



INL Site Environmental Management

C I T I Z E N S A D V I S O R Y B O A R D

Meeting Minutes

June 12, 2013

The Idaho National Laboratory (INL) Site Environmental Management (EM) Citizens Advisory Board (CAB) held its quarterly meeting on Wednesday, June 12, 2013, at the Hilton Garden Inn in Idaho Falls, Idaho. An audio recording of the meeting was created and may be reviewed by calling CAB Support Staff at 208-557-7886.

Members Present

Willie Preacher, Chair
Nicki Karst, Vice Chair
Bob Bodell
Herb Bohrer
Sean Cannon
Harrison Gerstlauer
Harry Griffith
Kristen Jensen
Betsy McBride
Bill Roberts
Tami Sherwood

Members Not Present

Teri Tyler

Deputy Designated Federal Officer, Federal Coordinator, and Liaisons Present

Ric Craun, U.S. Department of Energy Idaho Operations Office (DOE-ID)
Bob Pence, Federal Coordinator, DOE-ID
Dennis Faulk, U.S. Environmental Protection Agency (EPA)
Susan Burke, State of Idaho
Hoss Brown, Idaho Cleanup Project (ICP)
Danny Nichols, Advanced Mixed Waste Treatment Project (AMWTP)

Others Present

Bruce LaRue, DEQ
Kerry Martin, DEQ
Sue Skinner, SRA
Tami Thatcher
Roger Turner
Beatrice Brailsford, SRA
Brant Meagher, ICP
Chris Henvit, NR/IBO
Jordan Van Dyke, ICP
Douglas Barber
Natalie Packer, ICP
Preston Abbott, Canberra
Danny Nichols, ITG
Bill Barker, AREVA
Ben Roberts, DOE-ID
Ken Whitham, DOE-ID
Jim Malmø, DOE-ID
Curtis Roth, DOE-ID

Susie Barna, Moxie Endeavors
Kelly Galloway, Moxie Endeavors
Nolan Jensen, DOE-ID
Dick Raaz
Jerry Wells, DOE-ID
Danielle Miller, DOE-ID

Lori McNamara, Support Services
Bryant Kuechle, Support Services Facilitator
Peggy Hinman, Support Services

Opening Remarks

Willie Preacher welcomed the CAB and the members of the public to the meeting. He noted that this was his last meeting as chair and that Herb Bohrer will be taking over as chair.

Willie turned the time over to Bob Pence, who introduced Ric Craun, who is filling in for Jim Cooper. Craun has been at DOE-Idaho since 2009. He is the principal deputy manager for Idaho Cleanup Project (ICP) under Jim Cooper. Prior to coming to Idaho, he worked on the Yucca Mountain Project and also in the commercial nuclear business. Craun thanked Pence for the introduction and thanked the CAB for the opportunity to participate. He noted that in his preparation for the meeting, he sees areas with which he is very familiar and areas where he will be relying on those who know more about the facilities.

Dennis Faulk, U.S. Environmental Protection Agency (EPA), welcomed the group. Susan Burke, INL Coordinator for the Idaho Department of Environmental Quality (DEQ), welcomed the group and noted that she is looking forward to the tour tomorrow.

Hoss Brown, CWI, welcomed the group. He commented that CWI's work was going well. After the Memorial Day holiday, there was a safety stand meeting to review safety items. Tomorrow there will be an all-hands meeting to talk about safety and the status of the Integrated Waste Treatment Unit (IWTU). He noted that CWI and DOE-Idaho won a prestigious award for their efficient cleanup and cost savings under the first ICP contract. Some good news is that work on the Accelerated Retrieval Project (ARP) has begun again. This will mean that ARPs VI, I, II, III, and IV will have been completed. The sludge drum processing is going well. They are repacking drums and shipping it out of state. IWTU start up efforts continue and the items to be addressed keep shrinking. There is a new Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site identified out by Materials and Fuels Complex (MFC) where some steel shot was used. The coating on the steel shot is a concern. This is the first time that the 'plug in' remedy allowed under a Record of Decision (ROD) has been used.

