attached to the stream sediments. Lead is the only contaminant that has a significantly higher concentration downstream in Cochiti Reservoir sediment. Cesium-137 and plutonium-239 and plutonium-240 are only slightly higher in sediments downstream of LANL.

742-3 Smoke from all forest fires contains hundreds of organic and inorganic combustion products. As noted in Chapter 4, Section 4.6.1.3, an independent assessment of public health risk associated with LANL area air contamination as a result of the fire was conducted by Risk Assessment Corporation at the request of the New Mexico Environment Department (RAC 2002). The study examined data on contaminants that were measured in air, on smoke particles and in soil from the potential release sites and concluded that exposure to LANL-derived chemicals and radionuclides released to the air during the Cerro Grande Fire did not result in a significant increase in health risk over the risk from the fire itself. The Risk Assessment Corporation study concluded that there was some evidence of adverse health effects from breathing high concentrations of particulate matter (PM) in the smoke, but that “Such exposures are associated with any forest fire” (RAC 2002). It is estimated that nearly 7,500 tons of PM were released to the atmosphere by the Cerro Grande Fire, only 10 percent of which came from LANL sources. Many studies have correlated exposure to fine particles with respiratory-related emergency room visits and hospital admissions, work and school absences, premature death, asthma, emphysema, heart disease, chronic bronchitis and acute respiratory symptoms. Children, the elderly, and people with heart or lung disease or respiratory infections are more sensitive to PM. The Risk Assessment Corporation report stated that “It is probable that the calculated risk from PM<sub>10</sub> is greater than the risk from all chemicals and radionuclides combined” (RAC 2002).



Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 742 (cont'd): Miguel Pacheco

- 742-4 Evaluating the potential environmental impacts from the mining of uranium is not within the scope of the SWEIS, which focuses on the environmental impacts from LANL operations.
- 742-5 NNSA notes the commentor's desire for additional hearings, including hearings in Albuquerque. Although there were no public hearings in Albuquerque, other means of providing comment on the Draft SWEIS were provided. Refer to Section 2.2, National Environmental Policy Act (NEPA) Process, of this CRD for additional information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 743: Shannyn Sollitt

Hi, I'm Shannyn from Santa Fe. This is the third hearing I've gone to this week. And I spoke extemporaneously at the first two hearings and I decided, well, this time I would like to follow the rules. It's very difficult for me to do that kind of thing.

But, since this is a site-wide environmental statement that we're making here, I decided to write one out. I understand that, when you come to the hearings, that you're supposed to get answers for the questions that you pose in the site-wide environmental statement. Is that correct? You don't know?

MS. BRANDIN: No, no. The purpose of the hearing is to get your comments.

SHANNYN SOLLITT: But then what are you going to do with the comments?

MS. BRANDIN: They will be published in the final site-wide EIS and the responses will be also.

SHANNYN SOLLITT: These are a bunch of questions I have laid out here in this little bit that I wrote to be submitted to you. I'll read it quickly. The Department of Energy has a deplorable record when it comes to the safety of citizens in regards to the weapons production facilities across the U.S.

This track record has proven just as deplorable at the Los Alamos National Laboratory as elsewhere. In the site evaluation of LANL facility that was made available to the public, I noticed that they cite many instances where the Department of Energy has fallen very short in its ability to protect the environment.

Los Alamos National Laboratories was put in a remote area high on a mountain because of the concerns for secrecy in the second world war. Today the location of the laboratory is antithetical to its purposes, if its purpose is to produce nuclear weapons.

I would like a response from my testimony here to explain to the public what kind of rationale puts a nuclear weapons production facility on top of a windswept mountain in the middle of a wildfire zone and at the source of a watershed that feeds the Rio Grande Bravo River, the lifeblood of New Mexico, providing water for 10 million people? Not good science.

Rocky Flats, the previous pit production facility in Colorado that was closed for its egregious environmental behavior, pumped plutonium contaminated waste into creeks that were feeding the public water supplies. A horrific wave of infant deaths, cancers, and other problems followed.

Not only was the water supply contaminated, but plutonium particulate was found in the soil and sand surrounding the facility. One particle of plutonium, if breathed or otherwise ingested, can kill a human or animal. Documented cases of plutonium particulate found in the ashes of children from Rocky Flats were permitted after death attests to that.

743-1

As the commentor implies, LANL's location was selected during World War II because of its isolation. The continuing mission of LANL, starting at that time, has been support of the U.S. nuclear weapons program. As the needs of the U.S. weapons program have changed, so has the role LANL serves in the program. As announced in the ROD for the *Final Programmatic Environmental Impact Statement for Stockpile Stewardship and Management* (DOE/EIS-0236) (DOE 1996), LANL was selected as the location for re-establishment of a pit fabrication capability partly because of the existing facilities and capabilities. NNSA is aware of the potential for wildfire and has undertaken an ongoing wildfire hazard reduction and forest health improvement program, including extensive forest thinning, to reduce wildfire risk. Chapter 5 of the SWEIS describes the air, water, and other types of impacts associated with the three alternatives for operating LANL. As summarized in Chapter 3, Table 3-19, LANL operations are not expected to result in major detrimental impacts to the environment.

743-2

Environmental impacts associated with past operations of Rocky Flats are not the subject of the SWEIS. The interim levels of pit production proposed at LANL are much lower than were conducted at Rocky Flats. Chapter 4, Table 4-26, of the SWEIS shows that the cancer incidence and mortality rates in counties around LANL are comparable to those of the rest of the United States. Chapter 5, Section 5.6 presents radiological emissions and population radiation dose data associated with projected operations. All projected doses are a small fraction of the dose from normal background radiation received by the population in and around LANL.

743-1

743-2

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 743 (cont'd): Shannyn Sollitt**

I would like a response for my testimony here to explain to the public what LANL intends to do with the waste storage problem that it is already plagued with before even thinking about creating more.

Is the DOE intending to move 12,500 drums buried before 1971 that is currently contaminating the aquifer to WIPP. Such action furthering endangering the population with the possibility of an accident or spill. When an aquifer is contaminated, there is no way to remediate it. What about the tritium, plutonium, and other radionuclides found in the canyons on the neighboring areas.

743-3

On top of the Pajarito plateau is an enormous nuclear waste dump in a fire prone zone. Is the plan to continue the storage of this waste? What happens in the event of a fire or some major weather calamity? Plutonium doesn't burn. But carried by the wind it can land on any farmer's land. One particle of plutonium, if breathed or otherwise ingested, can kill a human or an animal.

Why would any rational person or agency want to put a nuclear weapons production facility on top of a windswept mountain in the middle of a wildfire zone and at the source of a watershed. Please answer this.

743-1  
cont'd

We are making comments not just to be saying things into the wind. We want to know from your scientists why you would want to do this activity there. It's not safe anywhere, nowhere, nowhere, nowhere but there.

This is a site-wide environmental impact that we want -- I want an answer to. And I want to see it, I want -- I have my address here, I want it written to me. Because otherwise you're just completely disrespecting everybody who is getting up here to make any kind of testimony. And I'm following the rules except I'm taking too long. Okay.

Something which is not addressed in the SWEIS review is the spiritual and psychological landscape. Why is there such an inordinately high teen suicide rate in Los Alamos, why did the travesty of Columbine High take place in Littleton, Colorado, a bedroom community for the Lockheed Martin plant. Is this just a coincidence or is it water that could have been contaminated?

743-4

Chemicals discharged from the plant that are known to cause aggression, neurological disorders, depression, cancers, birth defects, leukemia and other types of problems are found in the Columbine Valley. Or is it the soul of the human being that has lost all hope for a just and compassionate world.

Please, before you consider putting this production facility here, answer these questions. I call for a definitive research of the towns close to all the weapons production facilities to be done on the psychological effects on children and adults of the weapons of mass destruction facilities.

743-4  
cont'd

743-3 DOE currently stores transuranic wastes in both aboveground and belowground configurations in TA-54. These wastes include "newly generated" waste, as well as legacy transuranic wastes that were generated after 1970, but before a transuranic waste disposal facility was available. There is an ongoing program to characterize and prepare these wastes for shipment to WIPP. As discussed in Appendix H, Section H.3, of the SWEIS, LANL follows a program that gives the highest priority to shipping transuranic wastes that present the greatest risk in the event of an accident. NNSA intends to ship all of the LANL legacy transuranic waste to WIPP over the next 10 years. The risks of transporting these wastes and of accidents while the wastes remain in storage are addressed in Chapter 5, Sections 5.10 and 5.12, of the SWEIS. To mitigate the potential for a fire that could affect LANL facilities, a forest thinning program has been implemented, as discussed in Chapter 4, Section 4.1.2. Wastes buried prior to 1970 are being addressed through the environmental restoration program at LANL.

