



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

September 20, 2012

The Idaho National Laboratory (INL) Site Environmental Management (EM) Citizens Advisory Board (CAB) held its bi-monthly meeting on Thursday, September 20, 2012, at the Sun Valley Resort in Sun Valley, 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
Mark Lupher
Betsy McBride
Bill Roberts
Tami Sherwood
Teri Tyler

Members Not Present

None

Deputy Designated Federal Officer, Federal Coordinator, and Liaisons Present

Ken Whitham, Acting Deputy Designated Federal Officer, 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
Daryl Koch, State of Idaho
Hoss Brown, Idaho Cleanup Project (ICP)

Others Present

Erik Simpson, ICP
Jim Malmo, DOE-ID
Kathleen Hain, DOE-ID
Chris Henvit, Naval Reactors
Bob Holmes

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

Opening Remarks

Willie Preacher, Chairman of the INL Site EM CAB, welcomed the group to the meeting. Ken Whitham, the DOE-ID Acting Deputy Designated Federal Official, welcomed the group and the members of the public in the audience.

Dennis Faulk, EPA, welcomed the group. He commented on the 2013 DOE EM budget. He is seeing delays at Hanford and expects there may be slow downs here. This is an area where the CAB can weigh in. On the question of term limits for Hanford Advisory Board members, this issue continues to be discussed. The issue may have some benefits to the other CABs.

Susan Burke, State of Idaho, noted interest in the budget as well as progress on the Settlement Agreement. Daryl Koch, State of Idaho, introduced Hoss Brown, who is filling in for Tom Dieter, from CH2M-WG Idaho (CWI), the ICP contractor. Koch noted that unfortunately the Accelerated Retrieval Project (ARP) is being slowed down because of budget issues. He believes right now we are about a decade ahead of time on clean up at the Radioactive Waste Management Complex (RWMC). This may be why other projects should take priority. They can hold back on the excavation for a while.

Hoss Brown, CWI, commented that his company is fortunate to have good relationships with the regulators, DOE, the Tribes, and the public. With the exception of one project, the Integrated Waste Treatment Unit (IWTU), all projects have been completed under budget and ahead of schedule. CWI is focused on working safely to achieve startup of the IWTU.

Betsy McBride asked about Brown's comments about his good relations with stakeholders. She asked who CWI considers its stakeholders and how it knows what the relationship is. Brown replied that they have received good feedback from the Tribes, the public, DOE, the State and EPA; and they acknowledge the relationship of trust. McBride asked if there was anything that could be shared regarding regular assessments of CWI's relationship with the public.

Bob Bodell asked if CWI had a feel for what the workforce would look like under the contract assuming it is extended. Brown replied that this issue was still being reviewed.

Bob Pence, DOE, commented that there is a distinction between the stakeholders and the Tribes due to the Tribes' sovereign status. Preacher observed that CWI does make that distinction and the Tribes are appreciative of this.

Recent Public Involvement

Whitham provided a summary of recent public involvement activities. In response to a question about the tour of INL by the Snake River Alliance, Shaun Hill reported that he had a chance to discuss the tour with the group. They were pleased for the opportunity to review activities and supported efforts to startup IWTU safely.

Susan Burke asked how the meeting went for the Resource Conservation and Recovery Act (RCRA) permit on calcine treatment. Ken Whitham replied that one member of the public commented at the meeting.

Progress to Cleanup

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

Preacher asked for clarification of what fuel was located at the Idaho Nuclear Technical and Engineering Center (INTEC). Whitham replied that there was Navy fuel, EM-owned fuel and Nuclear Energy (NE) fuel in storage. He also described the fuel stored on pads. Some of the facilities are not full.

McBride asked where the Navy was going put their spent fuel that it is taking back from INTEC. Chris Henvit, Naval Reactors, explained there were 5,000 pieces of naval reactor fuel being shipped back. They were about half way through the shipments. When it gets to the INL Site Naval Reactors Facility (NRF) it is stored in canisters in dry storage awaiting final disposition in a geologic repository.