Betsy McBride asked how new CERCLA sites were found. Brown replied that as activities come up, an area may need to be sampled and then cleanup may be needed. The Environmental Restoration Department also maintains information on contaminated areas that are addressed as funds are available. Brown stated that the decisions are made between DOE, EPA, and the State to move forward. Craun noted that if a site that needs cleanup is identified, it is kept on a list to be cleaned up whether funding is available or not. Faulk explained that the ROD had been set up to allow for handling new sites that are discovered. A 'plug in' or standard remedy is used to address the site.

Danny Nichols, Idaho Treatment Group (ITG), thanked the group for the opportunity to participate. He noted that shipments to WIPP from Advanced Mixed Waste Treatment Project (AMWTP) are ongoing. They are working on retrieving some of the oldest waste that has been in storage. They have installed containment devices and have retrieved about 14 boxes so far. ITG has been working with Los Alamos on some corrugated boxes they need to treat. ITG expects to receive these boxes and will manage them along the timelines of the Idaho Settlement Agreement (ISA).

Recent Public involvement

Craun reviewed recent public involvement activities. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Burke commented that one of the tours was the National Governors Association committee focusing on DOE facilities. There was a group of about 20 people representing states from New York to Washington. Feedback she received on the tour was very positive. People were excited to see work actually in progress. Preacher commented that he attended a tour with the Shoshone-Bannock Tribes on June 10th. Betsy McBride asked Burke what the

states that have DOE facilities are thinking about the future of those sites. Craun noted that he felt that cleanup of DOE facilities is still a primary concern. At a national level there is a competition for the cleanup resources, and the governors are involved in this process.

Idaho Cleanup Project Status

Craun provided a presentation on the status of cleanup at the INL Site. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Craun commented that DOE prioritizes its work on a nation-wide basis. A key focus for DOE-Idaho is to keep funding coming to support the cleanup work. Craun explained that TRCR means Total Recordable Case Rate, and DART means Days Away on Restricted Duty or Transfer. Nichols explained the specifics of the reportable occurrence at AMWTP regarding a technical specification violation involving the assay process for waste going into the super-compactor. During initial examination of a box, the shielding inside prevented all of the radiation from being detected. When the drums in the box were removed and assayed they were found to exceed the technical specification for fissile content.

Roberts asked what the risks were when the material exceeded the fissile content. Nichols explained that they use controls to maintain a safety margin. Although a technical specification was exceeded, the higher regulatory limit was not exceeded. In addition, they were working with drums that were segregated before assay. When the issue was found, the drums remained segregated until the issue was resolved. Roberts asked what would happen if a criticality occurs. Nichols explained that if a criticality occurs there would be a high release of radiation. From a safety perspective, they assume a certain amount of radioactive content per drum, which is conservative.

Gerstlauer asked what limits are used to determine if a drum is acceptable. Nichols explained that the requirements in the safety basis do not allow anything over 800 grams of fissile material. A series of radioassay units monitors the radiation and calculates the fissile gram equivalent before the box goes into the treatment unit. The issue encountered that led to the occurrence report was that shielding in the box prevented all of the radiation from being detected. Nichols explained that the determination of the amount of material in the box is double verified.

Bohrer asked about CWI safety performance. He noted there were technical specification problems in both March and April and asked if they were related. Craun replied that they were not related. One issue was at IWTU and involved failure to complete surveillances when the plant was not operating. The other issue involved storage of fuel in racks. Bohrer asked about the AMWTP safety issue, and Nichols clarified that this was the drum that was just discussed. Craun also commented that another issue was developing related to the labeling of drums. Griffith asked at what point does fissile material become a concern. Nichols replied that there are many factors such as the shape of the material; he did not know the specific answer but will follow up.

In response to a question from Bohrer, Craun replied that the number of shipments to WIPP is determined by the funding available. Craun noted that the streamlining of approvals for shipment to WIPP was coordinated with all involved (New Mexico Environment Department, Idaho DEQ, and DOE).

Burke asked Craun to explain the particulars of the Los Alamos waste and why they were looking at sending it to Idaho. Nichols explained that the boxes at Los Alamos are similar to boxes that INL has received from Sandia. The boxes are much larger than Los Alamos is able to handle in their facility. When ITG showed Los Alamos what it was able to process at AMWTP, they were very excited about using it. The boxes would be managed exactly as any boxes retrieved from Idaho would be managed. This can be done much more efficiently at Idaho. From a timing perspective, there are also times during processing at AMWTP when these boxes can be inserted into the process without affecting the processing of the Idaho waste.