Chapter 2, Section 2.2.6, describes the progress that DOE has made in conducting its environmental restoration program at LANL. Since the early 1990s, LANL staff has identified over 2,000 sites that potentially required environmental remediation; only about 800 remain to be addressed. Appendix I of the SWEIS presents options and environmental analyses regarding future remediation activities at LANL that are primarily related to the Consent Order that was entered into on March 1, 2005. These analyses address LANL waste disposal sites and other contaminated areas, including canyons, and provide environmental impact information to facilitate future environmental restoration decisions that will be made by DOE and the State of New Mexico. Appendix I, Section I.3.4.1 summarizes technologies for remediation of groundwater and directs the reader to additional references. NNSA intends to implement those actions that are necessary to comply with the Consent Order regardless of other actions analyzed in the SWEIS.

743-4 NNSA notes the commentor's concerns regarding the possible spiritual and psychological effects of living near U.S. nuclear weapons facilities. Spiritual and psychological effects, however, are not within the scope of the SWEIS. Studies regarding the psychological impacts of living near a DOE facility have not been conducted and DOE has no plans to perform

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 743 (cont'd): Shannyn Sollitt

I do not want to see our children brought up in an environment that condones production of these weapons. I want the children growing up here to see a bright future with the possibility of working at the Los Alamos National Laboratory on life-affirming activities, on technologies that bring answers to the real national security issues of global climate change, on the use of renewable energy forms, on technologies for the remediation of horrific waste from the nuclear industry that started here and that are causing such suffering here and all over the world.

This is a common sense vision that I believe is held by the majority of people here and the world. Thank you.

743-5

743-5

such studies. There are also no studies that link teenage suicide rates to DOE operations. DOE recognizes that teenage suicide is a complicated nationwide and local social issue and has provided grants in the past to local organizations to promote free suicide prevention counseling.

In addition to LANL's primary mission of supporting the Stockpile Stewardship Program, research is conducted in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

**Commentor 744: Richard Yunker**

My name is Richard Yunker, my friends call me Preacher, my friends here tonight. I've had to wait so long and now I'm mad. We showed up tonight on really, really short notice to tell you that we don't need any more WMDs or plutonium pits or weapons of war, we already have too many.

744-1

744-1

NNSA notes the commentor's opposition to pit production and weapons. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

As a species we are committing ourselves to self annihilation. We have a plethora of the most diabolical, sinister, outlandish weapons of murder imaginable. And yet we rail hypocritically against those nations that we deem as enemies when they don't agree with us and want their share of these weapons to defend themselves against us.

744-2

NNSA takes its responsibilities to comply with environmental laws and regulations seriously and is pursuing the cleanup of LANL with regulatory oversight from State and Federal Agencies. Chapter 2, Section 2.2.6, of the SWEIS summarizes the progress made to date in environmental restoration activities since 1999. Appendix I evaluates the environmental impacts associated with potential remedial action alternatives.

We are contaminating our air, soil, water around the world for eons to come as if we think we are the last generation on the planet. Do we not believe in the continuing of mankind? Are we not acting like we don't care about the futures of our children or our grandchildren or great grandchildren.

744-2

They are our only guarantee of eternal life. We go around committing the world -- around the world committing degradations, atrocities on defenseless countries spouting freedom, democracy, and Christianity. And, when a country emerges with a democratically elected leader, we do everything to suppress and destroy it.

The day after 9/11 the Iranians marched in the streets in support of the U.S., deploring the crime, what had been done to us. This administration has so squandered that goodwill and so alienated Iran that Israel and the United States are the worst enemies.

In the April 17 issue of the New Yorker, Seymour Hersh wrote about the administration's plan to nuke Iran's underground nuclear facility at Natanz 75 feet below the surface and rock and steel reinforced concrete using the bunker buster, the B-61-11, referred to as the mother of all bombs. This, of course, will teach the Iranians that making nuclear weapons is wrong.

The Pentagon has demanded that the administration take this option off the table, but they aren't listening. Mr. "Shock and Awe" Rumsfeld and the DSB, that's the Defense Science Board, are telling the Pentagon we can build the B-61 with more blast, more robust, and less energy, less radiation.

And Bush with his messianic vision says he will do what no one else has had the courage to do and that doing Iran will be his legacy. On that day what will 1.2 billion Muslims do?

Why shouldn't Iran want a nuke? They are surrounded by nuclear nations. China, Russia, India, Pakistan, Korea, France, and oh, yes, Israel. Last count 200 warheads. And as of today they are still denying it. We have to stop this madness.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 744 (cont'd): Richard Yunker

I have lived in a beautiful isolated village valley in the Sangre de Cristos for the last 38 years, with lots of big trees, rolling hills, terraced, and plenty of water, but downhill from Los Alamos, downwind from Los Alamos, blissfully and naively growing vegetables, thinking I'm doing the best for my family and friends, only to find out that the manure, the wood, ashes, the compost, and the fertilizers, organic fertilizers I used are contaminated with cadmium, mercury, americium, and cesium. Such pretty names for such vile toxic substances.

744-3

On August 6, 2004, we marched with Pax Christi from Asbury Park to the labs. And, as we marched with our banners, we passed young people, probably technicians, scientists, and physicists. They wouldn't make eye contact with us as if they were ashamed of what they were doing, like they had sold out.

What happened? You were so brilliant, educated, bright futures, full of hopes, ideas. At what point did you think it was okay? Why come you? Who are these thugs slouching towards Babylon, towards Santa Fe, Espanola, Dixon, Penasco, Taos, Chamisal, Truchas, Trampas, Vallecitos, and Llano?

Their smooth, disarming manners, bland mendacious smiles, pockets full of money, poison, cancer and suffering, pockets full of plutonium, uranium 238, oil, bile, and the blood of the world's children, going to high schools at graduations, colleges at graduations, seducing young minds, the best minds of our generation, to come and be engineers, come and split some atoms, come and be scientists, make a good living for yourself.

The Lord has given us the beautiful minds. He said here is the sun, the wind, the surf to create all the energy you need. Be good stewards, love it and preserve it. It's a no-brainer that a technology whose byproducts are so toxic and poisonous that it can't be disposed of and yet be used to make the most dangerous diabolical weapons imaginable is a bad idea.

But we showed up tonight to tell you no. How could you ever think it was okay to shove it in the arroyos, to bury it in the ground, to sneak it and leak it into the water table, to vent it into the air. We don't need another environmental impact statement to know -- and you don't need one either to know that it stinks to high heaven. And yet everything you want -- every time you want to commit another environmental atrocity, you come up with another EIS.

744-4

Well, we showed up tonight to make sure you understand how we feel. It never was right and never will be. How can you? Don't we breathe the same air, don't we walk the same ground, are we not all brothers and sisters? Don't you have children you love and care about, their health and well-being? Are you just in denial about this stuff? How can you not see it as well?

744-3

Appendix F of the SWEIS has been revised to include a discussion and data on all measured chemicals in the soil, sediment, surface water, and groundwater in and around LANL. This data is compared to appropriate Federal allowable limits. Appendix C presents the health consequences and risks from the consumption of local flora and fauna containing radioactive and nonradioactive contaminants in and around the LANL area. The calculated radiation dose and health effects from radioactive and chemical substances in flora and fauna presented in Appendix C are well below all applicable regulatory limits.

744-4

Chapter 5 of the SWEIS presents the environmental impacts of continued LANL operations. As described in Section 2.6, Offsite Contamination, of this CRD, the LANL contractor analyzes soil samples and water runoff and monitors air emissions as part of its environmental surveillance activities and reports the results of these analyses to the public in the annual Environmental Surveillance Report. In the past, environmental regulations were less stringent and there is contamination present from past operations. In 2005, the State of New Mexico, NNSA and the University of California, as the LANL management and operating contractor, entered into a Consent Order that is currently being implemented to address the investigation and remediation of environmental contamination at LANL.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 744 (cont'd): Richard Yunker**

The labs should never be closed, they should be converted to peaceful, healthy nurturing, life-sustaining research and technologies to begin to heal the environment and reverse global warming, research for mega-epidemics, alternative resources, et cetera.

744-5

It will be a great day when we have enough money -- when we don't have enough money for bombs and weapons because we spent it all on food and shelter for the world's poorest people who are living in grunge and poverty and despair, we spent it all on healthcare and education. Sorry, no more money for bombs.

Then the lab will truly become the beacon of hope at the top of the hill, the crown jewel of New Mexico. We showed up here tonight to tell you that we are hopping mad as well and we're not going to take this [expletive deleted] anymore.

And every time you come, this will still be here, we will still be here, and we'll tell you the same thing. And we'll do everything we can to stop you. And, when you realize that you're wrong, we'll do everything to help change it.

