

INL Site Environmental Management

CITIZENS ADVISORY BOARD

Meeting Minutes

October 29, 2015



The Idaho National Laboratory (INL) Site Environmental Management (EM) Citizens Advisory Board (CAB) held its quarterly meeting on Thursday, October 29, 2015, at the Sun Valley Inn in Sun Valley, Idaho. An audio recording of the meeting was created and may be reviewed by calling CAB Support Staff at 208-557-0843.

Members Present

Members Not Present

Bob Bodell
Herb Bohrer
Keith Branter
Brad Christensen
Marvin Fielding
Harry Griffith
Kristin Jensen
Trilby McAffee
Betsy McBride
Bill Roberts

Cathy Roemer

Deputy Designated Federal Officer (DDFO), Federal Coordinator, and Liaisons Present

Jack Zimmerman, DDFO, U.S. Department of Energy Idaho Operations Office (DOE-ID)

Bob Pence, Federal Coordinator, DOE-ID

Hoss Brown, CH2M Washington Group Idaho (CWI)/Idaho Cleanup Project (ICP)

Susan Burke, State of Idaho

Daryl Koch, Idaho Department of Environmental Quality (DEQ)

Dennis Faulk, EPA

Others Present

Darin Dobbins, SN3 Scott McMullin, DOE-ID

Beatrice Brailsford, Snake River Alliance

Erik Simpson, ICP James Joyce, DOE-HQ Darina Palacio, DOE

M.N. Stewart

Bruce Wicherski, DEQ J.R. Stroble, DOE Ben Roberts, DOE-ID Dennis Faulk, EPA Andrea Gumm, Facilitator

Ann Riedesel, Staff

Ross Langsen, Mayor, City of Arco Amy Taylor, U.S. Senator Risch Lawrence Schoen, Blaine County

Mike Huth

Chris Henvit, Naval Reactors Preston Abbott, Canberra

Peter Jensen, *Idaho Mountain Express*Rose Bernal, Butte County Commission

Daryl Koch, DEQ Kenneth Alkemal Bob Leyse

Jordan Davies, Staff



Opening Remarks

Facilitator Andrea Gumm opened the meeting at 8:00 a.m. She reviewed the agenda and noted the public participation period. She also reminded attendees about the process for public questions either during the meeting if time permits or via "question cards" available at the table at the back of the room.

CAB Chair Herb Bohrer welcomed everyone to the meeting. He thanked the Sun Valley Lodge team for helping make it enjoyable. He welcomed the members of the public and noted that public involvement is a key aspect of the CAB. Bohrer noted the passing of CAB member Willie Preacher; he was a mentor to many on the board and will be missed.

Jack Zimmerman (DOE-ID) also welcomed everyone. He noted that the CAB had their annual planning session the previous day and has a lot of interesting topics planned for the next year.

Susan Burke (State of Idaho) commented that she appreciates the venue. She noted that there has been a lot of talk surrounding the spent fuel shipments, but there is also a lot of progress happening including processing the transuranic (TRU) waste. The State continues to stay focused on the cleanup program progress.

Daryl Koch (DEQ) noted that he is joined at the meeting by DEQ soil scientist and geologist Bruce Wicherski. Wicherski will be giving a presentation on caps and soil covers, which is of interest because caps will be used at some of the sites in the future.

Dennis Faulk (EPA) apologized for missing the previous meeting due to travel schedule conflicts. He commented that he is looking forward to presenting at today's meeting. He touched on a recent "Omnibus Report" and its potential impacts at Hanford.

Hoss Brown (CWI) noted that CWI received a 6-month extension for their contract. He commented that their safety performance continues to be excellent; they've reached another million hours without any recordable incidents, which is about the fifth or sixth time they've reached that milestone. The sodium distillation system is working very well. They treated some additional sodium from some of the RH-TRU waste. The Accelerated Retrieval Project at the Radioactive Waste Management Complex (RWMC) is going well; they are about 68% complete with the 5.69 acres. CWI is currently working in ARP-VIII and ARP-V. CPP-767 has been prepared for some demolition activities, the demolition of CPP-766 (Sodium Boiler Building) is about 85% complete, and demolition of CPP-799 is complete and down to the slab on grade.