McBride noted that Idaho was now accepting waste into the state to handle it here and asked if there was a process for informing the public about this. Burke explained the ISA provisions for receipt of waste from off site and the requirement to send it out of the state within one year. Waste from Nevada, Sandia, California, and Hanford have sent waste to Idaho. The state continues to monitor that the one year time limit is being met. McBride asked if the schedule issues at WIPP could affect the process. Craun noted that all shipments would have to be coordinated. The DOE Carlsbad Office manages the transportation logistics for shipments to WIPP.

Craun addressed McBride's question about the different conditions among the boxes being retrieved. He explained that the boxes at the bottom of the storage pile tended to degrade. Karst asked if there was a risk involved in shipping the waste before it was treated. Nichols explained that the waste that comes in to Idaho is received in the same type of container as is shipped out to WIPP. It is a type B container that is shielded. The difference is that the waste is compacted and sized at AMWTP. Faulk commented that he believes the Hanford site will be very interested in AMWTP due to the capabilities to handle prohibited items. Craun noted that DOE is seeking to demonstrate it can treat waste safely, reliably, on schedule, and cost effectively. Nichols also commented that AMWTP offers 10 years of operating experience, which is an extremely valuable asset. Sherwood asked how the liquid squeezed from the drums was solidified. Nichols explained that different absorbents were used depending upon the waste material.

In response to a question from Bohrer, Ken Whitham, DOE, noted that the Idaho CERCLA Disposal Facility (ICDF) was now being operated by CWI. The facility is maintained in standby mode unless there was a need to mobilize a crew to conduct disposal.

Bohrer noted that with regard to IWTU, there were technology development issues related to going from demonstration to full scale. He feels that the traditional process of going from lab scale up to full scale was not conducted initially and led to the issues. He asked if lessons learned were being captured from this technology deployment effort. Craun replied that a formal lessons learned was required, but that really focused on the difficulties related to construction. DOE recognized that it has commissioning issues after construction and going to start up. DOE has initiated an effort to look at lessons learned from start up at projects across the DOE complex. Initial findings of the effort are that commissioning of a full production facility goes much better when a full scale test facility can be developed first. This is very expensive, however. The group doing the review may come up with recommendations on how to address issues that are identified during the start up process.

Preacher asked how many total metric tons of spent fuel stored at INL. Craun will provide this information.

Karst asked about the 2035 completion date for the calcine and whether the delays associated with IWTU could affect that milestone. Craun replied that he did not see IWTU as being critical path to affect the calcine treatment schedule.

Roberts commented that money was still being spent on cleanup projects in the U.S. There are a lot of lessons learned. He asked if there was a list of lessons learned that would be of value in the future and whether they are being passed along. Craun replied that Frank Marcinowski at DOE Headquarters is focused on this topic. Marcinowski coordinates the projects across all the cleanup sites. Craun also noted that Jim Cooper has been attending meetings involving the other sites, where the sites are working together on common issues. As budgets become more constrained, more sharing of information and resources can be expected.

Tami Thatcher asked why receipt of Domestic and Foreign Research Reactor fuel has been suspended. Craun replied that receipt was suspended because the milestone for treatment of the sodium bearing waste had not been achieved by the end of 2012. Craun clarified that the activity to prepare Spent Nuclear Fuel facilities for transition to another government entity referred to the transfer of the spent fuel storage asset from DOE Office of Nuclear Energy (NE) to DOE EM. This is a formal process to assure that all requirements are transferred. Whitham

explained that the segregation fence referred to in Craun's presentation was an actual fence that would make sure the proper safeguards were in place and that the security barrier was specifically defined.

Thatcher asked about the safety risks associated with the ARP and what safety documentation was in place. Craun explained that all facilities go through a licensing process. This may be internal to DOE or may involve state approval. This involves making sure the facility can be constructed and operated safely. Craun explained that the ARP facilities were nuclear facilities regulated under CERCLA and DOE regulations. Brown described the process for approving the facilities. The buildings are constructed to withstand wind and snow loads. They are robust. Craun explained the timeframe of the construction of the ARPs and the purpose they have of covering the exhumation process. Bohrer commented that the process of approving and designing the facilities includes opportunities for public involvement. DOE's safety organizations are involved in approval of the designs. Craun commented that DOE's Office of Health Safety and Security was involved in oversight of readiness reviews followed for cleanup facilities at INL.