So the DOE should go back to Linton Brooks and say those people in the mountains don't want this [expletive deleted] and neither do we and you should quit your jobs and work for peace. It's not much money, but it feels real good. Nuclear arms, may it rest in peace.

744-5

NNSA notes the commentor's support for continued operation of LANL. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 745: Carol Benson*

I'm not Carol, I'm Astrid, but Carol is headed for Albuquerque as we speak and she wanted me to say several things. She wanted me to draw attention to the yard signs, the billboards that the Los Alamos Study Group has put out. You too can we have one of these. You can do more than float words on the air, you can put a picture in people's minds. And these are really good pictures. So see lasg.org on the web site to get one.

Also the Los Alamos Study Group has a call for nuclear disarmament. Over 4,000 people have signed it, over 400 businesses have signed it, and about 110 organizations have signed it. I think, ladies and gentlemen, we ought to quadruple this number. Quadruple something safe rather than nuclear weapons. And Carol last of all wanted to say thank you for letting them go first. Thank you.

NNSA notes the speaker's remarks.



*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 728 (cont'd): Astrid Webster (comments continued from page 3-1036)*

All right. Here I am back as me. I respectfully disagree with the second speaker representing Tom Udall. A 15-day extension with a mere three minutes per objecting citizen is more than enough when you listen politely without really hearing anything.

Those of you who were in Los Alamos Tuesday night already know that I grew up in a don't ask, don't tell home. My German rocket scientist father used to preach children should be seen and not heard.

To cement the lesson in place, he often pulled us by our ears, almost dragging us to the site of our sins or transgressions. Is it any accident that I've become a listening therapist, using music to connect children's hearts to their intelligence and their voice.

I could not stop dreading my father's next unexpected appearance until he was safely sequestered in a nursing home in his early eighties. I didn't even know when I was growing up that my father had a Ph.D. in physics and meteorology until I was dating my husband and he said so what does your dad have a Ph.D. in. And I said (gesturing).

And he said, well, why don't you ask him. And I said, hey, dad, what do you have a Ph.D. in? And he said who wants to know. Talk about don't ask, don't tell. I grew up terrified of this man.

My boyfriend wants to know. Okay. Physics and applied meteorology, no big thing. I didn't ask him would you have answered that for me because I sort of knew the answer.

I was the victim as were my siblings of all kinds of indignities, not the least of which was not being listened to, not even really much of the time wanting to be seen. Erich grew up a few blocks from us. And I asked him Tuesday night over dinner do you think your father cared one whit about you? No.

Now, those people who are taking home sizable checks from Los Alamos need to think about your children because your hand is not harming them, they are so obedient to your will that their own hands are harming them. The children of this universe are crying for some positive attention, especially those of color. And what are we doing? We're designing bombs to get rid of them.

Who in this room thinks nuclear weapons are the stupidest idea that mankind has ever come up with?

All right, you California kids, I have a new cheer for you. And that is nuclear weapons, stupid, stupid, stupid. Three times. Nuclear weapons, stupid, stupid, nuclear weapons, stupid, stupid, stupid, nuclear weapons, stupid, stupid, stupid.

NNSA notes the speaker's remarks.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 728 (cont'd): Astrid Webster (comments continued from page 3-1036)*

Linton Brooks, take that to the bank. You are dragging the human race with all kinds of helpers with little badges on to the precipice of human existence. We're dying here in case you don't know it. And you know what your cheer is? Bring it on.

Well, I think those of us who live in this state ought to do you a favor because you can't stop yourselves because you're addicted. And that is, when somebody says we're going to have a peace conference in New Mexico, well, guys, let's show them.

Let's be there, let's point to the largest waste dump in the Southwest. Let's point to the eight, what is it million, whatever, the new chemical metallurgy building that's going to cost us a billion bucks and going to be obsolete in eight years. Let's bring peace tourists to New Mexico and let's us tell them the truth because we know the other guys won't. Thank you.

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*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 746: John Otter*

I'm going to emphasize a few points I feel deserve it and then I'll make a practical suggestion for political action. Nuclear weapons are a moral issue. I think that's pretty well been brought here today. As Bishop John Deere said a couple days ago, war and nuclear weapons are the greatest sin of mankind.

And you may not be of a Catholic or Christian persuasion. But, even if you're a Darwinian or an otherwise, the evolution of the earth might sometime a few billion years from now create life again after we've destroyed it. But I don't think that's a premise that we want to follow.

The point is that nuclear weapons can destroy the entire life on earth. And we have 20,000 of them, each of which is 1,000 times more powerful than the ones that were dropped on Hiroshima and Nagasaki. No problem.

And I think that particular knowledge is available to us and our children. And it sets a tone of a background of anxiety in the youth which I think underlies a lot of our youth's social problems.

We have these wonderful efforts these days on sustainability and countering global warming and recycling as contrasted to nuclear weapons which are wasting things rather than reusing them. But what can we expect from our youth in terms of a focus on the future when their outlook on living to an old age is degraded, diminished greatly by a nuclear weapons presence on earth.

I guess I'll move on to the suggestion. So we don't want nuclear weapons. What can we do about that? And there's been quite a bit of commentary which leads to the idea of a revolution. And that's not a bad idea, particularly a nonviolent revolution.

We've seen Ecuador, we've seen Argentina, we've seen Venezuela, Brazil. But the United States' prospects for that kind of a people's revolution isn't quite so good because we have kind of a -- not such a good political involvement in the populace currently. It's certainly worthwhile to work on that.

And I know that appeals to us because it seems to have a short kind of time scale to maybe do it next week and get rid of nuclear weapons. But I think we ought to couple that with a longer term time scale approach.

And so we need to ask ourselves now who makes the decisions that brought us all these nuclear weapons. Well, our federal Congresspersons and our state Congresspersons had a lot to do with that. How did they get elected?

They're supposed to be representing the people, but they seem to be representatives of corporate interests primarily and other ideas for dominating the world. And that's because our election system allows them to be elected on the basis of the funding that they receive from corporations and large interests.

NNSA notes the speaker's remarks.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 746 (cont'd): John Otter*

So how do we counter that? Well, we need to reform our electoral election system. And, of course, these people who are in power are not going to just decide to do that for us. We're going to have to start where we have the power and we can -- and that is in our own municipalities and counties and working at the state level and the federal.

And there are public financing of elections and there are -- and what I want to just pursue for a minute is what's called brain choice voting or instant runoff voting, where you rank the candidates. And it has many advantages in terms of encouraging more candidates to run, encouraging more people to vote, increasing the accuracy of the representation so that it really does -- the people who get elected really do represent the people. And the charter and new commission is considering this. And it will I think go to the ballot before the people in Santa Fe city.

It's been used in San Francisco and recently two times in Burlington, Vermont. And other cities have voted to use it and it's being considered by a number of others. It's been used in Australia for their government, their Congress elections for 40 years -- 80 years and in Ireland and other places around the world.

It's a great system. And, if you would like any information about that to use or try in your groups and your city, I would be happy to help you with that. And my name is John Otter, I'm the only Otter in Santa Fe.

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 747: Eduardo Krasilovsky**

My name is Eduardo Krasilovsky. And I'm sorry, I'm tired, so my accent gets worse as the night progresses. But I want to say that I am not going to read those three volumes or going to the Internet to read those 17 CDs because the purpose of that technical jargon there is to keep us down, to keep us in tunnel vision, the wrong vision of life instead of helping us to go with the eagles and take the view from above. And that's how they want to win all this. They have done that over and over again.

So why -- instead of reading volumes, just, if you can do it, look for Helen Caldicott's book. If you did, maybe an idea just came up from me, maybe we should buy this book and put one book in each house in Los Alamos.

Maybe we can win over some scientists, because they are ignorant of many things. They are not perfect. They may be very intelligent. But it doesn't mean that they know and understand everything especially with their hearts.

Now, why don't I want nuclear weapons. I think we shouldn't talk about what they want us to talk, I think we should close Los Alamos. The U.S. currently, as of 2002, has 2,000 intercontinental land based hydrogen bombs, 3,456 nuclear weapons in submarines roaming the seas, 15 minutes from their targets, 1,750 nuclear weapons on intercontinental planes ready for delivery.

In total there is now enough explosive power in the combined nuclear arsenal of the world to overkill every person on earth 32 times. That's one reason why we don't need these weapons.

Now, if you'll Google Eduardo Goncalves, he wrote an article in The Ecologist in 2001 and showing the following, using the official radiation risk estimates published in 1991 by the International Commission of Radiological Protection, in 1993 radiation exposure data calculated by the UN Scientific Committee on the Effects of Atomic Radiation, researcher Rosalie Bertell, author of the classic book No Immediate Danger, has come up with a terrifying tally. 358 million cancers from nuclear bomb production and testing, 9.7 million cancers from bomb and plant accidents, 6.6 million cancers from the routine discharges of nuclear power plants.

