



PORTSMOUTH EM SITE SPECIFIC ADVISORY BOARD

MINUTES OF THE THURSDAY, MARCH 7, 2019, SSAB MEETING • 6:00 P.M.

Location: The Ohio State University Endeavor Center, Room 160, Piketon, Ohio

Site Specific Advisory Board (SSAB) Members Present: Chair, Bob Berry; Vice-Chair, Carlton Cave; Dr. Todd Burkitt, Brad Burns, Carol Caudill, Jody Crabtree, Dennis Foreman, Jimmy Smalley, Beckie Thomas-Kent, Cynthia Quillen, Judy Vollrath

SSAB Members Absent: Lisa Bennett, Rick Fraley, Turman Helton

U.S. Department of Energy (DOE) and Contractors: Greg Simonton, DOE; Rick Greene, RSI EnTech; Julie Galloway, Cindy Lewis, EHI Consultants (EHI); Jack Williams, Jill Thomson, Fluor-BWXT Portsmouth (FBP)

Liaisons: Sean Kubera, Ohio Department of Health (ODH); Amy Tegethoff, Tom Schneider, Ohio Environmental Protection Agency (EPA)

Facilitator: Eric Roberts, EHI

Public: Pat Marida, Sierra Club; Vina Colley, PRESS/NNWJ; David Manuta, MC2; Lee Blackburn, Diana Cahall, JD Dowell

Approved by Bob Berry, Board Chair

Bob Berry

Call to Order:

Berry: I would like to call the meeting to order.

Roberts: I would like to welcome everyone, and I will be facilitating the meeting. There will be a public comment period after the presentations. The board should stay within its defined scope and follow the meeting ground rules adopted.

October Agenda:

Roberts: Are there any modifications or proposed changes to the March agenda?

- **Cave:** I make a motion to approve the March agenda.
- **Burns:** I second the motion.
 - **Motion carried, minutes approved**

October Minutes:

Roberts: Are there any modifications or proposed changes to the December minutes?

- **Burns:** I make a motion to approve the December minutes.
- **Crabtree:** I second the motion.
 - **Motion carried, minutes approved**

DDFO comments provided by Greg Simonton, Federal Project Coordinator:

- **Environmental Management System (EMS) Integrates with ISMS and Sustainability**
- **Safety Outside the Work Place**
- **PORTS Integrated Baseline**
- **D&D Progress-X-326 Deactivation**
 - **Safely Completed X-326 Wet Air Removal Station**
 - **Field work complete**
- **D&D Progress - X-333 Deactivation**
- **OSWDF Construction**
- **OSWDF Construction-Building the X-611B New Emergency Spillway & Pump and Treat**
- **Groundwater Cleanup**
- **Depleted Uranium Hexafluoride (DUF6) Conversion Plant Update**
- **Site Tours**
 - **Joint Information Center - SSAB Tour**
 - **DOE Public Tour Dates for 2019**
- **Economic Development - Fluor-BWXT Donates \$142,500 for Economic Development in Jackson**
- **Community Outreach**
- **Upcoming Outreach Events**

Question/Comment:	Answer:
<p>Foreman: Has there been any movement on the utilities on the 80 acres?</p> <p>How long does it take to get a response if someone can go on a tour?</p>	<p>Simonton: Yes, the sewer will come from us, gas with us, water and electric may come from off-site.</p> <p>If they talk to Deneen Garner she can tell you if she has spots open. You can still get your name on the list up to a couple of days before.</p>
<p>Smalley: With DUF6' are they using rail?</p>	<p>Simonton: Yes, that is the way it is shipped. We had a shipment this week. The rail had some repairs done, so it is back up and running again.</p>
<p>Quillen: It is important to know that the Joint Information Center (JIC) can also be used by the county. If there is a county disaster, it can be used to assist the county.</p>	

A copy of the DDFO presentation is available on the SSAB web site (www.ports-ssab.energy.gov)

Federal Project Coordinator comments provided by Greg Simonton, Federal Project Coordinator: None at this time.

Liaison comments provided by Sean Kubera, ODH:
Kubera: None at this time.

Liaison comments provided by Amy Tegethoff, Tom Schneider, OEPA:
Tegethoff: None at this time.
Schneider: None at this time.

Administrative Issues: None at this time.

Subcommittee Updates:

D&D/Remediation Subcommittee Update by Brad Burns:

Burns: The D&D/Remediation and Future Use Subcommittee met on January 8. The purpose of the meeting was to present an update on the public comment period for Draft Supplemental EIS for DUF6 presented by Greg Simonton. The subcommittee met again on February 12. The purpose of the meeting was to receive a X-326 Criticality Incredible status presented by Bob Leonard.

Question/Comment:	Answer:
<p>Burkett: Where is the hydrofluoric acid that is being sold?</p> <p>Does that money go back to DOE?</p>	<p>Simonton: It is hydrofluoric acid it is used for industry like etching glass/metals.</p> <p>It goes back to offset the project.</p>

Future Use and Infrastructure Coordination Subcommittee Update by Dennis Foreman:

Foreman: The Future Use and Infrastructure Coordination Subcommittee met on January 8. The purpose of the meeting was to have a tour of PORTS Joint Information Center by Rob Dupras. The subcommittee met again on February 12. The purpose of the meeting was to present a Railroad Infrastructure update presented by Adam Reeder.

Question/Comment:	Answer:
<p>Foreman: The \$115 million, is that now allocated? I thought I saw something in the news about it.</p>	<p>Simonton: I do not know the answer to that.</p>
<p>Are there generator back-ups? They said they had some discussions about it.</p>	<p>Roberts: We will find out.</p>
<p>It would be nice in the future to have it. We had 50-mile winds the other day, you never know when you will have an outage.</p>	<p>Quillen: No, for that building we do not have one, but for the EOC we do.</p>

Workforce Development, Education Outreach and Worker Training Subcommittee Update by Cindy Quillen:

Quillen: The Historic Legacy & Community Engagement Subcommittee met on January 8. The purpose of the meeting was to discuss the Fluor-BWXT Internship program presented by Todd Cron and Jan Paul White. The subcommittee met again on February 12. The purpose of the meeting was to have a preview of the Science Bowl presented by Jeff Pinkerton.