Roberts asked what kinds of waste were the subject of the cleanup. Brown explained that materials were buried before 1972, such as personal protective equipment, filters, graphite materials, etc. By agreement with EPA and the State, DOE is targeting certain waste for exhumation. This is the TRU waste primarily. There are extensive records of what was buried where, and these records are used to assist in the location of the targeted waste. They also use retrieval specialists who worked at the Rocky Flats Plant that sent the waste to Idaho. These specialists assist in identifying the waste that is being exhumed.

Sherwood commented that she located the ISA on-line. She felt that this contained very helpful information in understanding the issues.

Roger Turner asked about plans for treatment of the calcine waste. He noted that a permit application had been submitted, and asked about the plans for public involvement and EPA review of the permit. Craun replied he would confirm the availability of the applications. Faulk commented that EPA has two roles on the calcine. EPA supports the Resource Conservation and Recovery Act (RCRA) permit review. EPA also oversees the rules for air emissions under the National Emission Standards for Hazardous Air Pollutants (NESHAPS).

Beatrice Brailsford asked about the plans for the interim cap at the Idaho Nuclear Technology Engineering Center (INTEC). She did not know why a cap was needed if the tanks were being closed. Craun agreed that the tanks should be emptied by that point, but in the event there is a delay, the interim cap will be protective going forward. Faulk commented that a final cap would be installed at the end of the cleanup. The ultimate goal is to dry up the perched water.

Brailsford asked about the sodium treatment at MFC. Craun explained the process for removing the sodium from the tanks and using water to react with the sodium.

The cover photo for Craun's presentation shows the reflection of a worker reaching down with an instrument into the spent fuel pool.

Public Comment

No public comment was offered at this time.

Sodium Bearing Waste Treatment Project Update

Curtis Roth provided an update on the Sodium Bearing Waste Treatment Project. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

McBride asked about the suspension of receipt of research fuel and when DOE expects the suspension would be lifted. She also asked how the delay was affecting the budget for the Treatment Project. Roth replied that DOE has renegotiated a date of December 2014 for completion of treatment of the sodium bearing waste. Completion of processing of the sodium bearing waste would allow the shipments of research reactor fuel to resume. Craun explained that the compliance date has not changed, and until compliance is achieved, spent fuel cannot be received. Burke clarified that the ISA was not changed to reflect the new date; however, a consent order for treatment of the waste was extended until 2014. This does not affect the ISA requirement. In terms of budget impact, Craun noted that the priority for IWTU has resulted in some lower priority activities having to be shut off. Liquids are the number one priority to address. McBride asked if this was the only noncompliance piece regarding the ISA. Craun believes this is the case.

Gerstlauer asked about the new type of seal and the difference with the old seal. Roth explained that the new seal has an additional barrier to prevent particulate from getting into the seal, as the particulate is what causes the seal to fail. The gas pressure in the seal allows the two seals to be kept separate so they don't rub together and fail. The purpose of the seal is to keep the process gas in the process line from exiting the process. Back pressure is applied to separate the seals and prevent process gas from releasing through the seal. The additional barrier is a wiper mechanism to keep the particulate from getting inside. If the seals are operated as designed, there is no friction and they do not wear readily. Craun emphasized that once the seals start running, they will not touch. These seals are very sensitive. The plant will be run with gas continuously on the seal to prevent any friction. The seals being discussed are for the blowers that receive the process gas from the system. They could receive particulate as they are ahead of the HEPA filters in the process.

Griffith asked if the seals were proprietary property. Roth explained that the first seals were commercially available. The manufacturer then modified the seals to eliminate the chance for particulate.

Remote-Handled Transuranic Waste Management

Ben Roberts, DOE, provided a presentation on remote-handled (RH) transuranic (TRU) waste. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Burke commented that the State may not share the same view as DOE over what wastes are to be in the inventory of waste considered RH TRU that is to be sent from Idaho to WIPP under the ISA.