As many as 175 million of those cancers could be fatal. Added to this number are no fewer than 235 million genetically damaged and diseased people and a staggering 588 million children born with a range of teratogenic effects including brain damage, mental disabilities, spina bifida, genital deformities, and childhood cancers.

These are my two reasons why we need to close Los Alamos. By the way I am a member of Veterans For Peace, Bloomfield Peace Action, and Cornucopia of New Jersey which makes me somebody who just is for life and not for death which is what people in Los Alamos do. Thank you very much.

747-1

747-1

NNSA notes the commentor's opposition to nuclear weapons and the operation of LANL. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

747-2

The subject of the 2001 Ecologist article by Mr. Eduardo Goncalves and statements by Rosalie Bertell in the book, "No Immediate Danger" are not part of the scope of the SWEIS. Neither document presents information regarding environmental impacts from the continued operation of LANL. Chapter 4, Section 4.6.1, of the SWEIS provides detailed information on cancer mortality and incidence rates in New Mexico and all counties surrounding LANL. This data, along with the final LANL Public Health Assessment, issued on August 31, 2006 by the U.S. Department of Health and Human Services Agency for Toxic Substances and Disease Registry, shows that, "...there is no evidence of contamination from LANL that might be expected to result in ill health to the community," and "...overall, cancer rates in the Los Alamos area are similar to cancer rates found in other communities" (ATSDR 2006). Chapter 4, Table 4-26 shows that some cancer rates in Los Alamos County are lower than the national average and some are higher, which is typical of any area.

747-2

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 748: Willem Malten

So my name is Willem Malten. You know, I'm not going to read that EIS book either because, you know, the environment that I'm concerned with is a slightly different environment than I think is being described.

I think I'm concerned with the psychic environment that a place like Los Alamos creates. I'm concerned with trashed international treaties that Los Alamos has taken a part in. I'm also concerned with the degradation of democracy that weapons of mass destruction inevitably lead to.

You know, last year we had a Hibakusha here from Hiroshima. And her name is Shika Husasamori. I don't know, some of you may have met her. You know, and she, you know, is kind of like a reborn human being or resurrected human being rather, kind of like an angel.

And I think what, you know, her message was -- you know what a Hibakusha is, right? A Hibakusha is somebody that was the victim either in Hiroshima or in Nagasaki and, of course, now, you know, we can include also the Bikini Atolls, we can include Kosovo, we can include Iraq, we can actually include Laguna, Navajo, we can start including Espanola. It comes really close.

And in a way the vision that expanded pit production gives us is that we all have to have peace with becoming Hibakusha and our children will become Hibakusha and it's unacceptable.

In a world where most of the money is spent on weapons, most of the problems start looking like military problems and most of the solutions, therefore, look military as well. Yet we need to open our eyes to the bankruptcy this has wreaked on the civil society. Ultimately this is the cause for proliferation of weapons of mass destruction including nuclear worldwide.

Nuclear weapons are the very spare point of a culture of violence, the logical end point of the failure of true diplomacy. These weapons are not just aimed at the people of the world, they are not just taking away the resources of the next generation, these are weapons -- these weapons are aimed at the heart of human dignity.

Through security comes from a stronger sense of community for common causes. And that is why it's been so great that actually Santa Fe last year signed up as -- with Mayors for Peace and has become a community of peace.

Now, it's up to us to get this meaning. When over 80 percent of the American public has expressed a desire for nuclear disarmament and yet the U.S. national laboratories such as LANL at Los Alamos and Sandia Laboratory in Albuquerque, both in New Mexico, keep pursuing renewed testing, upgrading nuclear weapons, and building a new pit production facility, there's something wrong with this picture.

748-1

748-1

NNSA notes the commentor's concerns regarding impacts on the psychic environment, international treaties, and the democratic institution. These subjects are not within the scope of an EIS. The Council on Environmental Quality NEPA regulations require that EISs discuss significant environmental impacts. In 1983, the U.S. Supreme Court ruled (*Metropolitan Edison Co. v. People Against Nuclear Energy*, 460 U.S. 766) that "psychological effects" are not included along with general environmental impacts in EISs.

It should be noted that the United States is a leader in nonproliferation initiatives and has not violated any nonproliferation treaties. Stockpile stewardship capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and confidence in its nuclear stockpile capabilities is likely to remain important in future arms control negotiations as the Nation moves to further reduce the size of its overall stockpile. Refer to Section 2.1, *Opposition to Nuclear Weapons and Pit Production*, of this CRD for more information.

748-2

The U.S. Congress and the President establish national security policy, which includes management of the nuclear weapons stockpile. Cessation of stockpile stewardship support by LANL would run counter to these policies and is therefore not considered in this SWEIS.

748-2

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 748 (cont'd): Willem Malten*

It illustrates that the magnitude of nuclear weapons is incompatible with a functioning democracy. And democracy may have to be rebuilt from the bottom up. Neighborhoods, communities, and cities are now vehicles that express people's will and have to represent the changes that we are seeking.

So this is the main thing, you know, we have to -- we have to figure out how to give meaning to Santa Fe being a city of peace. And, if that means civil disobedience, resistance, disruption of transportation of nuclear weapons or pits, we should face those possibilities. The call for nuclear disarmament, as was mentioned before, this is a small good step in the right direction. Thanks very much.

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 749: Virginia Miller

Hi, I'm Virginia Miller. And I'm a member of a number of peace groups. And I - a lot of things that I was going to say have already been said. And I support so much of what has been said. So I will go over -- I'll probably leave some of it out. But I will try to hit on a couple of things that will maybe add something.

Let's see. I vigorously oppose any continuance and expansion of nuclear weapons design and production at Los Alamos National Laboratories as called for in the LANL SWEIS. And I won't go through all the different things because everybody has already said that.

749-1

But one thing that hasn't been talked about a whole lot is to protect explosive open air experiments of up to 6,900 pounds of depleted uranium every year when the use of DU weapons is a war crime under the Geneva Convention, resulting in grievous health problems shows a blatant disregard for the health and safety of the people and environment of Northern New Mexico for our land, our water, and our air.

749-2

The people in Iraq, the children in Iraq and Afghanistan have suffered and they are dying from the use of depleted uranium weapons. I find this absolutely horrible that the lab would even consider doing open air experiments with this material.

They should all be banned. All of this -- the proposed activities of the LANL SWEIS is at a site located above the Rio Grande. This has been noted. But to me this is incredible. It's a source of water for many communities in both New Mexico and Mexico. But it shouldn't be done anywhere. But the fact that it is above the Rio Grande River is just unbelievable that they would do this kind of activity there.

749-3

All of this, all of this -- all of these proposals, they are unnecessary, immoral, and illegal. The current pits will last -- we are told by the scientists that the pits will last 60 to 90 plus years. And every one of these pits should be dismantled. We don't need any more. Every one of them and just no more.

749-4

The World Court has condemned the use and the threat of the use of nuclear weapons. Nuclear weapons threaten our very planet and all life on it. It is immoral.

I love this planet and I love all life on it. And there's no way I'm going to allow this to continue. It must stop, it must end. In 1970 the U.S. signed a nonproliferation treaty under the Constitution International Treaty, the supreme law of the land.

749-5

In Article VI all nuclear powers are called upon to engage in worldwide nuclear disarmament. It's a law. This is the law. And the work at Los Alamos National Laboratories is breaking the law, it's against the law. And it's a crime, a crime against humanity. I just found this out in an email recently.

749-1 NNSA notes the commentor's opposition to nuclear weapons activities at LANL. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

749-2 The testing at LANL using depleted uranium does not relate to any issues related to the Geneva Convention. Chapter 5, Section 5.4.2, of the SWEIS provides detailed information on radiological air emissions from LANL for all three alternatives. These emissions include all uranium radioisotopes that are present in depleted uranium. Section 5.6.1 provides detailed public radiological impact information for all emissions including depleted uranium under all three alternatives. For all alternatives, the average population dose within 50 miles (80 kilometers) of LANL is less than 0.1 percent of background. LANL programs and procedures are designed to minimize any releases of depleted uranium to the environment during tests. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for additional information.

749-3 Closure of LANL and relocation of its mission support activities to another location is not under consideration at this time. Refer to Section 2.4, Modernization of the Nuclear Weapons Complex, of this CRD for more information. Also, refer to Section 2.8 of this CRD, Water Use, for information on monitoring the Rio Grande and use of the Rio Grande as a source of Albuquerque drinking water.