Public Comment:

Blackburn: I have three items. The first is one I have talked about for a long time that is the landfills outside Perimeter Road. They are toxic dumps and they need to be cleaned up. The board needs to do a recommendation to DOE that says these toxic dumps need to be dug up. If you do not do it, someday there will be a problem and DOE will say hey no one never said anything, the board didn't say anything. So, you need to make a recommendation to clean them up and then let DOE decide what they want to do. Second item I have is Recommendation 18-02, which was presented last year and did not pass. The board operating procedures say that recommendations that do not pass will have a majority and minority report written and submitted to DOE and as far as I know they have not been submitted. Dennis you already have a majority report which is the recommendation and those six members that voted against it can write a minority report and submit that as well. But please submit your majority report to DOE so they know what part of the board

wanted to have done. The third item is the ROD on waste disposition. It is wrong, therefore meaningless because it has come to light that the bedrock underneath the on-site disposal cell facility is fractured. When you read the ROD, it says solid bedrock and it is not. There are other faults in the ROD as well. DOE in reference to Recommendation 15-05 as well as DOE counsel have both said the DUF6 will not go into the on-site disposal cell but if you read the ROD it says that some of the piping from the process buildings which contains DUF6 will be cut up and put into the landfill. So, that is other issue and brings up the point. Tom how is it possible that OEPA is Ok with having signed off on a faulty ROD? Do you still agree with that ROD and if so why? Thank you.

Manuta: I want to make a couple of quick points. First one is Greg when you were doing your presentation, I wanted to make sure I heard the word hydrogen fluoride and not hydrogen chloride because that is critically important. Second thing, I wanted to say was when Brad was talking. The key issue is the money compound, it is the degree of the enrichment that determines whether it is used in weapons grade or reactors. The DUF6 tanks are depleted, because every time you remove the product you are leaving behind a lower concentration of uranium 235 and the other material, which is the depleted material. Keep in mind that the thousands of cylinders that Eric is talking about have been stacked up for the lifetime of the plant. The idea is that the uranium hydrogen fluoride that is in them is much less stable than the oxide that came out of the ground, and so what the DUF6 process does is converts the fluoride back to the oxide and the by-product is HF, hydrogen fluoride. I mentioned to the leadership that if you do it right the amount of HF could be sold and pay for the whole thing and eventually it will get to that point. It is important to recognize the value of the HF.

Cahall: To follow-up just a little bit on the comment that Lee was making on the waste disposal criteria, DOE has issued a document that notifies the public to send DUF6 conversion waste from Portsmouth and Paducah to locations in Nevada, a Nevada security site and Energy Solutions in Utah, Waste Control Specialist in Texas, one of those three and a fourth which is leaving the DUF6 on-site, which I do not think anyone here would vote for. So, in that decision-making process, they are talking about the empty cylinders being crushed or cut up and disposed as waste. With the heels in those cylinders, they removed most of them, but I think some are still left in them. Might ask some questions about whether they go into the waste disposal facility. Is that allowed in the facility and if not, why not? I would push for that because nobody wants DUF6, or worse, transuranic heels. That's all I have, thank you

Marida: I am the chair of the Ohio Sierra Club. I handed out a couple of papers to you today. First, I want to talk about the Code of Conduct because I have seen in a lot of meetings their code of conducts are famous for silencing people within the leadership, so it can be used as a way of marginalizing a member of a committee or member of the public. Pay attention to the person's argument and, of course, personal attacks are unacceptable from any side. One of the hand-outs I gave you

was about the draft EIS for the disposition of the uranium oxide from the depleted uranium in the core. The Sierra Club knows that the three places that the ban was mentioned that it suggested the waste go is Texas, Utah and Nevada. Texas is clearly the closest so that would mean there was a financial advantage to sending it to Texas, but the Sierra Club has some serious concerns about that. We have concerns about transport in the bags because they clearly are not as robust as the cylinders. Therefore in case of an accident it would be pretty easy for them to pop and spread all over. Then we wonder also if the DOE is making some kind of policy or De Facto regulation by writing this paper and we have a question about that. About the three different places, the Sierra Club has a long history of opposing private radio active dumps. The ones in Texas and Utah are private dumps. So at least in theory the public has some control over what happens in a publicly owned dump which is the Nevada National Security Site. Private dumps can also go bankrupt and leave a horrible mess for the public to clean up. We do not have confidence in this material getting one step farther away from public oversight. And we definitely oppose it being moved to WCS in Texas because that sits above the Ogallala aquifer, which is a water source for six states. Maps show the aquifer to be under that site, but WCS with their application says they moved the location of the aquifer, so they say it is no longer under the site. Because they want to make a consolidated storage for high-level waste, there is a proposal to ship high-level waste, which is the fuel rods from nuclear power plants. They ship that to a site right there at WCS. There has been a new study done with a 10-page report of the storage facility and it shows critical aquifers there. Energy Solutions at the Utah site have been fined numerous times. In 2018 they paid more than \$50,000.00 in penalties for repeated violations at the Utah site. While there is no good solution for radioactive waste, the least problematic place would be the Nevada site. The Sierra Club says this material should have never been generated in the first place.

Colley: PRESS/NNWJ I ditto what Blackburn said, because our group was one of the first in 1992 to find that the bedrock was fractured. We brought it up to the DOE facility in '94, '95, '96 we filed a petition with the centrifuge plant and in that petition you will see that the bedrock was fractured. Not only is the bedrock fractured, but the site is on top of the largest aquifer in the Midwest. So in many ways tearing this facility down and putting it in a waste cell is a crime really. I brought a couple of newspaper articles and I didn't have time to make copies for everyone, but I hope you go back and look at them. One of them is from August 13, 1999. They don't mention my group, but they mention plutonium, transuranics and our group brought it up before that. You have a serious problem here. You have plutonium, and transuranics all over this site, off-site, in the creek, in the river and I am inviting all of you to come to our forum. It is March 19, 2019, at the Welcome Center in Portsmouth, Ohio from 5:00 - 7:00. They have it on line now where you can sign-up if you are coming. Here is the invitation. I want you to make copies of these two newspaper articles and give them to the board so they will know exactly what is going on at this plant. We cannot go in there and demo these buildings with all these transuranics and plutonium on-site, and it cannot definitely go in that waste cell. We need to figure out something else to do. I do not know why they have

not been listening to us all these years, but we have been telling you guys that there is plutonium out here. They admitted it in 1999, workers were compensated because of it. It's a long battle for the workers, it is a long battle for the community. There was a lawsuit out here that has been going on for 21 years. The lawsuit was within a 10-mile area around the facility, not the east, not the west, not the south, it was all around this site and the community won. We have a serious problem out here. I would like to get a commitment from you guys to come to our meeting on the 19th. It will be the first time we have the opportunity to ask you guys questions, you can ask us questions. We have enough whistleblowers from this site that we could actually put someone in jail for what they have done to this community and these workers. Hopefully we can get our records released so that we can extend the workers to get paid. The cut-off is 1992. These new workers that come in here now and demo these buildings will not get compensated. That is our goal.

Final Comments from the board: None at this time.

Berry: Adjourned

Next Meeting: April 4, 2019

Action Items:

- Find out if the \$115 million for the Centrus project is allocated now.