Sherwood asked if aerosols and liquids could be left in the RH TRU based on the changes allowed for WIPP. Roberts explained that the RH TRU would not be supercompacted; therefore, the liquids and aerosols would still be prohibited items that are not addressed by the compaction.

Gerstlauer asked about the future of CPP-666 after the ISA actions are completed. Roberts replied that this facility is the workhorse of the RH TRU program. As long as there is a need to ship RH TRU, it will be kept open. Chris Henvit, Naval Reactors, clarified that Naval Reactors is not sending waste to INTEC. The Naval Reactor waste being treated at INTEC now is waste that was in storage at INTEC. The Navy does not plan to send newly generated waste to INTEC; it is evaluating its options for treatment.

McBride clarified that RH TRU waste would continue to be generated, but it falls outside the ISA. She asked how this waste would be managed. Roberts described the process for managing the waste. Roberts clarified that the ISA does not cover waste generated into the future. McBride thanked Roberts for the briefing; she felt it was very informative and clear.

Roger Turner asked about the hazardous waste that is RH and also mixed low-level waste (MLLW). He asked how it is stored and permitted. Roberts replied that it is essentially the same waste as the RH TRU except there is less

TRU content. Acceptance at WIPP will depend upon the amount of TRU in the waste. If it is below the levels for WIPP, it will go to a permitted hazardous waste disposal facility. The hazardous components would be treated before it could be sent off for disposal. The criteria would be set by the facility accepting the waste for disposal.

Brailsford asked if the CPP 666 hot cell is one of the facilities that might be transferred to NE. Craun replied that DOE-EM was planning to retain the facility as long as there was a mission need. EM and NE are looking at facilities to be transferred; CPP 666 is not currently being considered. Brailsford asked if there might be RH TRU at AMWTP. Roberts replied that there could be RH TRU, although the radiation levels would be much lower than the waste coming from MFC. Gerstlauer asked if Savannah River had a facility to process RH waste. Roberts replied that the facility at Savannah River is small. In response to a question from Bob Bodell, Roberts explained that the sodium residue from the RH TRU treatment would be treated at an off-site facility by a neutralization process.

A member of the public asked about the relationship of the CAB and the Leadership in Nuclear Energy Commission (LINE) and how the groups are coordinating. Pence replied that the CAB is uniquely formed to deal with EM issues. The LINE Commission is formed to look at the future of nuclear energy. DOE's direction to the CAB is that there is no mixing between the EM CAB and issues related to DOE-NE. The member of the public expressed the point that there is a lot of important information being provided about how waste can be treated and managed that would be of interest to the LINE Commission. Sherwood commented that the meetings of the LINE Commission are open to the public. Bohrer commented that this does not mean that the agencies do not communicate; the point is that the CAB does not communicate on these issues. Pence noted that the CAB is chartered under the Federal Advisory Committee Act and is limited to EM issues.

Hanford Cleanup 101

Dennis Faulk provided a presentation on cleanup at Hanford. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Gerstlauer asked if the ponds used in the Hanford 300 area have caused a release to the Columbia River. Faulk replied that uranium was being released, but it was diluted in the river and cannot be detected. However, the waste sequestration treatment that is being planned is intended to stop the release of uranium. In response to a question, Faulk clarified that much of the treatment efforts at Hanford are aimed at treating the hazardous constituents in the waste (such as carbon tetrachloride) that were introduced through reactor operations and production facilities.

Gerstlauer asked about the treatment system for the carbon tetrachloride. Faulk explained that it is collected on carbon filters that are then disposed. He also described a new groundwater treatment system for carbon tetrachloride. It may be the largest treatment complex in the nation; and it is being used to treat what may be the largest plume in the nation. It is one of several different treatment processes are used for the groundwater treatment.

McBride commented that when she was working on nuclear waste issues for League of Women Voters, she worked on a Nuclear Waste Primer. She related some of the efforts that have been undertaken to try to treat the waste. They have always been trying to manage the waste, but have discovered that some of the early actions that were taken may have had unintended consequences. Faulk commented that production tended to take precedence over waste treatment in the past. Faulk noted that the waste to be vitrified and sent off-site is the high-level fraction of the 53 million gallons of liquid waste in the tanks. This is about 10% of the waste. The low-level fraction is supposed to be vitrified as well before being disposed onsite, but other treatment options are being investigated. Griffith asked about the cost of the vitrification facility. Faulk believed it is about \$12 billion. The lifecycle for cleanup is \$102 billion. Hanford needs over \$3 billion a year to comply with its cleanup agreement. Sherwood

asked if the glass logs generated from the vitrification facility would be radiologically 'hot.' Faulk replied that they would be. He has recently heard that DOE is planning a storage facility for the glass logs.