749-4 NNSA notes the commentor's opposition to pit production. NNSA has reviewed the pit lifetime studies and has concluded that degradation of plutonium in the majority of nuclear weapons would not affect warhead reliability for a minimum of 85 years. The analysis in the LANL SWEIS, however, is still valid and provides a bounding scenario in which up to 80 pits per year could be produced. This potential production rate provides NNSA with flexibility in meeting its stockpile stewardship mission, taking into account changing geopolitical conditions. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

749-5 Operations at LANL that support the NNSA mission to ensure a safe and reliable nuclear stockpile are not in violation of the Treaty on the Non-Proliferation of Nuclear Weapons. Stockpile stewardship



Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 749 (cont'd): Virginia Miller

Okay. That Representative Dennis Kucinich introduced House Current Resolution 950 calling for the administration to lead in negotiating a treaty abolishing nuclear weapons. He submitted it to the House and the International Relations Committee.

And we need to support any of our leaders who are willing to speak out and have the courage to call for a nuclear disarmament. And I was very glad to hear Greg Mello speak earlier of the fact that there are a number of Congresspeople who are willing to do this. They need our support. It's going to require all of us working together to get this job done.

Yes, I'm almost done. I'd like to call for the transformation of LANL as others have done and all of the national laboratories. There is so much work that they can do that will really contribute to the well-being of humanity.

They can begin to clean up the radioactive contamination, develop renewable sustainable energy independence, work to help prevent and curb the impacts of global climate change. These are things that would really make a genuine contribution.

And they certainly have the brilliance and the means to carry this out. This should become a national priority. And these laboratories could do that. And just think of the jobs that that could provide for our state and the positive impact that it could have on the world. That's our true national security.

All right. My last sentence. If our leaders and the NNSA and the DOE and the nuclear industrial complex choose to ignore the law, they will be held accountable one way or another. So stop this madness. Basta.

749-6

749-5  
cont'd

capabilities at LANL are currently viewed by the United States as a means to further the Nation's nonproliferation objectives and are likely to remain important in future arms control negotiations as the Nation moves to further reduce its overall stockpile size. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information.

749-6

NNSA notes the commentor's desire for activities at LANL to be focused on areas other than those related to nuclear weapons production. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 750: Clarissa Duran

Hi, I'm Clarissa Duran. This is my sister Danielle Duran. We're from Espanola. And I just want to thank the nice people who gave me water because I almost passed out because it's so damned hot in here.

Anyway first of all I want to say look around this room. And I know everybody here knows somebody of color. Next time bring them with you. And I'll do the same.

The other thing I want to really tell people is for those of you who want to close the labs, no, because 25 percent of my community works there. And we can't have a 25 percent unemployment rate. Our community was an agrarian society until the road to Los Alamos was built.

We are like Afghanistan and probably now like Iraq. Our way of life was taken away from us. And who is going to be there to help us rebuild our way of life. Nobody. Nobody is doing that now.

SPEAKER: We will.

CLARISSA DURAN

All right. Well, we want to see it. Come hang out with us and help us out. You know, there are a lot of kids in our community who are dying, who are on drugs, and will do anything not to have to deal with the oppression that we live with every single day.

And that's the effect of what Los Alamos is. And yeah, I'm telling you not to close it because we still need whatever money we need to make a living. But we don't need to do it by producing nuclear weapons. I'm on the Dennis Kucinich campaign for New Mexico because he said to me that no, we wouldn't have to close the labs, that we could change it into a research facility that would help humanity.

And that's what I want you to think of, is that your neighbors will suffer if you guys close the labs. But we can do something positive with that energy and that intelligence up there. We're starting -- in Espanola I'm telling you about the hard conditions.

But we've started to clean up our own waste. And we did that by electing a brand-new city council and a brand-new mayor. Our former mayor used to kiss the asses of all the top people in Los Alamos. We don't have that going on anymore. So, you know, you guys can shove it because my sister here, Espanola City Councilor Danielle Duran, is going to tell you what she's going to do about Los Alamos.

750-1

750-1

NNSA notes the commentor's support for continued operation of LANL. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

750-1  
cont'd

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 751: Danielle Duran

Thank you. My name is Danielle Duran, I'm a city councilor for the City of Espanola. And I was recently elected in March. One of my big issues is economic development for the city of Espanola.

And one of my major issues is how people believe that Espanola is reliant on Los Alamos. And just because we have 25 percent of our community working in Los Alamos doesn't mean that we're totally reliant.

And I wrote down some points which is that Espanola existed before Los Alamos did. When it was a boys' camp and it was farmers there, Espanola existed as a commercial venue within the state. It was the heart of Northern New Mexico commercial activities. So to say that Espanola is completely reliant on Los Alamos and it exists because of Los Alamos is a complete fabrication.

The other thing is I have a degree in economics and I do believe in Keynesian economics and I believe in government crowding out which means the more money and more activity that goes to the government, the less that local businesspeople do, the less that private people do.

So, of course, we don't have a lot of business in Espanola because all of our time, all of our talent, all of our people, and many of our resources are going up to Los Alamos and being taken over by Los Alamos.

When we talk about salaries, I mean Nambe Mills is in Espanola. Do you think Nambe Mills can compete with the salaries for machinists when it comes to Los Alamos? No, they can't. So I mean that's another issue for us. And that's not something -- that's not a reliance that Espanola has on Los Alamos, that's a problem Espanola has with Los Alamos.

And so finally I would just like to say that I don't want to close the labs, not because 25 percent of our people live up there -- work up there, I'm sorry. But because I know scientists working in Los Alamos on hydrogen fuel cells, on solar power, on wind power, on other renewable energies and sustainable development issues.

And I respect those people. And they do not work on nuclear issues. And some people will say, if you didn't have the nuclear part, you couldn't have the renewable part. And I think all of us know that that is a bunch of B.S.

When we look around us and we see the energy crisis that is looming in our future, we know that energy can take a huge portion of our budget from now on. And it doesn't have to be solely focused on the production of uranium or plutonium. It can be focused on renewable energies, it can be focused on automation technologies, it can be focused on micro and nanotechnologies.

And that's the future that I see for Los Alamos. And I hope that all of you will share that vision with me for Los Alamos.

751-1

751-1

NNSA notes the commentor's support for continued operation of LANL. Cessation of LANL's primary mission activities supporting NNSA's Stockpile Stewardship Program would be counter to national security policy as established by the Congress and the President. In addition to these activities, however, research is conducted at LANL in areas promoted by the commentor. These research areas are part of current operations and as such are included in the SWEIS as part of the No Action Alternative. These activities would continue to be conducted at LANL regardless of the alternative selected. Refer to Section 2.3, Alternative Missions, of this CRD for more information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 751 (cont'd): Danielle Duran

And before I finish I just want to say that I believe these things. I have not discussed these things with other members of our city council. And, for those of you who have gone to all the meetings, I apologize for not being at the Espanola meeting yesterday, I did have an economic development committee meeting and we talked about the future of economic development in our valley.

And so I apologize for not being there. And I would like to thank all the speakers who have gone before me because I have learned so much tonight, I have learned more than I thought possible. So I want to thank all of you for speaking tonight and for your action.

And finally I want to ask Los Alamos, if you are really serious about being responsive to the communities around you, please tell us. If you go ahead with the increase in production of pits, how you are going to safeguard the communities around you, how are you going to make sure that none of that comes down in the form of waste, of pollution, of degradation of our environment or our people. And that is what I would like a response to in this EIS. Thank you.

751-2

751-2

NNSA notes the commentor's concerns regarding increased pit production. Chapter 5, Section 5.14, of the SWEIS discusses ongoing and planned mitigation measures at LANL for avoiding, minimizing, rectifying, reducing, eliminating, or compensating for any environmental impacts associated with LANL operations. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for more information related to this comment.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 752: Elizabeth West

Good evening. My name is Elizabeth West. And thank you all for helping put this on, for being here, and I have a bunch of mixed feelings as don't we all.

Of course, I would like to add my comments to the list of people and to the comments made by these people against added Los Alamos pit production. I also would like to make sure that my name and address is written in. I'm speaking solely to help you, because I do want a response and I would like to be one of the people who gets that response.

My name is Elizabeth West, 318 Sena Street, that's S as in Sam, e-n as in Nancy, a Street, Santa Fe, New Mexico, 87505. Thank you very much.

I actually did speak up years ago about the WIPP, the waste isolation pilot project down in Carlsbad. And I did get a response from the government. And I still have them someplace in my basement. I really do want to hear back from you all. Thank you.

I woke up this morning thinking about what I was going to say and feeling a little discouraged. And thank heavens I'm following so many great people, especially these two women. It's just fabulous. I'm so proud to be in a state with people like you two. It's great. And lots of other people too.