Susan Burke asked for clarification of the information regarding transuranic (TRU) waste that was being shipped from Idaho. Jim Malmo, DOE-ID, clarified that some of this waste was managed as TRU waste until it was treated. After treatment, it could be managed as low-level waste (LLW) and would be disposed at a location other than the Waste Isolation Pilot Plant (WIPP). Burke asked if mixed low-level waste (MLLW) was generated from the ARPs. Katie Hain, DOE-ID, explained that some material from excavation and treatment is incidental waste that is not returned to the pit and must be disposed. It cannot go to WIPP. Faulk clarified that if the waste goes into a drum, it cannot go back into the excavation, so it must be disposed otherwise. Hain explained that the waste is packaged and sent to the Idaho Treatment Group (ITG) Advanced Mixed Waste Treatment Project (AMWTP) where the waste is characterized and a final determination is made as to whether the material in a drum is TRU or MLLW. Faulk asked if TRU content was being 'level loaded.' Hain explained that DOE is permitted to mix among dirt piles before waste goes into a drum to achieve a TRU concentration that meets the conditions for transport to WIPP. The goal is to generate as few drums as possible for shipment to WIPP.

Herb Bohrer asked about the plan to conduct no further exhumation until funding is assured. He asked if work had been stopped at this point. Bohrer asked what was planned to be stopped and what would continue so that the CAB could understand the impact to the program at this stage. Whitham replied that there were near term regulatory requirements for IWTU that would be the focus. Work that could be delayed will be put into standby mode. WIPP shipments will continue. Most decontamination and decommissioning (D&D) work will cease. Faulk commented that a letter from the CAB to DOE focusing on continued removal of TRU waste might be helpful. There are downstream effects from slowing down WIPP shipments. Bohrer asked what the two highest priority activities were. Whitham replied that IWTU and AMWTP shipments to WIPP were the highest priorities. Brown also commented that remote-handled TRU was also important to continue to ship to WIPP because of how it is managed at WIPP.

McBride asked why the WIPP pipeline needed to keep going. She also asked why regulatory drivers were the priority instead of risk to public health. Whitham replied that the drivers are closely related to protecting public health. Regarding the WIPP 'pipeline,' Whitham explained that Idaho was a major shipper to WIPP and that if shipments fell off, WIPP may lose its resources to continue to support shipments in the future. Tami Sherwood also noted that while WIPP was open, there was a lot of maintenance needed, so costs would increase if WIPP operations were drawn out.

McBride asked if there were wastes that could pose a problem if the budget were cut in terms of imminent threat. Faulk explained that the biggest environmental risk is the Test Area North (TAN) groundwater. There is a plume that needs to be addressed. He explained that all sites are seeking discretionary dollars.

Malmo explained that remote-handled TRU is disposed in a particular manner at WIPP and it must be available for disposal on a somewhat continuous basis so it can be mixed in with the other waste.

Teri Tyler asked if work to subcontractors was being cut as budgets were cut. Whitham replied that CWI has a commitment in its contract to use small businesses, so this would continue. However, if budgets are cut, funds for subcontracting would be reduced as well.

Hain explained that with a small business, the concern is to utilize them in a manner that does not unduly burden the business with small administrative requirements. Where small businesses are an option, this is pursued.

Sherwood asked where aqueous waste was generated at INL. Hain replied that there were three sources of aqueous waste. The first is from purging of wells prior to taking a sample for groundwater monitoring. Liquid waste is also generated from activities at the Materials and Fuels Complex (MFC) and from other D&D operations.

Mark Luper commented that it would be helpful to identify the dollar signs associated with the different activities that have been completed. Hain committed to get end of year costs to the CAB, as that information is made available.

Luper commented there was a gulf between what we hear at CAB meetings versus what we hear the politicians say about work having to stop. He would like DOE-ID to explain how reduction in budgets can result in greater inefficiency versus more efficiency. Whitham agreed that it may look good to cut 10% now, but the amount needed down the road to restore the capability and start working again may exceed 10%. When budgets are cut and an extremely well trained and knowledgeable work force is lost, it is difficult to replace.

Sherwood asked about the savings CWI has achieved over the course of its work and how those savings are used. Brown explained that the savings are reinvested in the project. Whitham clarified that under the CWI contract 70% of the cost savings are made available to the contractor. Malmo clarified that the cost savings that can be reinvested are in current year dollars. Anything that results in an out year savings is generally recognized as a cost avoidance and the budgets are reduced accordingly. So the only money that can be reinvested is what is saved in the current year.

McBride asked if DOE had to adjust its budget to address the issues with the concrete maintenance at Three Mile Island. Whitham explained that Three Mile Island work is funded through a different source and that funds were available to make the repairs through that funding source.