Bohrer thanked Faulk for his presentation. He commented that the issues at Hanford help the CAB see the challenges that DOE faces to keep funding cleanup at Idaho when there are such big problems at Hanford. Hanford gets about 75% of the EM budget. Faulk commented that they are also seeing Idaho people moving to Hanford to work on cleanup.

McBride asked about the vitrification plant being planned and whether it might be useful for wastes across the complex. Faulk commented that the amount of waste at Hanford is so large that it will likely focus only on this waste and not waste from other sites. Bohrer commented that, in addition, the waste would be liquid, which is a huge challenge for transportation. The waste types may also be so different from site to site that a treatment unit designed for Hanford won't work for other wastes. She also asked who would challenge the re-characterization of high-level waste as TRU waste. Faulk commented that at least one tribe and one public interest group have expressed concerns about reclassification. Most people involved expect there will be litigation over this issue. He commented that the State of Washington is now pushing to have new tanks built.

Preacher asked if Faulk worked with the tribes in Washington. Faulk replied that EPA did work with all the affected tribes.

National Transportation Stakeholder's Forum

Willie Preacher provided a presentation on the National Transportation Stakeholder's Forum. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

McBride asked what three states were seeking consideration as a permanent repository. Preacher recalled that Tennessee was interested and also one Northern state plus the WIPP site in New Mexico. Preacher commented that resolution of the issues of storage and disposal of used nuclear fuel and high-level waste will require the involvement and cooperation of the States and Tribes.

Thatcher asked if there have been presentations on the transportation risks of fuel being transported to Idaho compared to the shipments from the stranded sites. Preacher replied that he thought that the same types of casks would be used to transport fuel. This issue had been raised with DOE. There are different types of casks, but they are all pretty much the same. Issues may be how the fuel will be transported – by rail or by truck, and whether it has been stored for a long time. Thatcher thought that commercial casks may be subject to more hazards. Preacher stated that there would be consideration of the routes to minimize hazards. Nuclear Regulatory Commission (NRC) will also be involved.

McBride commented that the Navy fuel already is sent to Idaho. She asked if the Tribes were able to access the 180(c) funds for emergency preparedness since fuel was passing through the reservation. Preacher explained that the Navy fuel was an issue with DOE. The 180 (c) funding would come into play if transport of commercial fuel is planned. Preacher clarified that the lack of involvement of the Tribes in a consent-based process was a problem with the discussion draft legislation that had been released for public comment. McBride asked when fuel might start to be moved. Preacher commented that it could be by 2016 according to DOE's schedule. Preacher commented that DOE honors the Tribes concerns about shipping and does not ship on certain days.

Sherwood recalled that a presentation had been provided to the CAB some time ago about transportation and communication. She recalled that the casks were very robust and that training was provided. Sherwood asked if Preacher knew of any accidents. Preacher replied that the Navy informed the Tribes about an accident in New York when an empty cask fell off a train. He noted that on the reservation there is a 35 mile-per-hour speed limit.

Gerstaluer commented that as part of the American Nuclear Society, he has videos of the testing that the casks go through. He feels it is unlikely that a cask would come apart and cause a release of the insides. He feels the amount of radiation allowed on the outside of a cask is safe. Preacher stated that the only concern he may have would be with WIPP shipments due to the type of cask. Bohrer commented that the transportation packaging is very closely studied and analyzed. Roberts commented that the CAB cannot answer questions about the safety of the casks. However, DOE can provide an answer. As a citizen, Roberts wants to know if the Navy has better casks, and if so, why.

Craun commented that DOE can provide a briefing on transportation at the next meeting. Pence commented that about 17 years ago, DOE spent a few days on the Reservation with the casks it planned to use for shipments to WIPP and videos of the tests that were done on the casks.

Public Comment

No public comment was offered at this time.