I'm known to be a little bit of a Pollyanna. And a Pollyanna I used to think is just somebody who is, oh, everything is going to be just fine. And actually Pollyanna is persistence. And so yes, I'm kind of positive. That's my job, I'm a librarian, and I want to be nice to everybody. I also like to learn things. And so those two things sometimes are a little bit in conflict.

I also have a lot of good friends in Washington, D.C., from all parts of the spectrum. So this morning, when I woke up, I was thinking all these funny jumbled thoughts. And what popped into my head was George Wallace. George Wallace.

Well, I'll be 62 in November so I'm older than some of you and younger than others. And George Wallace, of course, I remember was a tremendous antisegregationist, horrible, horrible, unbelievable. And then late in his life he completely changed. So it's possible, it's possible.

And I know it's possible. What we're going through now is another version of a kind of fascism. It's a petticoat fascism, of course. It's another kind of anti -- a discriminatory situation, it's an environmental problem. It's a mess of stuff as segregation was and as a lot of other issues have been and are. But that changed and this can change. This will change. And I'm taking my vitamins and I'm going to be around to see the change.

So the last thing -- I have a moment or two I think. My Washington friends, I'm very interested in a lot of topics. And one of emails I sent to a friend of mine who is a pretty nifty Republican and -- no, not necessarily, there are all different kinds of Republicans. He's a pretty good one.

752-1

752-1

NNSA notes the commentor's opposition to pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 752 (cont'd): Elizabeth West*

And we differ on some things, of course. But he is not a Conservative Without a Conscience, a referral to a book, of course, because I'm a librarian by John Dean. Anyway, when I wrote to him -- he is very high up in the government under the previous big Bush. No, excuse me, under Reagan. And then pretty high up recently until Condoleza Rice came in.

A very connected guy. I'm not going to mention his name because he is still alive and he is a friend of mine. But I will say that, when I wrote to him about something I'm going to do in November, I'm going to go down to the School of Americas and I sent them some email about that. And he said oh, well, that's interesting. I don't think I've heard anything about that.

And I gave him the new name, you know, the unlisted long name and I didn't give him the School of Assassin's name. But anyway I was appalled. And then I realized our friends and our nonfriends and our people who we would have dinner with hopefully at Nora in Washington. For anybody that goes to Washington, that's a great -- the first organic foods restaurant in the United States.

I hope that they will learn about these things. There are so many things to learn about. And Los Alamos is one of them. So I'm hopeful, but I'm feeling really tough. So I'm going to be friendly and talk to my friends in Washington. And thank you very much. I hope I have not spoken too rapidly. I appreciate what you're doing.

And for the record again I do want a response to any of the questions that have been asked here. Any and all of them. Thank you very much.

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 753: Monika Steinhoff**

So, you know, the people have brought up that they want -- you know, many of us -- I see the same things, many of us have been here many years. The first WIPP hearings and everything.

And I did expect a response, but all I got was this amazingly mind-boggling, mind numbing stuff, you know, scientific stuff about this and that and that had no relevance really in any way to life.

And so I'm a little ambivalent about wanting to give anything. And I don't give my email out or anything like that because I'm into life. You know, I live my little -- I have a little actually colored, you know, personal colored granddaughter because I adopted a kid from Brazil 21 years ago. And I also have a little Anglo child.

And I look at those little -- they're both little tiny things, they're under six months. And, you know, I look at those magical beings, I think little tiny hands, perfect little hands. I am filled with love and vitality.

And I wonder if the people who make the bombs -- I'm going to direct my remarks to the people who seem to be up from Los Alamos. I also have two adopted kids from Los Alamos. One of them is back up there. And she used to say, oh, mom, they don't make the bomb, you're nuts. They don't make something like that.

Well, as she got to be a teenager, I got to know a lot of kids who lived under bridges in Los Alamos. And the reason I got here quite late was because I decided to use the mass transit. I do that periodically. It took me two hours to get from downtown Santa Fe. And I thought now, if we spent a little more money on mass transit and less money on the bomb, maybe lots more people would be here.

And then, if I could go back to the WIPP hearings for a moment, because they told us over and over and over that this was temporary and it was low level. I'm married to a lawyer. I hear all these law stories, et cetera. Well, I knew that the first group of lawyers who worked for the government quite because they told the truth in government. They hired another group who would lie to them. And now you know it's a lie.

I mean we have huge, huge roads going through New Mexico down to WIPP. I grew up in Alamogordo. And that way you know who my dad is maybe a little bit. Carlsbad is amazing, it's like rich, you know.

The DOE, the government bribes people to ruin their environment, ruin their kids and everything, lots of money. You know, someone said if your check -- I think it was Einstein said something like that. If your check comes from -- if you earn a check from a particular organization, it's very hard to loosen yourself from them and tell the truth about them.

And I think that's part of Los Alamos' problem. So I am totally against the pits. || 753-1  
You know, when we began -- Israel began bombing Lebanon, I cried a whole day

753-1 NNSA notes the commentor's opposition to pit production. Refer to Section 2.1, Opposition to Nuclear Weapons and Pit Production, of this CRD for additional information.

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 753 (cont'd): Monika Steinwald

because I thought about kids like mine, little grandchildren, perfect little beings get bombed. It happened -- I cried when we bombed Afghanistan. And have we fixed Afghanistan? I'd like to know. Is that fixed?

And those weren't nuclear bombs, those are just ordinary bombs. And now we are in Iraq and we have made an incredible mess of Iraq. If our government makes such a mess of a country -- and they want to go into Syria and into Iran and into Egypt.

There's a document out there that probably most of you have not heard of. Clean Start, look it up on the Internet. That's the future for us. War forever. But, you know, you talked about the storm earlier. I thought a storm, we need a really good storm.

We had a fire at Los Alamos and it went just to the gate. It did dispense some of that nuclear stuff and I have proof of that actually. We need a really good storm that will shake up the world up there. A really good storm to show what nuclear waste does, what plutonium does.

I saw the film from -- I saw the film from Hiroshima and Nagasaki. But I also saw the film, the Russian film, The Lesson at the UN. All these kids with tumors. Instead of a little, sweet, perfect child like I have, kids with tumors that are as big as the rest of their bodies. That's what nuclear waste does.

You know, and we can make bombs, but can we make a child? Until we learn how to make a child, we better stop forgetting those bombs. And I think anyone with their heart open -- I remember the day I walked out of my bedroom one day, because I had a father who made bombs and he treated us in a particular way that only -- if you really make bombs, you don't treat kids like a loving father with a heart.

But my dad did have a heart, I learned that later. But I realized I had a numb heart. And I even knew as a 12 year old in Alamogordo that I would have to suffer a lot before I really knew what love was. And I have suffered a lot.

And I think that the universe is a moral place. And I think all the ill that we have done. You know, my husband used to say we have the greatest country. All his friends, everybody used to say we have the greatest country. Well, I would like to know, I would like that in the EIS statement, how we have the greatest country.

We are the greatest bomb makers. We have the worst transportation system. How many people here, raise your hands, how many people have taken the bus here ever? The young people. How about the people up there? Great. Okay. Here in Santa Fe, though? I think we need a little more money here in Santa Fe. It's horrible, you're right.

And then you have to hear Bush on the radio and the advertisement on the radio which drove me crazy. Anyway, if your heart is alive, if your heart -- everyone has

753-2

753-2

In the Cerro Grande Fire of 2000, no LANL structures or facilities containing radioactive or other hazardous material were burned. However, several burned areas on the site (totaling about 320 acres [130 hectares]) were known or suspected to be contaminated with radioactive materials or chemicals. Using the best available information about the contamination on each area, the Risk Assessment Corporation study referred to in Chapter 4, Section 4.6.1.3, of the SWEIS estimated the amount of radioactive materials and toxic chemicals that became airborne as a result of the fire. The study concluded that potential exposures in the surrounding communities to radioactive materials or chemicals originating from LANL were about one-tenth of the acceptable intakes established by the U.S. Environmental Protection Agency, and that the risk of cancer from breathing radioactive materials and chemicals released from natural vegetation that burned was far greater than from LANL-derived materials (RAC 2002). A team of national and international scientists led by Colorado State University provided technical peer review of the Risk Assessment Corporation efforts and the New Mexico Environment Department provided multiple opportunities for public input throughout the 18-month study period.



*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 753 (cont'd): Monika Steinwald*

brains up at Los Alamos. I have known many scientists. I have never heard of one who admits making -- helping to make the bomb.

And I think like Cristo said, the son of the big Cristo, when he was at the last thing, you know, remember he said you all are all dead. And I think, unless you have a heart, and you don't make bombs if you have a heart, you are dead.

Your brain may be alive. But your brain is like a computer. It cannot make life even though we tried making all these different things. You cannot make life. And the universe is moral. And whatever ill we are doing now and what we keep doing will come back to us. Thank you. And I hope for a big storm.