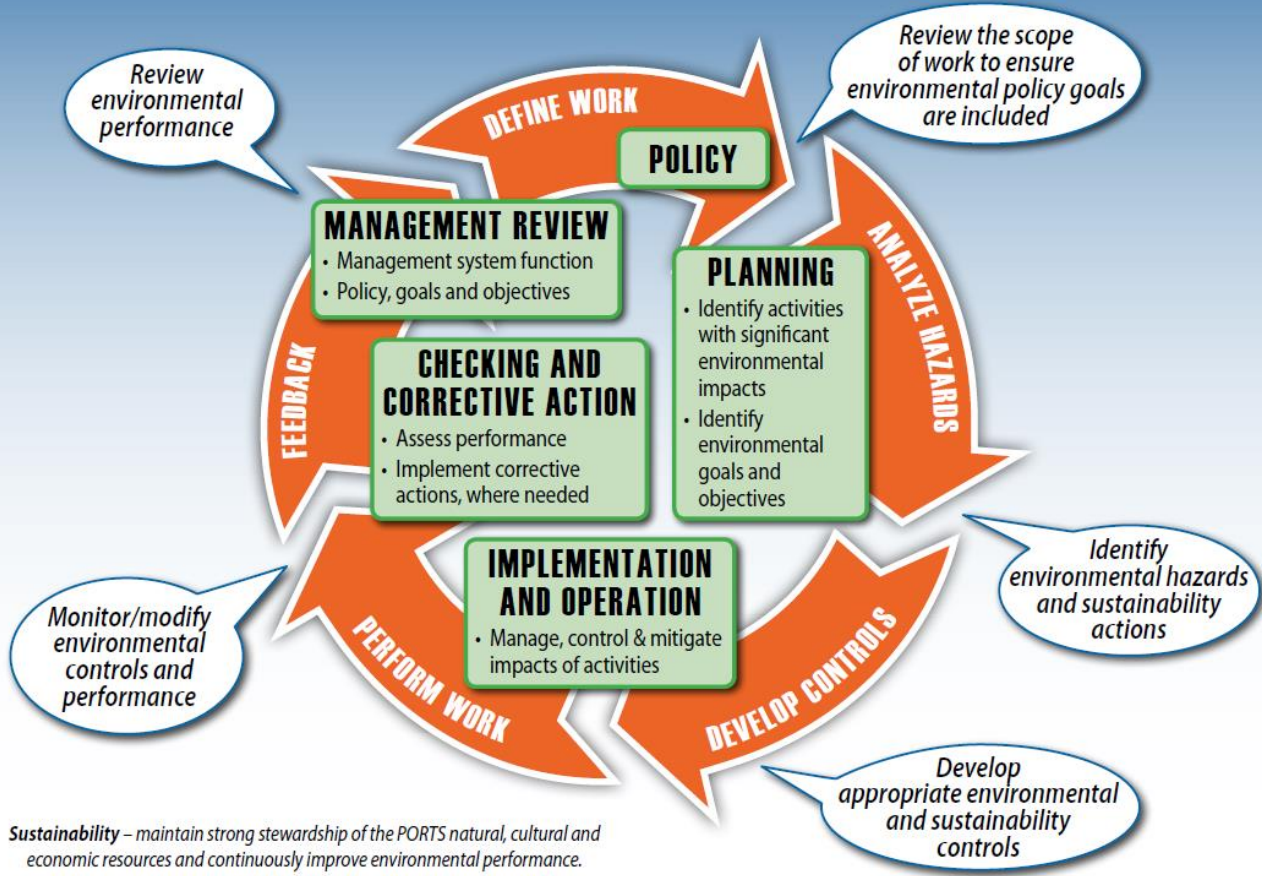
U.S. DEPARTMENT OF ENERGY



Deputy Designated Federal Official Presentation Portsmouth Site Specific Advisory Board

Greg Simonton, Federal Coordinator
March 7, 2019

Environmental Management System (EMS) Integrates with ISMS and Sustainability





Safety Outside the Work Place



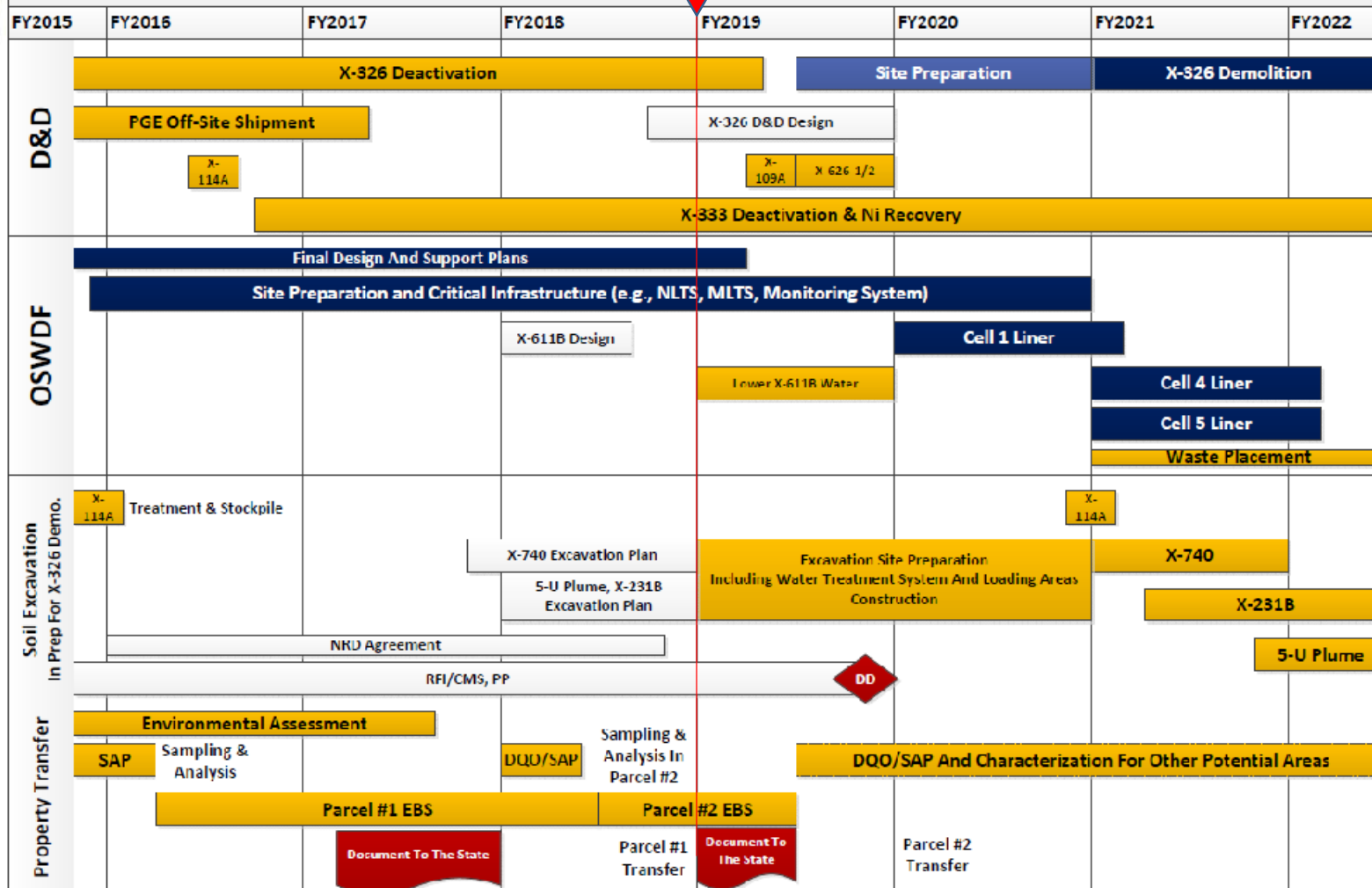
“I truly believe that the course offered here on plant site that covers CPR, AED, and First Aid for Children, Infants and Adults is a fantastic class and should be taken by every employee if possible,” Randy Blevins