Waste Isolation Pilot Plant 101

Joe Franco, DOE, provided a presentation on WIPP. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Faulk asked why the word 'pilot' is in the title of WIPP. Franco replied that it originally was to be pilot test facility. In response to a question about whether a drum containing prohibited items could arrive at WIPP, Franco explained the process that is followed at the sites that generate the drums to make sure there are no problems or that problems are resolved prior to shipment. If a problem is discovered at WIPP, the affect on the performance of the repository would have to be evaluated in order to determine what actions are needed. In response to a question about where WIPP would expand, Franco explained that there is a challenge in knowing what is best for the facility when evaluating how it will perform over 10,000 years. The underground salt goes all the way to Kansas.

Gerstlauer asked about the height of the tunnels. Franco explained that the rooms are about 10- to 12-feet high and 30-feet deep. Franco explained that the mine is located at 500 feet within a 1,000 foot layer of salt, and that mining could go either above or below the current site. DOE is evaluating a scenario where the drilling industry may hit a brine pocket and cause a flooding of the mine. Franco described the new TRUPACT III shipment container and stated that each one costs approximately \$800,000.

Sherwood asked about contact handled waste. She asked what magnesium oxide was used for in the process. Franco replied that magnesium oxide is related to the long life of the repository. The magnesium oxide would help stabilize the brine containing the waste to limit migration.

Gerstlauer asked if there were pictures that showed how the salt affects the waste. Franco replied that metals take longer to degrade, but the drums will eventually degrade. The rooms are not subject to air flow which takes longer. They have an animated video to show what is expected to happen long term. The isotope of concern is plutonium because it is long-lived.

In response to a question, Franco explained that exposures to workers are below the administrative limit for DOE. He was amazed at how low it was. Workers are really not around the actual drums of waste for long periods of time. The facility is clean because no drums are opened at WIPP. All opening and examination is done at the generator facility. The salt acts as shielding when the drums are placed in the rooms. The air in the rooms is monitored. Gerstlauer asked if high-level waste could still be accepted at WIPP. He asked if DOE has been looking into it. Franco commented that because of the Blue Ribbon Commission report, DOE is building an

underground research laboratory. One activity will be defense disposal basis authorization. There is no funding for this through the WIPP office at this time, however. Plans are to go into the old mine at the site and extract items that were placed there for testing purposes many years ago. He believes that WIPP has proven itself as a repository. However, if there is a desire to retrieve the waste, WIPP won't be suitable.

Burke asked if a use had been identified for the salt that has been mined. Some salt must be retained for fill. However, an industry has approached WIPP about purchasing the salt.

Faulk asked if there was sufficient space left in WIPP to accommodate waste in the future. He is concerned about the future shipment of waste from Hanford. Franco replied that expansion would require a change in the footprint and therefore further analysis of the performance of the facility.

Karst noted that WIPP is truly a mining operation and asked about the safety record of the workers. Franco replied that WIPP is under the regulation of the Mine Health and Safety Administration. WIPP has instituted a strong safety training program and emphasizes the importance of safety. When near misses occur, work is stopped and critiqued. This is a challenge for WIPP because the miners are often production oriented. One major hazard identified is the multiple use of the access road to WIPP for the oil and gas industry. There is a serious effort dedicated to improving safety. He related that when he started back at WIPP, the passion related to the start-up had passed, and he realized that DOE needed to make sure the workers realized the importance of the project and the safety of the workforce. It is hard to handle the high turnover experienced due to the strong oil and gas industry that competes with workers.

Cannon asked about work with France on its waste. Franco explained that waste is defined differently in France. Their 'intermediate, short-lived and less' class of waste is like the U.S. Class B waste. They have a process that the community has agreed to for disposition of this type of waste. TRU waste and high-level waste are managed together, and many countries are looking at clay as the disposal medium. France has an underground research laboratory in the clay. However, they do not have a deep geologic repository.

A member of the public asked about the training for the WIPP transport drivers and whether communications were hands free. Franco commented that the truck drivers operate in tandem. Therefore, one is always free to conduct communications. There is a camera in the truck cab to monitor the drivers as well.

A member of the public asked if it was possible that vitrified high-level waste would go to WIPP. Franco replied that he would like to accept it. He felt WIPP should be looked at as part of the solution; he feels WIPP is an asset for the government that has a use beyond the existing plans to mine 10 panels. It was a tough effort to get WIPP opened. Its safety has been proven and it now is more accepted.