Tribute to Willie Preacher

Bob Pence (DOE-ID) gave a tribute to long-time CAB member and Sho-Ban Tribal representative, Willie Preacher, who passed away recently.

Recent Public Involvement Activities

Jack Zimmerman (DOE-ID) reviewed recent public involvement activities. The presentation is available on the INL Site EM CAB website: http://inlcab.energy.gov/.

Bohrer asked about attendance at public meetings and number of comments typically received on permit notifications. Koch responded that normally there are not many people who show up for the public meetings and very few comments are submitted. Burke concurred.



ICP Progress

Zimmerman 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/.

CAB Member Betsy McBride asked what USQ stands for. Zimmerman responded that it is an "Unreviewed Safety Question." It is a term in the nuclear safety review process that notes something that potentially hasn't been looked at or considered before. In this specific case, it was a hypothetical question related to a satellite accumulation area and the potential impacts of an earthquake if materials were stacked in the area. He noted that USQs are reported through the Occurrence Reporting System.

Bohrer asked what the secondary containment basin is. Zimmerman responded that it provides protection in the case of a leak in areas where they store drums. Zimmerman clarified that it is not part of the facility but an added spill control like a catch basin. Brown noted that it is a RCRA requirement.

Bohrer asked about the worker that didn't have fall protection and if the worker realized that he needed fall protection. Zimmerman responded that the worker was a subcontractor. When the incident occurred, it was pointed out to the worker that he needed fall protection. The worker was receptive, made the correction and continued working. Zimmerman noted that it likely would have been okay in a commercial project but the INL requirements are more stringent. Bohrer questioned if there were any deficiencies in the training process that resulted in this situation. Ben Roberts (DOE-ID) noted that it was more a problem of the flow-down of the requirements to a subcontractor and ensuring they understood the INL requirements. Bohrer asked for additional detail about the critique of the incident and if it identified any deficiencies and corrective actions. Zimmerman agreed to get the additional details and provide them to the CAB.

McBride asked if the review and approval by the Carlsbad Field Office for the RH-TRU shipment to WIPP is the last step in the process. Zimmerman said yes, it is the last step.

Bohrer commended the work that was accomplished dealing with RH-TRU and any issues that arose related to the sodium distillation process.

Bohrer noted that DOE is in violation of the Settlement Agreement because of the rolling average requirement and potentially could be in violation if they miss the 2018 milestone. Bohrer asked if DOE is in discussion with the State and if there is the potential for similar impacts as with the Integrated Waste Treatment Unit (IWTU) milestones. Zimmerman responded that the primary penalty under the Settlement Agreement is related to bringing fuel shipments into the state. It is the same penalty that would be related to later milestones. Bohrer questioned if there could be any additional penalties. Zimmerman responded that discussions have been ongoing with the State to address questions like these. Zimmerman also noted that a modification to the Settlement Agreement would require agreement by the Idaho Governor, the Idaho Attorney General, and DOE.

Bohrer also asked about the AMWTP certification process, noting that initially it was done by plant personnel and then later shifted to Central Characterization Project (CCP) as a cost saving measure. But now it seems that the process is going back to AMWTP plant personnel. Zimmerman noted that it was only the visual examination that was not done by AMWTP but that the new approach will be a more cost-effective approach.

McBride asked for clarification regarding the Settlement Agreement milestones; if IWTU were up and running would there still be a Settlement Agreement issue. She also asked if there was some approach that would be publicly acceptable in terms of having the waste treated and road ready versus having it actually



shipped. Zimmerman believes that would be a possibility. He also noted that the way the Settlement Agreement is written, it credits "waste shipped to WIPP." He noted that AMWTP continues to ship MLLW because it is not impacted by the WIPP shutdown, but that waste is not counted toward the rolling average. If it was counted in the rolling average, that milestone would be met.

Betsy asked for further clarification regarding if DOE was out of compliance with the Settlement Agreement in two areas. Zimmerman confirmed that.

Trilby McAffee asked how many wells are located at Test Area North (TAN). According to Zimmerman, there are a total of 90 wells at TAN; 37 of those wells are for sampling.