Blevins Receives the first-ever Charlie Lineberry Safety Award



PORTS Integrated Baseline

September 26, 2018





D&D Progress – X-326 Deactivation





D&D Progress – X-326 Deactivation -

Safely Completed X-326 Wet Air Removal Station



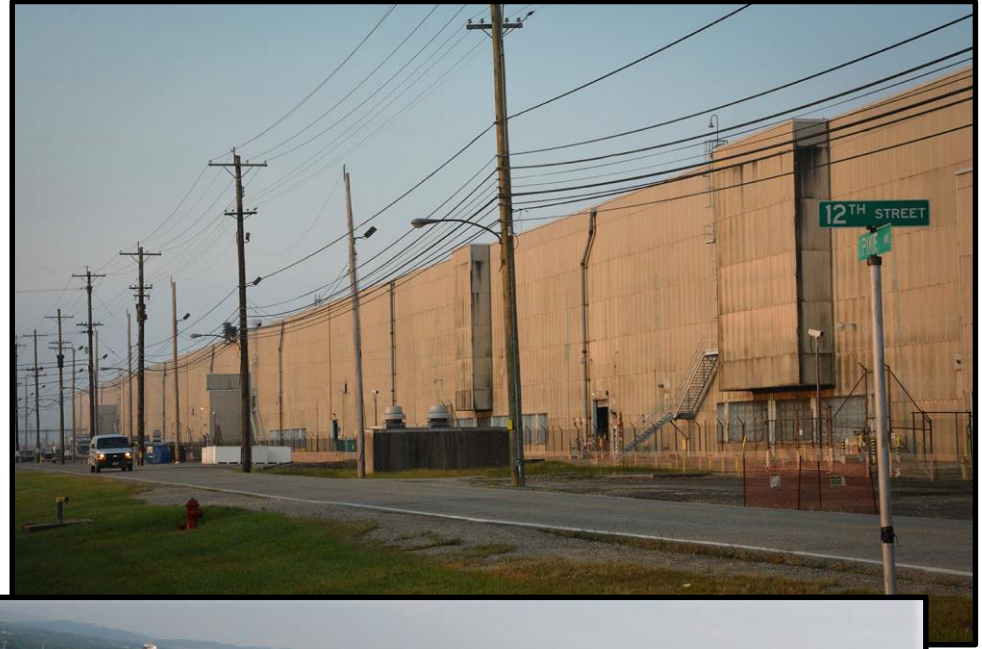
PREPARING THE FUTURE

PORTS
D&D PROJECT





D&D Progress – X-326 Deactivation - Field work Complete



In the X-326 Process Building, which was once the home of highly-enriched uranium, Fluor-BWXT personnel are streamlining efforts to deactivate the building.





D&D Progress – X-333 Deactivation





OSWDF CONSTRUCTION-



PREPARING THE FUTURE

PORTS
D&D PROJECT



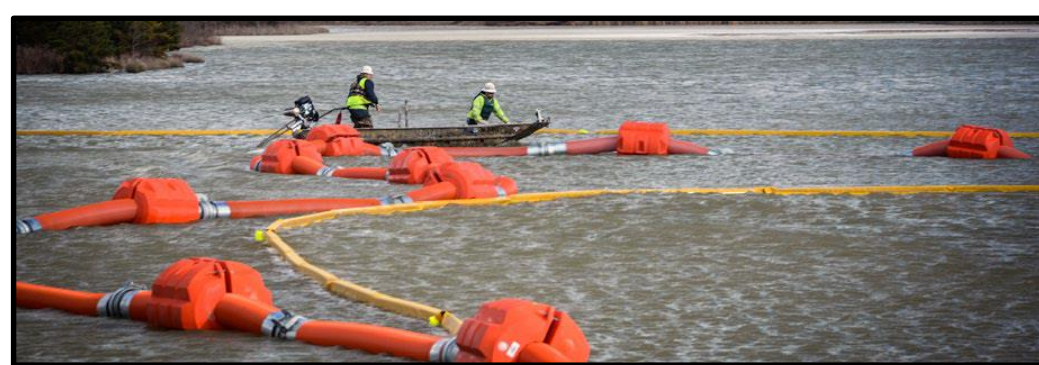


OSWDF CONSTRUCTION-

Building the X-611B New Emergency Spillway & Pump and Treat



Panoramic view of the X-611B Emergency Spillway Project at the Portsmouth site



Bright orange “pipe floats” suspend the hose that will be used to convey pumped water from the lagoon.