CAB WORK SESSION

Preacher, Bohrer, and Karst provided an update from the EM SSAB chairs meeting. The next chairs meeting will be in Portsmouth in the fall of 2013.

The CAB elected Harry Griffith as vice chair.

The CAB reviewed the work that has been conducted by the public involvement committee on development of a newsletter. The CAB discussed the extent to which the CAB newsletter would address DOE activities and cleanup. Sherwood expressed that the newsletter has to be from the CAB perspective with DOE making sure it is factually correct. She feels it is important to have the views of the CAB about cleanup presented.

The CAB discussed that the annual report was difficult due to the coordination needed to get it compiled. Karst wondered if the group had the capability to come up with content. A shorter newsletter might be more manageable.

McBride commented that we know the types of questions our neighbors have about the cleanup and the newsletter could provide answers and information. Examples are RCRA permitting and availability of tours. Another option is to provide a list of the questions that the CAB feels the public needs to have answered to the INL. The group agreed that it makes sense to keep a newsletter short. Bohrer commented that if the public is relying on the CAB newsletter to learn about site activities, then that is a problem. If the CAB feels there are questions that need to be answered, this should be passed on to DOE. The newsletter could say where the public can find information of interest. The problem of putting information out is that the CAB has to agree with what is said. He hesitates to provide project status from the CAB. Pence commented that the newsletter is not a forum to pontificate. It would be a means to provide information. Craun commented that DOE should provide the summary of project status to the CAB. The CAB meetings are a great forum to communicate and it would be great to have the CAB efforts result in increased attendance at the meetings. The CAB noted that the website is good and we should avoid duplicating effort with a newsletter. If we had a simple one page summary to send out to our community, it would be very useful. It needs to be clean, simple, and short. The CAB decided to have the committee move ahead with the newsletter.

The committee brought up the concept of a dashboard. Griffith explained it comes from the corporate context where information is provided in a simplified visual format. It would be a standardized approach. It can be conceptualized that there are key 'traffic lights' that highlight which of the standardized factors are of interest for the particular presentation. It would be the same format, with different responses based on the presentation. The CAB discussed whether this should be the first or last slide of a presentation. Craun identified that there may be standard questions that the CAB wants DOE to answer, and this is great. Also, he felt that during the development of the agenda it would be useful for the CAB to provide its areas of interest. Kuechle summarized that the group is interested in having input prior to the presentation and then having a summary of the presentation that covers a standard format. Preacher commented that some presentations can be tailored to the questions of the audience. The group felt that a standardized list of items desired is a good idea. Pence identified that there would be some additional effort involved in making sure these questions are addressed. Griffith replied that it will take a meeting or two to get the questions settled. Bohrer noted that this summary would be very useful for input to the newsletter. McBride pointed out the importance of incorporating these principles into the entire presentation. The goal of the CAB is to have information of interest to the community.

The CAB reviewed the agenda for the September meeting. McBride identified that the CAB may want more information on the cleanup priorities and how activities are funded to meet the priorities, and why. The CAB decided a presentation on the budget and priorities would be useful. Pence commented that there may be interest in a presentation on how DOE collects lessons learned from projects and commissioning. The presentation could focus on the process for capturing lessons learned and the top lessons of note. Sherwood noted that the lessons learned at INL could also be shared at the presentation. Griffith brought up two additional topics. One is the audit process used by INL to review projects. He is interested in this from a risk management standpoint and he wants to see how this is integrated into the programs. Craun noted that there are several different types of audits and there may be some more discussion needed on exactly what audits the CAB would be interested in. Griffith commented that he is interested in the process and what is being identified. Another topic of interest is the water leakages from INTEC. He understands there have been burst pipes and other events that have caused water filtration.

The CAB determined its agenda for the education and planning session it will hold in September. The CAB will discuss the need for additional time during CAB meetings for the CAB to do its internal work. Griffith comments that if DOE would like feedback on the dashboard, the CAB could provide this. Public involvement will be kept on the agenda, but will be cut to half an hour. The CAB discussed instituting the practice of reviewing each meeting at the end of the meeting by way of a wrap up.

Herb Bohrer, Chair
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HB/ph