Nicki Karst asked how the fuel is transported from Mexico and Austria. Whitham explained it is shipped by road in certified casks between shipping ports. Hain further explained that the port at Charleston, Georgia, is the port used for shipment of spent fuel. There are three agreed-to shipping routes that can be used. Each state has a point of contact that is informed when a shipment is passing through the state. Shipments from the port are by boat. The entire movement is covered by a transport plan governed by the Nuclear Regulatory Commission when it is in the U.S., under the International Atomic Energy Agency during overseas shipments, and then by each country in Europe. Sean Cannon asked how much countries pay for fuel. Whitham recalled about \$5M was received from Austria to support the shipment to Austria.

Tyler asked what percentage of fuel transfers were by rail versus road. Hain replied that all fuel from Domestic Research Reactors and Foreign Research Reactors comes in by truck. In the past, receipt of other types of fuel may have come by rail. However, now, the rail line has been pulled out.

Preacher asked if the TRIGA reactor material was highly enriched uranium. Whitham replied that it was low enriched uranium. Hain explained that all the highly enriched uranium in U.S. university reactors has been returned. The remaining fuel is to be returned by 2018 under the current treaty. The reason some countries still have highly enriched uranium is that it hasn't reached its burn up rate and there are additional costs involved in managing this material. Hain provided further explanation of the treaties and processes that govern receipt of research reactor fuel.

Preacher asked if notifications were made of shipments leaving the site. Pence replied that the shipment procedures used for shipments coming into the state would be used for shipments leaving the state.

Karst asked about the cleanup at TAN and efforts to re-vegetate areas. Whitham replied that reseeded areas that were demolished is done as part of remediation. Hain explained that re-vegetation efforts are ongoing and are reviewed every 5 years.

Integrated Waste Treatment Unit Investigation Report and Corrective Actions

Shaun Hill, DOE-ID, provided a presentation on the IWTU investigation into an incident that caused startup operations to shut down and the corrective actions being taken. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Preacher asked how the heels from the tanks containing the waste to be treated in IWTU would be dispositioned. Hill described how the tanks would be emptied and the heels flushed out.

Bohrer asked if HEPA filters were safety significant components for IWTU. Hill replied they were not. This means that they are not required in order to protect the offsite public but to maintain emissions at the lowest rate.

Harry Griffith noted that when DOE-ID is talking about putting in new lines that there is not much space in the building. He asked how new lines will fit this into the tight spaces in the facility. Hill replied that this was an issue. The engineers were working on how to maximize the available space, and some re-engineering is needed.

Bohrer asked if DOE-ID felt that the testing process from test to bench scale to pilot scale to production should have indicated this type of problem. He wondered if there were lessons learned for people trying to develop technologies. Hill replied that the biggest lesson learned is that there are a lot of unknowns encountered as you go from pilot scale to full scale. He felt that the technology had been adequately tested. The major information need was to know how two reactors in series would perform. Hill felt that there was no need to change the process, but that adjustments were needed.

McBride noted that past studies of upset incidents indicated that the team involved are often found to be bound by the parameters of their ideas of the project. Hill agreed that it is important to continue to ask ‘what if’ and think broadly about the process and operations. He also described the steps being taken to assure many inputs into the startup effort. Whitham also addressed the problem. He felt that DOE was working to keep its awareness of the issues.

Tyler asked if a different team had conducted the testing that had been involved in start up. Hill replied that the team doing the testing was involved in start up, and that it had continued to be involved through the review of the incident.

Koch asked if DOE had looked at where in the process it would be most concerned about upset conditions and whether there would be radioactivity in the off gas during an upset condition. Hill replied that the off gas would have small amount of radioactivity but he wasn't sure what the level was. Tyler asked about the goal of adding additional instrumentation to monitor the process. Hill replied that they were reviewing the whole alarm strategy to make sure they are located at the proper spot and that priorities to alarms are assigned. Harrison Gerstlauer asked if monitoring was conducted of radiation on the system. Hill replied that the radiation monitoring system and continuous air monitors would go off if there is high radiation.

Preacher asked if there was a problem with the bed in the system if it went through shut down. Hill replied that during shut down, nitrogen would continue to be fed to the bed of the facility to maintain it.

Karst noted that there was an estimated start date of April 2013. Initially, everything was to be complete by December 2012. She asked how this affected regulatory milestones and also whether, in this time of budget crunch, completion could be pushed out even further due to lack of funds. Hill replied that it is clear that the December 2012 date will not be met. Whitham explained that under the Settlement Agreement, no spent fuel can come into Idaho because the deadline has not been met. There is also a consent order requirement to cease use of the tanks by a date certain that will not be met. As far as funding, Whitham emphasized that this project was one of the highest, if not the highest, priority project. Karst observed that the effect on funding may be the effect of reduced funding to other projects to support IWTU. Griffith asked for a ballpark estimate of what the event cost to the government. Whitham said that not all costs had yet been identified. Whitham agreed to report on the costs at a future CAB meeting. Griffith noted he would expect there was a project contingency to address this, but he would like to know how much of the contingency was being used up.