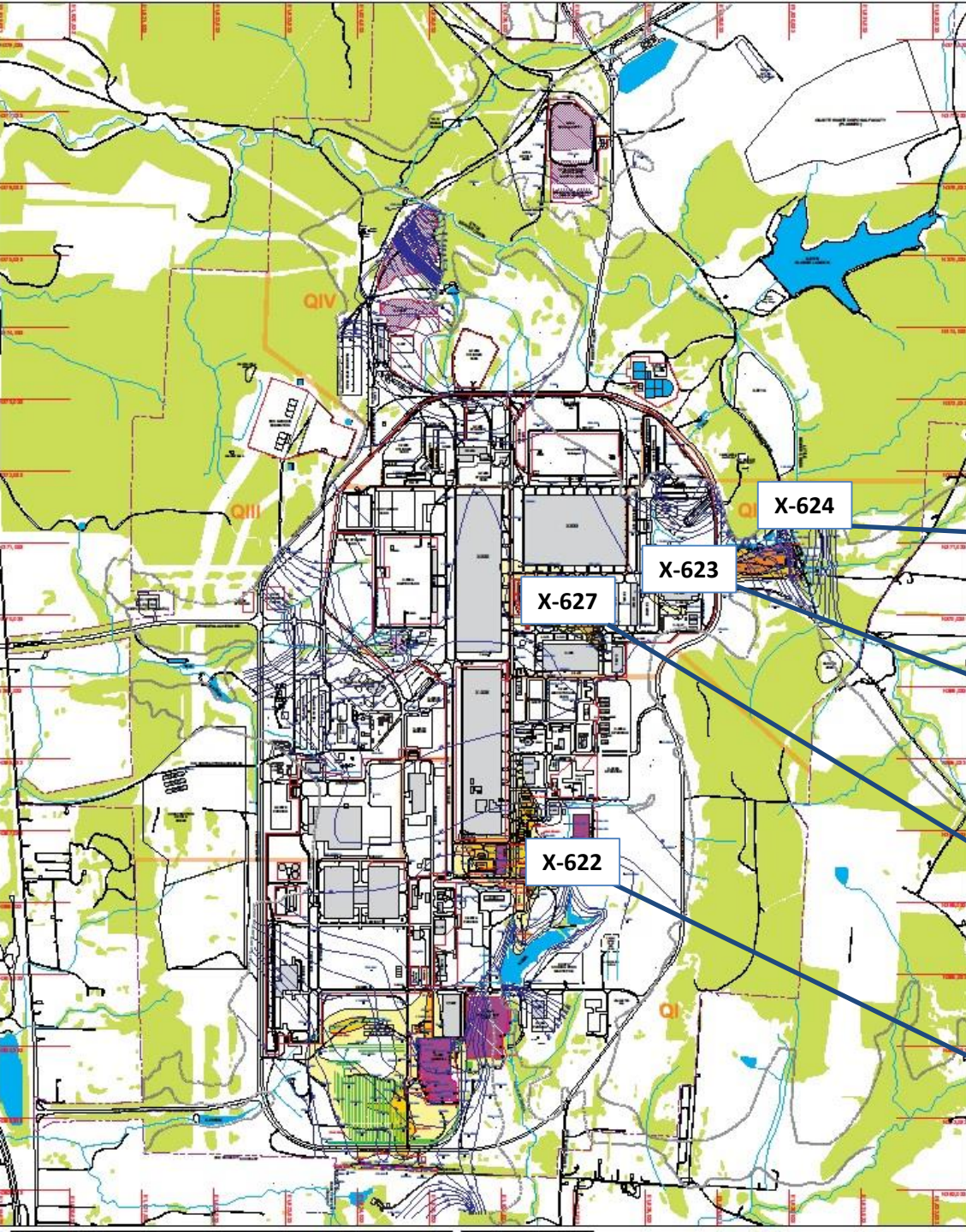
Another view of the spillway during construction.



Groundwater Cleanup



Groundwater Cleanup



Groundwater Treated FY19- Through Dec 2018	Groundwater Source	TCE Removed FY19- lbs.
Gallons 111,800	X-701B Plume	1.12
Gallons 6,150	Misc. Site	0.00
Gallons 2,785,600	7-Unit Plume	30.00
Gallons 5,875,700	5-Unit & X-749/ X-120 Plumes & PK Drainage	5.97



Depleted Uranium Hexafluoride (DUF6) Conversion Plant Update





Site Tours

Joint Information Center - SSAB Tour





Site Tours

DOE Public Tour Dates for 2019



DOE Public Tour Dates:

April 27 -May 18-June 15-July 20-August 17-September 21-
October 19

Contact Deneen Garner at deneen.garner@ports.pppo.gov



Economic Development – Fluor-BWXT Donates \$142,500 for Economic Development in Jackson





Community Outreach





Upcoming Outreach Events



South Central Region Science Bowl VII
Friday, March 15, 2019
Shawnee State University



SSAB Full Board Meeting
Thursday, April 4, 2019



DOE Public Tour
Thursday, April 27, 2019



PORTSMOUTH EM SITE SPECIFIC ADVISORY BOARD

•OSU Endeavor Center• 1862 Shyville Road • Piketon, Ohio 45661 • (740) 289-5249 •

Proposed Agenda for the March 7, 2019 Board Meeting

Chair

Robert L. Berry

Co-Vice Chair

Carlton L. Cave

Board Members

Lisa Bennett

Todd Burkitt

Bradley Burns

Jody Crabtree

Maddeline C. Caudill

Dennis Foreman

Wade Fraley

Turman Helton

Cynthia Quillen

Jimmy E. Smalley

Beckie Thomas-Kent

Judy R. Vollrath

6 p.m.

Call to Order, Introductions

Review of Agenda

Approval of December Minutes

DDFO Comments

--15 minutes

Federal Coordinator Comments

--10 minutes

Liaison Comments

-- 5 minutes

Administrative Issues

--20 minutes

Subcommittee Updates

--5 minutes

Public Comments

--15 minutes

Final Comments from the Board

--15 minutes

Adjourn

Deputy Designated

Federal Official

Joel Bradburne

DOE Federal Coordinator

Greg Simonton

Support Services

EHI Consultants, Inc.

1862 Shyville Road

Piketon, OH 45661

Phone 740.289.5249

Fax 740.289.1578



Ohio Sierra Club Nuclear Free Committee
131 North High Street, Suite 605
Columbus, OH 43215



Senator Sherrod Brown
Senator Rob Portman
Representative Brad Wenstrup

March 7, 2019

Dear Senators Brown and Portman and Representative Wenstrup,

We are disappointed that Ohio's representatives on both sides of the aisle support the Department of Energy's plan to continue in the failed tradition of enriching uranium at the Portsmouth Nuclear Site.

This comes to us as yet another taxpayer burden at the time when the wealthiest Americans are paying less and less of the cost of supporting the needs of the nation.

The only purpose for newly-sourced High Assay Low Enriched Uranium (HALEU) is military. The Nuclear Nonproliferation Treaty requires countries to have domestic ownership of facilities that enrich uranium for nuclear weapons. All U.S. commercial reactors can be supplied by Urenco in New Mexico, the only commercial producer in the U.S. Urenco is foreign-owned. For any other purpose, including "advanced" or "small modular" reactors, HALEU can be obtained from Urenco and elsewhere. Idaho National Labs has tons of HALEU, and Urenco will soon be producing HALEU for its U-battery reactor.

Existing reactors cannot use more than 5% U-235, so HALEU will actually need to be downblended to produce tritium for military use at Watts Bar, the only reactor that is allowed to produce tritium.