Bohrer asked when the CPP-666 basin will be empty. Zimmerman responded that it is being looked at right now. While EM doesn't have a need for that basin going forward, the Advanced Test Reactor (ATR) is likely to have a longer mission and the ATR fuel goes into the 666 basin. Alternatives are being considered and DOE anticipates setting a path forward later in the year.

McBride asked if DOE-NE has a cooling pool of their own. Zimmerman responded that ATR has some cooling capability for material removed from the reactor, but it probably is not large enough for their ongoing mission. McBride asked if EM takes NE's spent fuel. Zimmerman said that EM takes NE's spent fuel from ATR.

Bohrer asked about the green "exceeding safety goals" indicator on the dashboard chart. Zimmerman noted that August wasn't a very good month, but that CWI is still below their goals for the year.

The CAB chair opened the discussion to questions from members of the public. Bob Leyse, Sun Valley, Idaho, asked who pays for storing the Three-Mile Island fuel and how much it costs. Zimmerman responded that DOE pays for that storage and he estimated that it is about \$1Million per year.

Integrated Waste Treatment Unit Update

Zimmerman provided an update on the IWTU project. The presentation is available on the INL Site EM CAB website: http://inlcab.energy.gov/.

Bohrer asked what the biggest technical issue is currently. Zimmerman responded that the biggest issue probably is that this plant hasn't been operated previously so it is a learning process in identifying the optimum safe parameters. Bohrer then commented that 8,400 gallons of simulant seems like a lot, but it's actually less than 1% of the total amount of waste to be processed. Bohrer is curious about how DOE and the contractor are going to reach some assurance that the system is going to operate. Zimmerman responded that they have developed some criteria to determine successful operability. That's part of what the testing and commissioning period is for. Zimmerman noted that they are doing some additional things with the design including reviewing the design verification review process. Ultimately, they have to rely on the test and commissioning program. During startup, they will take incremental steps while maintaining stability. Bohrer asked who has startup authority on this system. Zimmerman responded that he has that authority.

Cathy Roemer commented that this project seems to be in a constant state of experimentation. She asked for some information about the crew that is there on a daily basis and what it costs to run that crew. She also asked if there has been any discussion about an alternative method and at what point you decide to move to another method. Zimmerman noted that a significant investment has been made in this technology and they are trying to start up a large-scale pilot plant. Studies were conducted in the past that selected this technology. It is a fairly unique waste and a unique treatment system. However, it is prudent to look at



alternatives. DOE is commissioning a team to look at a full gamut of alternatives – from changes to this plant all the way to potentially new technologies. As far as the crew operating the facility, there are at least three or four individuals in the control room at all times and another six to eight operators. In addition, there is a maintenance crew that is shared with other facilities. It costs approximately \$3.5 million to \$4 million per month including engineering, support, and management staff.

McBride commented that Zimmerman said earlier that another treatment method for sodium bearing waste could be incineration but that is not necessarily acceptable politically. She asked if IWTU isn't a type of incineration. Zimmerman noted that IWTU does not have an open flame, so it isn't considered an incinerator but it is performing a similar intended function. McBride asked if the system worked perfectly, what would come out the stack. Zimmerman responded that nitrogen and air would be emitted from the stack. McBride asked if the same kind of simulant is used every time. Zimmerman said it varies on occasion in order to simulate the various waste types.

The CAB chair opened the discussion to questions from members of the public. Beatrice Brailsford, Pocatello, Idaho, asked how many gallons have been run through IWTU. Zimmerman responded that it is about 68,000 gallons total – 60,000 gallons in the first run and 8,000 gallons in the second run. Braislford asked for clarification about the 30 outages. Zimmerman noted that they have had several heat ups before ever introducing simulant. Beatrice also asked for clarification about what a "G Outage" is. Zimmerman responded that the letter is the designation for the various outages. Brailsford also asked for clarification about what constitutes at outage. Zimmerman noted that an outage is a period of time when the plant and operating temperature are brought down so equipment modifications and maintenance can be completed. Beatrice asked and Zimmerman confirmed that there have been 30 heat ups and 7 outages.

ICDF Disposal Criteria

Scott McMullin (DOE-ID) provided a presentation on the ICDF Disposal Criteria. The presentation is available on the INL Site EM CAB website: http://inlcab.energy.gov/.