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 754: Sheri Kotowski

I'm Sheri Kotowski. And Clea Mustakis was going to speak with me, we were going to talk about some things together. She has put hundreds of hours into researching the site-wide environmental impact statement. It's grueling. 1,500 pages.

And it's not technical, that's the really worrisome part of it. It's gook, it's nonsense, it's convoluted. I mean there's no scientific background to it. It's like we finally got the 15 CDs or the 19 CDs that were the reference material today. She had them in her hand. This document was issued on July 7 I believe. I actually didn't get my document until 15 days ago because it got lost in the U.S. postal system. So that's number one.

I think it's -- this situation is grueling. It's 15 minutes until 11. We've all been here since six o'clock this afternoon. We asked in our negotiation process, when these hearings were being negotiated, we asked to have more than one session on the day.

We asked for additional sessions. We asked that these sessions start at three o'clock in the afternoon, go to five, have a break, and have an evening session because people have kids, people have jobs, and that has to be considered when you're making public comment. We're humans, we have lives.

And, you know, the whole process is destroying our lives. Modern pit facilities. A lot of what I'm going to say has been said tonight already. And I'm going to say it again because we've been saying this for years.

We defeated the modern pit facility two years ago. It's back again. This document says it goes from 20 pits for 80 pits. And then every part of the summary it says, oh, and we also calculated it for the modern pit facility which is 450 pits per year. So you've heard that.

One of the things I also wanted to point out, three minutes. A 1,500 page document, what is it, \$5 million SWEIS, that's how much it cost. One of the people that I work with likes to do demos and illustrate things. I thought I would do a little demo with that.

I think that it's probably a little exaggerated and it might be a little bit inaccurate. But I think, if we filled this whole room with beans, we call that \$5 million for the SWEIS, for the draft SWEIS.

I'm going to be that one little bean outside of this room. And that's how much energy has been put into this and how much consideration my opinion gets and all of the hard work that I have also put into researching this document.

What I really wanted to talk about is water. Water is so precious. It's not just precious in this state, it's precious to everybody. I mean it's life. The planet, we survive because of water. Our whole life is based on water.

754-1

754-1

NNSA notes the commentor's statement regarding the content of the LANL SWEIS. NNSA made every effort to make the content of the SWEIS understandable to the public and clear regarding the scientific basis. NNSA revised the Draft SWEIS to clarify the discussion if specific public comments were made regarding the understandability of the text. Relevant scientific references are cited in the SWEIS and supporting calculations and assumptions are documented in the Administrative Record.

754-2

Reference to a modern pit facility in the Draft SWEIS was in the context of ensuring that reasonably foreseeable future actions were addressed in accordance with the Council on Environmental Quality NEPA regulations regarding cumulative impacts. The SWEIS alternatives addressing operational levels for the next 5 years limit the level of pit production to up to 80 pits per year (Expanded Operations Alternative). In October 2006, NNSA issued a Notice of Intent to prepare a *Supplement to the Stockpile Stewardship and Management Programmatic Environmental Impact Statement – Complex 2030* (now called the *Complex Transformation Supplemental Programmatic Environmental Impact Statement [Complex Transformation SPEIS]*) (71 FR 61731). In addition to announcing its intent to prepare the *Complex Transformation SPEIS* which assesses the environmental impacts from the continued transformation of the nuclear weapons complex, NNSA announced cancellation of the previously planned *Supplemental Programmatic Environmental Impact Statement on Stockpile Stewardship and Management for a Modern Pit Facility* (DOE/EIS-236-S2). The Final SWEIS does not include analyses of a modern pit facility.

754-2

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 754 (cont'd): Sheri Kotowski**

With the increased pit production, we go from 500 acre feet of water per year used by LANL. This is discharge water, this is industrial wastewater, this is sanitary effluent. You can't use this water, you can't drink it, all you can do is make more pits with it. But they don't make more pits with it, they flush it into the canyons.

In dry years all the contamination, it just -- it sticks on the soil. When it's windy, it blows around. When these big storms come, it just washes into the river. Albuquerque is going to be drinking this water.

And who is going to pay for cleaning this water to drinking water standards? Not the laboratory. It's up to the municipalities, the municipalities to clean this water so that Albuquerque can drink it and Santa Fe can drink it. So we're at 500 acre feet of water. We're going to go up to 822 acre feet of water used per year.

Another demo. I live in a really small --

I'm going to just continue because, you know what, I've been here since 6:30 and I've worked on this document for the last two weeks, I've been sweating blood and I want to finish what I'm going to say.

I'm going to finish and I'm not going to take that much longer. But I do want to illustrate how much 822 acre feet of water is. I live in a really small community in Northern New Mexico. They've told us we have to district our water because us little tiny communities are using too much water.

We are allotted 37 acre feet of water a year. With increased pit production and expanded weapons, it would take us 20 -- that's the equivalent of 20 years of our allotted water supply.

And I also want to say that Los Alamos is taking more than their allotted water supply. We get charged, we get fined. And they will stand up and say we're going to take more water. And that's a violation. It's against the law for us to take more water and we get charged for it. And they can just say that they're going to use all the water that they want.

And one more thing. 1,400 sites, potential release sites at the laboratory. Every single time it rains, the snow melts, all of that washes down. It doesn't make any sense. And we really have to stop and protect our water. Thank you.

754-3

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cont'd

754-4

754-3

DOE and Los Alamos County have combined water rights of 1,806 million gallons (6,836 million liters) per year, of which 542 million gallons (2,052 million liters) per year are allotted to DOE. In recent years, the largest amount of water used by DOE and the County was 1,515 million gallons (5,735 million liters) in 2000, when the Cerro Grande Fire occurred. As shown in Chapter 4, Table 4-43 of the SWEIS and discussed in Chapter 5, Section 5.8.2, LANL water usage has been and is expected to remain below its 542 million gallons (2,050 million liters) per year allotment. Effluents from LANL facilities are discharged in accordance with a National Pollutant Discharge Elimination System permit that establishes limits on the volume and quality of the discharge. As discussed in Chapter 4, Section 4.3.1.2, over the past 6 years, LANL has a very good record of complying with permit conditions. Under all alternatives, NNSA would continue to meet permit conditions designed to protect water resources at LANL. In addition, the NNSA operates a monitoring program (described in Chapter 4, Section 4.3.1.5) to detect contamination.

In accordance with applicable regulations and agreements, NNSA evaluates and takes corrective action for occurrences of contamination in groundwater and surface waters at LANL. Water quality data from upstream and downstream of where LANL surface waters enter the Rio Grande were compared in the 2005 Environmental Surveillance Report (LANL 2006g). This report states "All base flow samples from the Rio Grande had concentrations below drinking water standards and standards for the protection of aquatic life, wildlife habitat, and irrigation. Radioactivity in these samples was low. None of the radionuclide concentrations commonly associated with LANL operations were detected, except for uranium. Uranium concentrations, (0.5 to 2 micrograms per liter) were well below the Federal drinking water standard of 30 micrograms per liter." Most municipalities who use surface water for potable drinking water disinfect the water or otherwise treat it prior to use - this is not unusual in the United States.

754-4

NNSA does not agree with the statement that there are over 1,400 unmonitored discharge sites. As described in Chapter 4, Section 4.3.1.3, LANL staff managed stormwater runoff from its industrial sites under a Multisector General Permit Program, and then transitioned towards management under an individual National Pollutant

Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

Commentor 754 (cont'd): Sheri Kotowski

Discharge Elimination System industrial activity permit. LANL staff manages stormwater and snowmelt from construction activities under the U.S. Environmental Protection Agency Construction General Permit. There is also an integrated Stormwater Monitoring Program that monitors stormwater on a watershed basis. Refer to Chapter 4, Section 4.3.1.3, of the SWEIS for details.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 755: Catherine Montano*

My name is Catherine Montano and I'm a member of the Citizens of the American Constitution. A few months ago LANL was burning depleted uranium nuclear waste, diesel, an open burn, a bonfire, throwing whatever they wanted to get rid of.

And we're downwind in Las Vegas, New Mexico. And we drink surface water. So they are poisoning the water that we drink. The very fabric of creation is in danger. Our school yards. This is a most crucial time.

And you know that I never volunteered to do this work. I was physically thrown out of my bed by a higher power. And I was told that I had to get involved in stopping the nuclear madness. At the time I couldn't even pronounce the word plutonium, I used to tell the Anglo women, how do you say that word. I could hear it in my brain but it just wouldn't come out of my mouth.

For 16 years I have gone to nuclear hearings. And they have all been like this one tonight. A dog and pony show, because that's all they are. You know, they do it to satisfy the letter of the law, that they had a public hearing for the people.