In this February 13, 2019 *Midwest Energy News* article, Peter Bradford, a former member of the Nuclear Regulatory Commission, Tim Judson of the Nuclear Information and Resource Service and Ed Lyman from the Union of Concerned Scientists share concerns about the dangers of crossover and comingling between military and civilian nuclear activities: [*Nuclear watchdogs warn against blurring energy, military uses at Ohio fuel plant.*](#)

Proposed Small **MOBILE Nuclear Reactors** would use HALEU so they don't have to refuel as often—perhaps only every 10 years. There are even proposals to bury these in the ground. Stunningly, there are proposals to abandon these after a useful life of 10 years because that would be easier than digging them up and refueling. Small Mobile Nuclear Reactors, deployed by truck, train, ship and plane into isolated mining regions, onto military bases and into war zones. What could possibly go wrong?

The Sierra Club Board of Directors voted in 2017 to support the **UN Treaty on the Prohibition of Nuclear Weapons**. In 2018 the Club became a partner organization with the **International Campaign to Abolish Nuclear Weapons (ICAN)**, recipient of the 2017 Nobel Peace Prize. The last thing that the world needs is more nuclear weapons. Nor does the world need to risk stimulating the desire of currently non-nuclear nations to enrich uranium themselves and build nuclear weapons.

Instead, Ohio needs investment in renewables and efficiency. We ask you, our representatives, to exert your influence on the DOE to increase its presence in wind and solar development in Ohio.

Sincerely,

/s/

Patricia A. Marida, chair
patmarida@outlook.com



**SIERRA
CLUB**

*Ohio Sierra Club Nuclear Free Committee
131 North High Street, Suite 605
Columbus, OH 43215
February 11, 2019*



Comments and questions from the Ohio Sierra Club Nuclear Free Committee on the

Draft Supplemental Environmental Impact Statement for Disposition of Depleted Uranium Oxide Conversion Product Generated from DOE's Inventory of Depleted Uranium Hexafluoride

The U.S. Department of Energy (DOE) has informed the public that they overlooked notifying the states of Nevada and Utah of their intention to send DUF6 conversion waste from Portsmouth and Paducah to locations in those states for final disposal. The specific sites are the Nevada National Security Site (NNSS) and Energy Solutions in Clive, Utah. DOE now says that there are 4 alternatives for disposal, the two mentioned previously plus Waste Control Specialists (WCS) in Andrews County, Texas, and a fourth choice of leaving this DU onsite.

The Sierra Club has questions and comments. *Note that these questions are somewhat different than in Patricia Marida's oral statement at the public hearings.*

Question 1. Johnny Riesling of Fluor-BWXT Portsmouth made a recommendation to the PORTS Site Specific Advisory Board subcommittees that the DU be sent to WCS. Why is WCS being favored?

Question 2. Is *getting approval* from the states of Utah or Nevada to accept this waste going to be more difficult now than previously? Can Nevada say no to this waste?

Question 3. Is getting approval from Texas and Waste Control Specialists going to be easier than from Nevada and Utah?

Question 4. Has DOE sent waste from PORTS to Energy Solutions in the past? If so, what did the major shipments contain?

Question 5. Texas is closer to Ohio, Utah next, and Nevada farthest. Are shipping costs a major factor in making this decision? The Sierra Club takes the costs of these alternatives seriously.

Question 6. There is a long discussion of transport in "bags" in the SEIS. Choices are shown, but no recommendations given. It would seem that these bags would be far less secure in case of accident. Also, bags would surely be far less stable wherever they are located. Why is the Dept. considering shipping the DU in bags?

Question 7. If the "empty" cylinders are crushed, any remaining contents inside cylinders would be able to be more easily spread. What will happen to the "heels" of transuranics and technetium that are currently inside the cylinders?

Question 8. Will bags be shipped first, before the crushed cylinders? We ask this question because we foresee the possibility of delaying the shipment of the cylinders till the end of the process.

Question 9. If the DU is shipped offsite in bags, is it possible that some of the empty cylinders will remain onsite?

Question 10. Without more information, it would seem that shipping the DU in bags and crushing the cylinders could save money, but at the cost of far more radioactive spills and pollution. Is a public hearing going to be held on this issue, with educational information given and comments accepted?

The Sierra Club has a long history of opposing private radioactive dumps. At least in theory, the public has some control over quality control and disposal issues at the publicly-owned DOE site in Nevada. Energy Solutions and WCS are private dumps. At private dumps, everything is proprietary. And they can go bankrupt and leave a terrible mess for the public to clean up. We do not have confidence in having this material one step further away from public oversight.

The Sierra Club strongly opposes moving Portsmouth and Paducah waste to the WCS site. WCS sits above the Ogallala Aquifer, a critical water resource. Before this radioactive waste dump was constructed, maps showed the aquifer to be there. With the stroke of a pen, WCS license application moved the location of the aquifer and presto, it was no longer beneath their location.

We are submitting, at the end of our comments, the 10-page "*Geologic Review of Interim Storage Partners LLC, WCS Consolidated Interim Storage Facility, Environmental Report*" written by Patricia Bobeck, PhD, PG, October 25, 2018. Among the things that this report says are, "The Environmental Review does not clarify the connection between the Ogallala Formation mapped at the site, its relationship to the OAG (Ogallala, Antlers, Gatuña undifferentiated) at the site, or the Ogallala Aquifer, or the hydraulic connection of this southern portion of the Ogallala to the central portion of the main Ogallala Aquifer located to the north." The proposed Interim Storage Facility sits next to the currently-operating Waste Control Specialists Site.

Dr. Bobeck's *Geologic Review* is an evaluation of the Interim Storage Partners Environmental Report. This Environmental Report is part of a license application submitted by Interim Storage Partners for the proposed construction of a Consolidated Interim Storage Facility at Waste Control Specialists property. Dr. Bobeck's Review goes on to say, "The Ogallala/OAG and the Dockum Group lie beneath the Consolidated Interim Storage Facility (CISF) site. The Ogallala aquifer is the largest aquifer in the United States and a major aquifer under the Texas High Plains. Availability of Ogallala water is critical to the regional economy because it is used for irrigation (Texas Water Development Board (TWDB) Report 380, p. 51)." Dr. Bobeck's review of Interim Storage Partners Environmental Report goes on to detail many flaws in Interim Storage Partners' determination of the geology.

Energy Solutions has had numerous violations, including fines for radioactive releases and employee exposures at its locations, particularly at its site in Erwin, TN. In 2018 the Utah Division of Waste Management and Radiation Control asked EnergySolutions to pay more than \$50,000 in penalties after the company repeatedly violated the terms of its permit at its Clive waste disposal facility. Utah regulators did not notify the public of these violations for 3 years.

While there is no good "solution" for disposal of radwaste, the problems and questions above lead to the conclusion that **the least problematic site for "disposing" of this extremely long-lived waste material would be at the Nevada National Security Site.**

We emphasize that this should never have been generated in the first place, and we recognize that this material will be either left in our back yard or sent to someone else's back yard. And the "someone else" is almost always the most marginalized and least politically powerful people. The Nevada Site, with less rainfall, will contain radwaste longer than any site in Ohio. Still, wherever it goes, this radioactivity will eventually mingle with its surrounding area.