McBride asked what makes waste "CERCLA waste" and allows it to be sent to ICDF. Faulk noted that it is more of an administrative process —whether the waste is resulting from the RCRA decision process or from a CERCLA decision process determines whether it is CERCLA waste or RCRA waste. ICDF can only take waste from INL CERCLA projects.

Harry Griffith asked what the engineered design life of the facility is. McMullin wasn't sure. Koch noted that ICDF includes an artificial set of liners to serve as a leachate collection system. Faulk commented that the liner is there for the operational period, but after that, it really has no purpose. It is not expected to last beyond operations because ultimately there will be a cap over the area. Faulk noted that generally, though, the liners are assumed to have a 30-year life expectancy.

Marvin Fielding asked if everything is still in the cargo containers and if they were grouted full. McMullin responded that yes, they were grouted. He noted that they were in the AMWTP and after the waste was removed from them they were sent to ICDF and then filled with grout to ensure no void space.

McBride asked if a ROD is ever revised if a new alternative were to be identified. McMullin responded that 5-year reviews are conducted for the cleanup actions. Potentially a new alternative could be considered then, but typically once the cleanup decision has been made and implemented, it is not revisited.



McAfee asked if the sediment in the evaporation pond ever has to be cleaned out. McMullin noted that it is a very small amount of sediment and that when the facility is closed, the sediments will remain in place and the area capped.

Bohrer commented that DOE's current management process for low level waste (LLW) is that most of it goes offsite for disposal elsewhere. There is a concern that the ICDF could become a defacto LLW disposal facility. Bohrer noted that AMWTP is a RCRA facility and the wastes are managed differently than the CERCLA wastes in the cleanup/Superfund program. He asked for the rationale in the AMWTP cargo containers going to ICDF. Zimmerman responded that there is no RCRA waste going into the CERCLA landfill. Ben Roberts noted that the AMWTP cargo containers disposed of in ICDF contained drums retrieved from the Subsurface Disposal Area that were then stored in AMWTP until processed and then the cargo containers were sent to ICDF; so they originated in a CERCLA facility. It is a similar situation for the soils.

Koch clarified that ICDF was created because it was known that there would be a lot of soils that would need to be disposed of.

Roemer asked what a perched water well is. McMullin responded that in geologic layering there are zones within the layers where water may get caught up, or perched, at a layer above the groundwater level. Groundwater wells are deep and reach to the groundwater layer. Perched water wells are not as deep and reach to the perched layers. Perched water is at approximately 40 feet; groundwater is at approximately 400 ft.

McAfee asked about the resin that was removed from the pools at CPP-666. McMullin responded that it was sent to an Energy Solutions facility. McAfee also asked if they cap as they go or if they wait till the end and cap the whole thing at once. McMullin responded that normally they wait until the end of the project or facility life, however, there could be special cases when they would cap in the interim.

AMWTP Future

Jamie Joyce (DOE-HQ) provided a presentation about the future of AMWTP. The presentation is available on the INL Site EM CAB website: http://inlcab.energy.gov/.

McBride asked about the ability to ship the Hanford CH TRU waste to AMWTP for compaction since the TRUPACTs are already approved for shipments. She also asked if WIPP stays closed would it be possible to send the waste to AMWTP for processing and then return it to Hanford until WIPP reopens. Joyce responded that shipping the waste to AMWTP in the existing packages (TRUPACT-II) would work if the waste meets the WIPP waste acceptance criteria and the containers don't include any restricted items. Unfortunately, most of this waste does not currently meet the WIPP waste acceptance criteria and contains restricted items. They are looking at whether they can make adjustments if the waste meets the treatment facility waste acceptance criteria. However, restricted items in the waste would still require it be repackaged before it can be transported. As far as treating waste at AMWTP and returning it to Hanford, ideally you would not want to do that because it doubles the amount of transportation involved, which makes it more costly. It is something that is viable, but the cost consideration would be a factor. You could consider sending it to a commercial facility but you still have the cost factor.