And the people -- you know, when I first got involved, I went home and I turned on the television. It said, oh, New Mexicans don't care one way or the other if they bring nuclear waste into the state of New Mexico. And I thought that's not true. Because there was hardly anybody at the hearings.

The media wasn't there. You know that I went to channel -- one of the channels here in Albuquerque, TV stations. And I asked them how come you guys aren't covering these hearings. It's the most important -- these were the WIPP hearings.

These are the most important -- it's the most important issue facing the state of New Mexico. They want to bombard us with everybody's waste from all over the United States.

See, New Mexico, they think it's Mexico. They think, oh, they live in the desert, it's just a bunch of Mexicans and Indians. And you know what's interesting, everybody is flocking to New Mexico because it's predicted that the East Coast and the West Coast is going to be under water. And the only place you can run to is the Southwest.

But you're all going to run to the fire. Because New Mexico is rated number one in the nation highest in radiation spills. You've heard tonight all the criminal activity at Los Alamos.

A few months ago we put out a letter, a Constitutional letter. I worked on petitions when WIPP first came out. In our area we gathered 6,000 signatures. We presented 17,000 signatures to Governor Bruce King.

And I happened to be the one to read the petition. And I asked him to sign it. And, when I put it over to him, he slammed it back and he said I don't sign petitions.

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LANL does not burn depleted uranium in an open burn. Any open burn would take place under controlled conditions as specified by LANL's Resource Conservation and Recovery Act permit. Refer to Section 2.10, Depleted Uranium and the Dual Axis Radiographic Hydrodynamic Test (DARHT) Facility, of this CRD for more information on the use of depleted uranium at LANL.

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 755 (cont'd): Catherine Montano*

And I said, Governor, I thought you were a compassionate man, I thought you cared about the people of the state of New Mexico. Oh, I am compassionate man.

And at the end he came up to me because I let him know how contaminated the state of New Mexico is. We are walking miracles. We all have plutonium in our bodies. If you don't believe me, get a hair analysis and you'll find out how much plutonium you have in your body.

And, you know, there is a researcher, his name is Ernest Sternglass. Right now he's 82 years old. But all his life he researched what radiation does to our bodies. He says that the more we get radiated and the more the animals get radiated, the more violent they will become.

Look how violent our society is today. And it's time that we stop this operation. You know that the Constitution is a very powerful law, it's the supreme law of the United States. And I've heard some of you talk about democracy, that we're a democracy. We're not a democracy, we're supposed to be a republic, a nation of laws.

But we have ignored our laws. And, you know, our activists here in New Mexico, we've been fighting administrative law. Well, it's geared for them to win and for us to lose. Constitutionally we closed down the operation at Los Alamos Labs. It took us 40 days.

And what we did is we sent out this Constitutional letter letting all our elected officials know that they work for us, we pay their salaries, and we will hold them accountable. You know, you can do all the civil resistance, all the protests, it doesn't work.

We've sat in senators' offices, I mean we've done it all. I'm 56 years old. And we've done it all. And the only thing that will work is the Constitution. We have won over 300 cases here in the state of New Mexico.

We stopped PNM in Las Vegas from burning diesel. We stopped a plant that was putting out 800 tons of carcinogens into the air of Las Vegas. And how did we do it? Through the Constitution.

See, when you use the Constitution, you go to the individual that took that oath. See, these guys, when they pick up that hand, they think it's just a party. They don't realize that, when they say they will defend and honor the Constitution, and if they don't, we can set them aside from their position that they hold and sue them lawfully, criminally and civilly.

And believe me, when you go after the person instead of the machinery of government, they get scared because they stand alone. And that's the way -- that is the tool that we need.

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Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)

**Commentor 755 (cont'd): Catherine Montano**

And, you know, I would like to tell our President, because he went around telling people here in the United States that he was against abortion. He's for life. Well, you know, I'd like to ask him this question, what's the difference in killing that baby before it's born or let that baby be born and radiated to death? What is the difference?

You know what the difference is? Not only do you kill the baby, but you kill the parents, the grandparents, their siblings, it kills everything. And like I say it is time that we have a moratorium in the state of New Mexico and around the United States.

We want cleanup of our state. I know they can't clean radioactivity. But we still want some cleanup. And we also need an independent investigation of all the facilities.

You know that one year I was coming from California and I was in Los Alamos. And you know what he told me? He says I work at Los Alamos Labs and I make so much money I don't have time to spend it. Then I ran into a little old man that said I have nuclear stocks, but they've all gone to hell.

And I felt like saying to him I helped them go to hell. And you know that during the nuclear hearings I had someone come up to me, and this was like 400 people. And he gave me a message, he says this message is for you.

And I read it. And, when I finished reading it, I told him a few things. He says that's true. And I would like to share that message because this message comes from a herald angel. And this is it.

Opposition to WIPP, say no to the waste isolation project WIPP. The massive hole dug in mother earth and into the salt of her veins is meant to house nuclear waste and dispose of them. It is a lie. There are entities from the dark forces at work here. Skullduggery abounds. Chemical warfare has become state of the art.

Thanks to the dark forces that have spread out world disease, one of which is AIDS, there are bunkers throughout the country that are now contaminated which is all our nuclear facilities. The cannisters have leaked and are earmarked to come to WIPP. How dare they. This will devastate our state.

A secret underground base is planned by the dark forces to complete the H bomb. The very fabric of creation is in danger. Our school yards. This is a most crucial time. Your brothers and sisters of spacemen and are love, joy, hope, and peace. To our brothers and sisters of earth, know that we are in the skies for you and we extend a hand of friendship and we stand with you.

Come forth like workers come forth. I am Ashtar and I have spoken through a starfighter. Through those gentle warriors and warriors of the sky and so it shall be. And at the bottom it had the Star of David, inside was his name and around

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NNSA notes the commentor's concerns about environmental restoration at LANL, but disagrees with the implication that contaminated areas cannot be remediated to safe conditions. Appendix I, of the SWEIS summarizes several technologies for cleanup of soil, water, and air and references additional information about existing and emerging cleanup technologies. Chapter 2, Section 2.2.6, of the SWEIS describes the progress that NNSA has made in conducting its environmental restoration program at LANL. Since the early 1990s, when LANL staff identified over 2,000 sites potentially requiring environmental remediation, progress has been made (and sites evaluated) such that only about 800 remain to be addressed. Appendix I of the SWEIS also presents options and environmental analyses for conducting remediation activities at LANL primarily related to the Consent Order that was entered into in March 2005. Decisions about environmental restoration for any contaminated site will be made in accordance with established regulatory standards and processes, including those of the New Mexico Environment Department for sites subject to the Consent Order. NNSA intends to implement actions necessary to comply with the Consent Order regardless of decisions made on other activities analyzed in the SWEIS.

NNSA also acknowledges the commentor's concerns about independent investigations of LANL activities. Independent investigations and audits have been performed at LANL, including an independent audit of LANL compliance with the Clean Air Act. In addition, activities at LANL are subject to external regulation, oversight, and inspection by Federal and State agencies, including oversight by the U.S. Environmental Protection Agency, the State of New Mexico, and the Defense Nuclear Facilities Safety Board. Environmental permits or approvals issued by external agencies are listed in annual LANL environmental surveillance reports. Information about State of New Mexico oversight of LANL activities, including the development of a program of independent monitoring is available at [www.nmenv.state.nm.us/DOE\\_Oversight/](http://www.nmenv.state.nm.us/DOE_Oversight/).

*Comments from the Santa Fe, New Mexico, Public Hearing (August 10, 2006)*

*Commentor 755 (cont'd): Catherine Montano*

it it had seven dots. And I thought who is this. And why would they give it to me. It's got to mean something to me.

And you know that during the day, if I go to the bathroom, I would ask my friends watch my stuff. At the end of the day, I picked it up again. And it was interesting because around the opposition to WIPP it was like a white lettering. The star was colored white. And each little dot, there were seven dots around the star, they were colored like little spaceships.

I have seen the ships line up in that formation. And the night that I saw them line up in that formation, this man made the statement that he had been up on a ship and that Jesus had greeted him. And I was ready to laugh at him when the sky lit up with seven ships in the same formation that was on the Ashtar message.

So I know that there's millions and millions of ships that are monitoring the earth and are watching to see what we are doing here. So it is important for you people that came from California, because the University of California is running Los Alamos Labs. And we need help from all over the country to stop this ugliness in our state.

I want to make one more comment before you take me off the record. My grandson came calling one day. He says, Grandma, I saw the sticker. You know what the sticker said? It said may all nuclear weapons rust in peace.

*Comment side of this page intentionally left blank.*



**SECTION 4**  
**REFERENCES**

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