Submitted by
Patricia A. Marida, chair
Ohio Sierra Club Nuclear Free Committee

Vina Colley, Whistleblower
PRESS/NNWJ/NWA
P.O. Box 136
Portsmouth, Ohio 45662
(740)-357-8916
vcolley@earthlink.net

February 28, 2019

To All This Will Concern:

PRESS, NNWJ, Food and Water Action, and A Call to Actions are pleased to invite you to our public forum on March 19 at the CAO Welcome Center, 342 Second St, Portsmouth, Ohio from 5:00 p.m. to 7:00 p.m. We would be honored to have you join us to listen and share our concerns about the proper disposal of nuclear waste at the A-plant in Piketon, Ohio.

Area residents are the ones who will feel the impact of the decision made on the re-purposing of the on-site waste disposal facility and burial of contaminated materials there. The community deserves to know the levels of exposure workers and the community are, were, and will be exposed to and needs an explanation of the chosen measurements for determining whether the elements are toxic. We are concerned about toxic Plutonium and Transuranic waste which will be placed in the underground waste cell at the Piketon site over fractures in the bedrock and in direct proximity to the Scioto River which flows into the Ohio. We are also concerned about dust particles being released in our air from the demolition.

Releasing all records will help the community and workers have a better understanding of what we have been and will be exposed to. Workers who have the burden of proof in order to get compensation under the EEOICPA will be helped by having the full and complete record.

Please contact Vina Colley for more information and to discuss this invitation further. Thank you for your time and consideration.

Sincerely,

Vina Colley

(PRESS)Portsmouth-Piketon Residents for Environmental Safety and Security
(NNWJ) National Nuclear Workers for Justice
A Call to Actions
Food and Water Action

Activist says wider probe is warranted

Plutonium contamination at Piketon

Monday, August 23, 1999

By Bob Dreitzler
Dispatch Staff Reporter

PIKETON, Ohio -- An activist hopes emerging information about plutonium contamination at the Piketon uranium enrichment plant will lead to a broader investigation of problems that she said have plagued the plant and its workers for years.

"People are beginning to understand that I am not crazy because the things I have been talking about are starting to surface," Vina Colley said. "Some of the workers think I am trying to shut the plant down, but I am trying to get them help."

Colley, 53, worked as an electrician at the gaseous diffusion plant about 70 miles south of Columbus in the early 1980s.

At the time, she said, she was exposed to a variety of dangerous materials, including oil laced with hazardous polychlorinated biphenyls and contaminated with uranium.

For more than a decade, she has been gathering information about nuclear materials and facilities and monitoring reports of leaks and spills at the local plant.

Colley is president of a local group, Portsmouth and Piketon Residents for Environmental Safety and Security. She also belongs to the Alliance for Nuclear Accountability and the Military Toxic Project, which studies depleted uranium issues and Gulf War illnesses.

She cites chronic bronchitis, chronic fatigue, hair loss, skin rashes, thyroid and connective tissue problems among her numerous health ailments. She's had a hysterectomy and

Portsmouth Gaseous Diffusion Plant in Piketon and whether the exposure could have caused cancer or other illnesses.

"There is no question . . . communications should have been a lot better," said Steve Wyatt, an Energy Department spokesman.

"Quite frankly, it all falls in the realm of openness."

Or a lack thereof.

The presence of plutonium at Piketon stems from a secret Cold War initiative during the 1950s, '60s and '70s to recycle spent nuclear reactor fuel into more uranium.

The enrichment plants were used to produce nuclear weapons-grade uranium.

The plants, privatized last year, now produce only commercial-grade uranium used as nuclear power plant fuel.

Most of the plutonium-laced uranium went to Piketon's sister plant in Paducah, where workers now are asking whether it caused a cancer cluster. Some of the material, in a diluted form, was shipped to Piketon.

The Energy Department said bulletins issued by plant officials in 1993 and 1996 noted the presence of plutonium and other transuranics -- related radioactive material.

But the bulletins, written in highly technical form, apparently were not highly publicized and did not receive much attention.

The presence of plutonium also was divulged during a public meeting last September in Waverly, Ohio.

But the few people who attended the meeting would have had to understand what transuranics are or studied a chart to know plutonium was being discussed, judging from a summary of the meeting.

A local newspaper article about the hearing never mentioned plutonium.

Hedges said safety measures were implemented, including plugging drains in the building and changing safety clothing requirements. He said the material was outside the X-705 building.

However, Colley read from a report that indicated transuranic contamination had been found in two large process buildings.

T. David Taylor, Martin Marietta's manager for environmental restoration and waste management site operations, said Hedges had referred only to locations outside the process pipeline system when he said the highly radioactive materials had not been found in other buildings.

"I am telling you, you have a real serious problem," Colley said. "You need to tell your workers and you need to (do something) about these buildings."

Among the thousands of documents Colley has collected about the Piketon plant is a 1957 letter from the Oil, Chemical and Atomic Workers Union to the state health department, citing an unusual number of deaths and illnesses among workers.

"We beg of you . . . to have a complete investigation," union President C. A. Romaine wrote. "This request comes as a last resort to get something done down here!"

A copy of a July 29, 1977, letter to the U.S. Energy Research and Development Administration discusses safe conversion of uranium oxide contaminated with transuranics. Colley's copy is unsigned but bears a stamp saying the original was signed by G.D. Althouse for Goodyear Atomic, operator of the plant at the time.

The letter said the company wanted to proceed cautiously with uranium oxide processing: "We will increase the scope and frequency of our monitoring (1) to assess the buildup of transuranics in workers' bodies and (2) to determine whether levels of transuranics discharged to the environment are acceptable."

A 1977 report mentioning the possibility of plutonium at the Piketon plant also is cited in a 1996 letter sent by Cincinnati attorney Louise M. Roselle to the Agency for Toxic Substances and Disease Registry.

Mark Griffon, a health physicist consulting for the union that represents Piketon workers, said he would have sounded alarm bells if he had known the extent of plutonium found on plant grounds in recent years.

Griffon said former workers he's spoken with knew nothing about working with plutonium at the time -- and did not find out in recent years, either.

"The line for years was, the plutonium . . . was there but in trace quantities. It wasn't concentrated enough to cause exposures to even warrant monitoring," Griffon said.

"Now the data is causing people to question that. My feeling is, let's go back and investigate further."

In 1997, the Ohio Environmental Protection Agency turned up evidence of significant quantities of plutonium and other transuranics.

Radioactivity from the plutonium has measured as high as 110 picocuries per liter.