Bohrer asked for clarification. He noted that under current requirements as long as the waste coming in meets the Settlement Agreement requirements for time in and time out, then it is still compliant. Bohrer noted that the CAB is interested in being involved in the public involvement portion once a decision is made regarding future use of AMWTP.



Ben Roberts made a clarification regarding restricted items: aerosol cans can be treated at AMWTP (supercompacted) and then can be sent to WIPP. AMWTP has a full suite of treatments to address restricted items. It is likely that AMWTP already has a process available to treat any waste at Hanford or Savannah River that includes restricted items.

Keith Branter asked if transporting by rail is being considered as a potential option. Joyce responded that there are some unique aspects regarding the railroad and could be some cost reservations, but it is an option that should be looked at seriously as there are some benefits.

Griffith asked if anyone has completed or is anyone working on an economic impact study on this (e.g. keeping the AMWTP workers employed). Joyce responded that they have looked at the cost savings for using an existing facility as opposed to building new facilities but they have not done an economic impact study. Griffith encouraged them to do so. Griffith also asked if DOE had considered moving the team and any non-contaminated assets to Hanford when AMWTP's mission is complete. Ben Roberts noted that the Idaho Leadership in Nuclear Energy (LINE) Commission has considered the economic impacts and made a recommendation several years ago to DOE to consider this. As far as moving the resources to Hanford, it's really the treatment facility that is the critical resource and it's not viable to move it. The capability of the facility is the driver and it realistically cannot be moved. Zimmerman noted that it was more than \$1 billion to construct this facility, so to replicate this facility elsewhere is not feasible with today's budgets. Looking at it nationally, the facility cost is the dominant factor.

Faulk noted that the Hanford workforce does not support this option. Joyce concurred and said that message had been communicated from Hanford to DOE-HQ.

Effectiveness of Caps

Bruce Wicherski (DEQ) provided a presentation about the effectiveness of caps. The presentation is available on the INL Site EM CAB website: http://inlcab.energy.gov/.

McBride asked if the diagram on page 7 was to scale. Wicherski clarified that the diagrams are for general information and are not to scale.

Fielding asked how burrowing is discouraged with the monolithic cover. Wicherski responded that burrowing is discouraged by ensuring there is enough moisture capture capacity in the upper parts of the soil layer to ensure the lower layers are dry. There is little burrowing if it is dry.

McBride asked if the percolation tests line up with past precipitation percolation tests and how far back they have information. Wicherski responded that studies have been completed just north of RWMC by USGS. They make borings through the soil and test soil samples with tracers that are good markers of water movement (e.g., chloride tracers) to determine how far the water has penetrated over time. McBride asked how far back and Wicherski responded that they have data showing thousands of years.

Branter noted that the ICDF cap had a layer of bentonite and wondered why the RWMC design does not. Wicherski responded that he didn't know the rationale for the two different designs. He noted that for RWMC the cap was designed for a long life and a clay layer can degrade over time. Branter asked why there were two different designs. Wicherski was unsure why the two designs, but he noted that the bentonite at ICDF is a liner not a layer of the cap.



Pump and Treat Effectiveness

Bohrer introduced a presentation from Dennis Faulk (EPA), who provided a presentation about the effectiveness of pump and treat. The presentation is available on the INL Site EM CAB website: http://inlcab.energy.gov/. Bohrer noted that a question arose at the last SSAB meeting during a tour of a Los Alamos pump and treat project. There was a discussion regarding the effectiveness of pump and treat and whether it is a viable long-term solution. Because there is a pump and treat project at INL's TAN, Bohrer requested a presentation regarding the effectiveness of pump and treat as a viable treatment option.

McBride asked for clarification regarding what circumstances make it likely for pump and treat to work and when it likely won't. Faulk noted that at Hanford it is a pretty homogenous aquifer compared with the Snake River Plain Aquifer, which has fractured layers of basalt. That is a good geology for cleanup. For areas with fractured basalt, if you can get into a transmissive zone, pump and treat works great.

McBride asked what the controversy is around pump and treat. Faulk responded that occasionally pump and treat has been used when it shouldn't have been. For example, it was used at Hanford for strontium; however, strontium has a high bind up rate with soil and not likely to be removed through pump and treat. Pump and treat can be successful, but it must be used in the right circumstances.

Fielding asked if the pumping rate is high enough to intercept the plume. Faulk responded that yes it is.

McAfee asked where the two new wells are located at INL. Faulk responded that they are in the northwest area of TAN. McAfee asked if another well will be drilled. Faulk responded that they might depending on the results they continue to get from the existing wells.

Bohrer noted that pump and treat is complex and has to factor in the geology and other factors. Bohrer believes the position stated at Los Alamos highlights that there are situations where it works and some circumstances where it doesn't. Faulk noted that the Hanford representatives that attended the New Mexico meeting also raised questions about the Los Alamos comments.

WIPP Corrective Action Plan

J.R. Stroble (National TRU Program Manager, DOE) provided a presentation about the WIPP Corrective Action Plan. The presentation is available on the INL Site EM CAB website: http://inlcab.energy.gov/.

Regarding the drum event, Bohrer asked when the ventilation system shifted to the filtering mode. Stroble responded that it shifted when the event occurred and before the contamination could reach the surface. Bohrer asked about the initial contamination release. Stroble responded that there was some contamination that made it outside the filter system because a bypass damper in the system did not operate as designed, which allowed a small amount of contamination to be released. Zimmerman noted that it takes about 20 minutes from the time of an event for a release to reach the surface.

Griffith asked about the 98% complete on recovery statement. Stroble responded that the 98% is relative to the square footage of the mine. He went on to say that the last 2% is more challenging because of its proximity to the waste.

Bill Roberts asked if new trucks had been purchased to replace the one (and similar) involved in the fire. Stroble responded that they are trying to get some new equipment, but that it was more an issue of inadequate maintenance on the equipment. Therefore they are restoring some old equipment and adding some new equipment.



Roemer noted the role of human error and asked if it is the same group of people trained in the same fashion that are working at WIPP now. Stoble responded that it is mostly the same workforce but they are participating in new training programs and a focused effort is underway to achieve an overall culture change. He noted that previously the mine workers tended to have more of a general mining background and the surface workers had more of a nuclear facility background. Through this process, they have realized that all workers need to have both. Roemer asked what types of testing is done to verify that the training has been adequate. Stroble responded that they go through a series of testing, retraining and retesting on a regular frequency.

McAfee noted that farm equipment has indicators for when maintenance is needed and wondered why the WIPP equipment didn't have that. Stroble noted that the salt mine environment is extremely corrosive but they are incorporating indicators and other measures where feasible.

Bohrer asked what the critical path is for the recovery. Stroble responded that there are several things on that path including the supplemental ventilation systems, design safety analysis, and readiness review. Bohrer asked who will have the final startup authority. Stroble said it will be DOE-HQ and likely the Secretary.

Bohrer asked if they are anticipating any permit modifications. Stroble responded that at this point, they do not have any identified, however, they are talking with the State of New Mexico. They currently don't believe that changes are needed. They have noted that there may be a few things that could be clarified. Bohrer asked when the sites, specifically Idaho, will know if there is anything that they have to do to modify their practices or processes to comply with any new requirements. Stroble responded that they do know many of the changed requirements now, but there are likely going to be additional changes. He noted that they are working real-time with the generator sites regarding changes. Most of the changes are process and document related, and not necessarily related to the waste. One outstanding question is what exactly does it take to meet a requirement for hazardous waste identifications.

Bohrer also asked, on a scale of 1 to 10, what the chances are of something coming up that will require the sites to reexamine and recertify waste that is already certified. Stroble guessed 0.5. He went on to say that more than 95% of the waste that has already been certified is not in question. They are conducting some additional reviews on a small subset of the waste.

Burke asked about resumption activities related to the RH TRU, noting that Idaho has RH TRU ready to go. Stroble responded that they don't have a timeframe for resuming placing RH TRU. He went on to say that it will be after they resume receiving CH TRU.

Burke asked how much time it takes to mine a panel. Stroble responded that it usually takes a couple of years, but it could be done in a few months if it was a focused effort. Realistically, it would take at least 6 months but possibly up to a couple years depending on other activities going on in parallel.