Levels as low as 1 picocurie per liter would have mandated a cleanup effort, said Maria Galanti, the state EPA's project coordinator for the ongoing Piketon cleanup.

The agency did not find any plutonium in the Piketon groundwater.

Trace levels found once in sediment in Little Beaver Creek off the plant grounds did not reappear, so the EPA did not issue a public notice.

But the land where the plutonium was found is considered so highly radioactive that it still is cordoned. People must wear protective gear to walk there, Galanti said.

She said other plutonium-contaminated sites at Piketon might not have been detected.

The state EPA has been testing 10 percent of all soil samples for plutonium and related materials because the Department of Energy said only "trace" levels should be present.

Energy officials promised that the issue will be investigated thoroughly.

U.S. Secretary of Energy Bill Richardson pledged this week that an independent board of scientists will conduct the investigation that will start Oct. 1 and finish by March.

According to the Energy Department, the amount of plutonium handled at the Piketon plant was minimal.

Most of the material was handled at Paducah, but quantities there also were relatively small, officials have said.

But there's an information gap that must be remedied, Wyatt said.

"The issue of transuranics has been with us for years," he said.

"Was it communicated well? No. We can't change the past. (But) from that, we can learn better ways to communicate."

Plutonium report hidden in jargon

**Agency blames poor communication for Piketon,
Paducah scares**

Friday, August 13, 1999

By Jonathan Riskind

Dispatch Washington Bureau

WASHINGTON -- The presence of highly radioactive plutonium at southern Ohio's uranium enrichment plant hasn't been a secret in recent years.

Not officially, anyway.

The federal government has quietly revealed the existence of the substance -- but only to those who can figure out complex scientific charts and understand such esoteric terms as *transuranics*.

Federal officials acknowledge they failed to properly inform workers potentially exposed to the deadly material

during the height of the Cold War, a U.S. Department of Energy spokesman said yesterday.

The department also reported late yesterday that an investigative team would arrive Tuesday at its uranium enrichment plant in Paducah, Ky.

The department is determining whether to ask for more money in the 2000 fiscal year to address health and safety issues in Paducah; Piketon, Ohio; or other sites.

Plutonium is 200,000 times more radioactive than uranium; even a millionth of an ounce can cause cancer, experts say.

The officials are scrambling to answer questions about how much plutonium workers came into contact with at the Portsmouth Gaseous Diffusion Plant in Piketon and whether the exposure could have caused cancer or other illnesses.

"There is no question . . . communications should have been a lot better," said Steve Wyatt, an Energy Department spokesman.

"Quite frankly, it all falls in the realm of openness."

Or a lack thereof.

The presence of plutonium at Piketon stems from a secret Cold War initiative during the 1950s, '60s and '70s to recycle spent nuclear reactor fuel into more uranium.

The enrichment plants were used to produce nuclear weapons-grade uranium.

The plants, privatized last year, now produce only commercial-grade uranium used as nuclear power plant fuel.

Most of the plutonium-laced uranium went to Piketon's sister plant in Paducah, where workers now are asking whether it caused a cancer cluster. Some of the material, in a diluted form, was shipped to Piketon.

The Energy Department said bulletins issued by plant officials in 1993 and 1996 noted the presence of plutonium and other transuranics -- related radioactive material.

But the bulletins, written in highly technical form, apparently were not highly publicized and did not receive much attention.

The presence of plutonium also was divulged during a public meeting last September in Waverly, Ohio.

But the few people who attended the meeting would have had to understand what transuranics are or studied a chart to know plutonium was being discussed, judging from a summary of the meeting.

A local newspaper article about the hearing never mentioned plutonium.

Mark Griffon, a health physicist consulting for the union that represents Piketon workers, said he would have sounded alarm bells if he had known the extent of plutonium found on plant grounds in recent years.

Griffon said former workers he's spoken with knew nothing about working with plutonium at the time -- and did not find out in recent years, either.

"The line for years was, the plutonium . . . was there but in trace quantities. It wasn't concentrated enough to cause exposures to even warrant monitoring," Griffon said.

"Now the data is causing people to question that. My feeling is, let's go back and investigate further."

In 1997, the Ohio Environmental Protection Agency turned up evidence of significant quantities of plutonium and other transuranics.

Radioactivity from the plutonium has measured as high as 110 picocuries per liter.

Levels as low as 1 picocurie per liter would have mandated a cleanup effort, said Maria Galanti, the state EPA's project coordinator for the ongoing Piketon cleanup.

The agency did not find any plutonium in the Piketon groundwater.

Trace levels found once in sediment in Little Beaver Creek off the plant grounds did not reappear, so the EPA did not issue a public notice.

But the land where the plutonium was found is considered so highly radioactive that it still is cordoned. People must wear protective gear to walk there, Galanti said.

She said other plutonium-contaminated sites at Piketon might not have been detected.

The state EPA has been testing 10 percent of all soil

samples for plutonium and related materials because the Department of Energy said only "trace" levels should be present.

The state EPA intends to return to nearby locations to test for plutonium to make sure it's all been found, Galanti said.

While most of the plutonium- laced uranium used during the Cold War was removed from the Piketon facility, at least 6 tons of the material remained on site as recently as 1985, according to a Department of Energy report obtained by Louise Roselle, a Cincinnati lawyer.

The report received little attention when it was released.

Roselle filed a \$300 million class- action suit several years ago that alleged plant emissions contaminated the area surrounding the plant. The case is pending. Some residents around Piketon have said those emissions have caused health problems.

The processing of plutonium- laced uranium took place in 1952-64, 1969-74 and 1976-77, according to the 1985 report.

The result was a potentially dangerous buildup of highly

radioactive material, which can require "special precautions to assure safe exposure levels to personnel," the according to the report.

The Paducah plant converted about 100,000 tons from solid to gaseous uranium, and did the initial enrichment. Much of that material then was sent to Piketon for further enrichment.

About 328 grams of plutonium were in that 100,000 tons; about one gram was left after conversion and before the initial enrichment.

Also, Piketon received about 570 tons of converted but unenriched plutonium-laced uranium, Energy Department officials said this week.

One expert said that amount of plutonium spread through that amount of uranium over about 25 years was unlikely to cause cancer.

But the plant-workers' union questioned whether more plutonium was in the shipments than the government has acknowledged.

Energy officials promised that the issue will be

investigated thoroughly.

U.S. Secretary of Energy Bill Richardson pledged this week that an independent board of scientists will conduct the investigation that will start Oct. 1 and finish by March.

According to the Energy Department, the amount of plutonium handled at the Piketon plant was minimal.

Most of the material was handled at Paducah, but quantities there also were relatively small, officials have said.

But there's an information gap that must be remedied, Wyatt said.

"The issue of transuranics has been with us for years," he said.

"Was it communicated well? No. We can't change the past. (But) from that, we can learn better ways to communicate."