Bohrer asked if there is anything the CAB can do to help the situation. He also asked if Stroble was satisfied with the funding priorities and if it would be helpful for the CAB to weigh in with their support. Stroble noted that letting that support be known can definitely be helpful. FY-2016 funding is challenging. Stroble also noted that if the CAB supports additional surface storage at WIPP, that would also be a helpful recommendation to DOE. Zimmerman noted that there are a lot of factors that DOE-HQ has to consider on budgets. He believes it would be helpful if WIPP could construct the above-ground storage and Idaho could start shipping sooner.

Koch asked Stroble to describe the relationship between DOE and the State of New Mexico's Secretary Flynn. Stroble responded that the relationship is good—good on the technical agreements, but there is still



some tension regarding how Los Alamos has responded to their compliance order. Stroble believes that the relationship is heading in the right direction.

McBride asked about above-ground storage at WIPP. Stroble believes that Secretary Flynn supports temporary storage above-ground and expanding the surface storage capacity temporarily. His only caution is he does not want activities to construct a new storage capability to interfere in any way with resuming operations.

Griffith asked about the public's perspective at this point. Stroble responded that in general the southeast New Mexico community has been very supportive of DOE and of WIPP. They were concerned when the incidents occurred – both for the employees and the communities. They have been engaged in the process and Stoble believes they have recovered most of their confidence.

The CAB chair opened the discussion to questions from members of the public. Brailsford noted that there is always a lot of talk about the interim and supplemental ventilation systems, but she wondered about the final ventilation system. Stroble responded that the full fix to the system must be funded and approved as a capital project. It will completely replace the existing system. Once funded and approved, they will install that system, which will allow returning back to the levels prior to the incidents. Brailsford asked what the timeframe is for that system and if it will require a suspension in work activities. Stroble responded that it is probably a 3 to 5-year timeframe until that system will be available. The design calls for little to no interruption to operations.

AMWTP Maintenance Upgrades

Ben Roberts (DOE-ID) provided a presentation about AMWTP maintenance upgrades in 2016. The presentation is available on the INL Site EM CAB website: http://inlcab.energy.gov/.

McBride asked how they accelerate retrieval and characterization since they are getting to the more challenging waste. Roberts responded that they do so basically by putting more manpower to it. They have increased the number of people working retrieval and increased the number of shifts. They are currently up to three shifts per day and moving towards four shifts ("jump shifts" or overlapping shifts). Last year at this time they were working two shifts per day.

Bill Roberts asked about maintenance on the supercompactor. Roberts noted that the supercompactor is less complex than the robotic BROKKs so there is less involved. There is some wear and tear and they have to do some maintenance but it won't require replacement like the BROKKs will.

Bodell asked about the retrieval schedule in conjunction with the maintenance upgrades. Roberts noted that accelerated retrieval and accelerated characterization will fit with the schedule for maintenance.

Bodell asked when they plan to complete the upgrades. Roberts responded that they plan to complete all of them by the end of September 2016.

EM Site-Specific Advisory Board (SSAB) Chairs Meeting Report

Bohrer and Branter gave a recap of the recent EM SSAB Chairs Meeting. Bohrer reported that the meeting was held in Santa Fe, New Mexico in September. The attendees toured the Los Alamos National Laboratory. Bohrer noted that there are a number of similarities in the types of waste and the processes at Los Alamos and Idaho.



Bohrer reviewed the "Best Practices for Informed Budget Recommendations" from the Chairs' meeting. He noted that there has been discussion amongst the chairs about whether there should be a consistent process. The group decided that rather than a formal consistent process, they would develop this best practices document to allow some of the practices be shared as appropriate for the individual sites. Bohrer also noted that the CAB's schedule for 2016 reflects more focus on reviewing and providing input to the budget priorities.

Bohrer also reviewed the EM SSAB Chairs recommendation regarding Supplemental Environmental Projects (SEPs). He reviewed the background of the program and how the INL EM Site CAB may provide input. All of the Chairs will need to decide their support (or lack of) for the recommendation. The CAB needs to decide when they want to deliberate and decide on the recommendation. The topic was added to the February meeting agenda.

Bohrer reviewed the presentation from DOE-HQ External and Governmental Affairs. He noted that the "By the Numbers" fact sheets are on the EM website, including a page for INL EM. He recommended reviewing them if CAB members haven't already.

Bohrer noted that he believes DOE takes the EM SSAB very seriously and values their input.

Fielding asked who sets the penalties for WIPP. Zimmerman responded that he's not sure about in New Mexico, but gave the example that in Idaho (IWTU), there are factors for mitigation that can be applied and discussed with the State to reach some agreement. Regulations allow for SEPs in conjunction with those penalties. The program requires that SEPs are environmental projects but they can't directly benefit DOE and INL.

The next EM SSAB Chairs meeting is in Oak Ridge, Tennessee, in April.

Public Comment

Robert Leyse, Sun Valley, Idaho read a letter that was published on October 7, 2015 in the *Idaho Mountain* Express regarding IWTU and the spent fuel shipments. He then read a statement that included links to several references. Bob Pence (DOE-ID) noted that Mr. Leyse had provided a letter which will be included with the public record (meeting minutes) of this meeting. A copy of that letter is attached. Mr. Leyse expressed concern about the "900,000 gallons of defense atomic waste that sits in old underground tanks." He stated that last year the Defense Nuclear Facilities Safety Board (DNFSB) concluded that the IWTU facility is not ready to operate. He noted that the DNFSB provided 17 recommendations but he can't find a response from DOE to any of them.

Conclusion

Zimmerman expressed his appreciation for everyone's involvement in the meeting and then concluded the meeting.

Herb Bohrer, Chair Idaho National Laboratory Site Environmental Management Citizens Advisory Board HB/ar

Letter provided by Mr. Robert Leyse during the Public Comment Period

LEYSE STATEMENT DISCLOSING DNFSB EVALUATIONS OF IWTU

Hello, I am Robert Leyse of Sun Valley, Idaho and I want the public to know that I have found the following via GOOGLE. I am including the links so that others may check my findings.

Link 1:

http://www.dnfsb.gov/sites/default/files/Board%20Activities/Reports/Staff%20Issue%20Reports/Idaho%20National%20Laboratory/2014/sir_2014523_24466_37.pdf

DNFSB investigated the status of the IWTU and reported its findings to DOE May 23, 2014. It reported "...a lack of assurance that the facility can safely proceed with nuclear operations." "Therefore, pursuant to 42 U.S.C. § 2286b(d), the Board requests a report and briefing within 30 days, on DOE's evaluation of the need for additional independent assessment at the completion of IWTU startup testing and prior to the introduction of radioactive waste feed."

Link 2:

http://www.dnfsb.gov/sites/default/files/Board%20Activities/Letters/2014/ltr_2014620_24626.pdf This is the 30 day reply letter from DOE to DNFSB and it reports agreement that "...IWTU will benefit from an additional independent assessment..."

Link 3:

http://thortt.azurewebsites.net/docs/DNFSB%20Letter.pdf

This documents a DNSFB review, January 24, 2007. "The Board has no significant safety issues with the project at this time (Critical Decision 2/3B). The final design, however, is progressing and there remain a number of items the Board believes must be addressed before the approval of final design and construction of the project." ... "The Board commends DOE for considering a potential future mission in this facility. Further, DOE convened an expert panel early in preliminary design to confirm that the design of the facility could accommodate this mission. The Board is encouraged by the project's commitment to address this panel's recommendations."

Link 4:

http://www.cresp.org/crespII/CRESPII_Report/E_attachment/INLreview_complete_9_11_06.pdf This is the report of the <u>expert panel</u> that is praised in 4. The report lists 17 findings and associated recommendations. Here is the first of 17:

"Finding 1. Documentation, data reduction and analysis are incomplete for the pilot-scale studies carried out to date at Hazen Laboratories. ... Insufficient attention to these aspects of pilot-testing has been a cause of other DOE program failures."

"Recommendation 1. Thorough documentation, data reduction and analysis of the results from pilot scale testing carried out to date should be completed as soon as possible and to the extent practical before initiating the planned next stage of pilot-scale testing."

LEYSE CLOSING STATEMENT

Others may download the above links and also search for other links regarding the IWTU. You may easilyaccess the above links via GOOGLE at *leyse nuclear power blog dnfsb*.