Public Comment

No public comment was offered at this time.

Idaho Treatment Group Recovery Plan/Projected Performance/Status of Initiatives

Jim Malmo, DOE-ID, provided an update on the ITG recovery plan and improvement initiatives. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

In response to a question, Malmo explained that there were costs associated with recovery that had not been originally planned. Griffith asked if DOE-ID had conducted a risk assessment for each recovery action item in terms of risk that would be reduced. Malmo indicated that no formal risk assessment had been conducted, but this risk was considered. McBride asked if the changes planned had risk attached to them. Malmo clarified that all changes were regulatory adjustments based on process improvements taking place within the facility; therefore, risks to the public were contained. Malmo further explained the goal was to shorten the path for waste treatment.

Roberts commented that these issues had been brought up at the last meeting and observed that he did not think a lot of progress had been made. Malmo explained the steps that had been taken since the last meeting to move towards resolution. The State of New Mexico has toured AMWTP and this has improved their understanding of our process. This is the first step toward allowing changes to the process. Malmo explained the value of compaction in terms of reducing the amount of shipments that take place. He feels there is a strong probability that improvements can be made in how the process is regulated. Roberts asked if there was anything the CAB could do to help on this issue. Malmo indicated that he has a call every two weeks to continue moving these issues along.

Tyler commented that she liked the graph in the presentation and the amount of information it provided. She asked what the contractor was doing at this time. Malmo replied that the contractor had started work on the 23 items assigned to it and that 12 of the 23 had been completed. Malmo indicated that the goal is to reduce the man hours for the project. The goal is to complete retrieval so that the resources spent on that activity can be applied to other areas of the plant.

Lupher commented that the worst case must also be kept in mind. He asked if DOE had identified anything that would be an unacceptable risk to the environment, employees or the plant. Malmo replied that the risks were known and the recovery efforts were intended to reduce the amount of risk. Malmo emphasized that the waste treatment requirements would still be met, but perhaps through a different process that is more efficient. Malmo identified budget as being one of the biggest challenges to achieving the recovery items and the project schedule.

Gerstlauer asked about one of the recovery items that involve hiring additional staff. Malmo explained that this was to get processing rates up to or above 50 drums per day from the retrieval area. Right now, there is the right number

of people but they only work 4 days per week. He would like to expand to 7 days per week by hiring people from elsewhere within the plant.

Bohrer commented that he would expect the contractor to come up with the things it should be doing to improve the situation. He asked if Malmo was satisfied that the contractor was doing what it should be doing to be responsive to DOE on this project. Malmo indicated that the contractor has acknowledged that increased levels of improvement are needed along the way in order to stay within their baseline planning. This is forcing them to implement improvements up front and not wait to seek credit for them later.

Karst noted the changes in management at ITG. She asked what the affect of this was upon the project. Malmo replied that these were challenges but that the change in culture for this contract needed to start at the top and work down. Karst commented that she felt DOE-ID had some responsibility for the situation because of the delays in getting the new contract in place. She asked if there were any changes planned in how DOE does contracting after this experience. Malmo replied that DOE-ID has realized that a situation of continued contract extensions sends a message of instability to the workforce. Many leave due to uncertainty. He feels DOE needs to address this by putting out contracts that are at least 3 or 4 years with option years, instead of short term contracts. He sees that a lot of time could be saved and disruption to the workforce avoided by having contracts with options built in.

McBride asked about the age of the drums being retrieved. Malmo replied that they were from the 1960s and early 1970s. Griffith asked if the anticipated difficulties retrieving the older drums had been factored into the recovery plan. Malmo replied that deterioration of the drums affects retrieval operations. The time for retrieving the different types of drums and boxes has been taken into account.

Preacher asked about the polychlorinated bi-phenyl (PCB) liquids and how DOE-ID knew which drums had the liquids. Malmo explained that certain sludge drums were known to contain the PCB liquids based on waste characterization information. He explained how DOE was working to address treatment of these liquids.

Accelerated Retrieval Project Status/Projected Execution

Katie Hain, DOE-ID, provided an update on Waste Area Group (WAG) 7. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

Burke asked if the MLLW from ARP went to AMWTP. Hain explained that MLLW was managed by CWI as part of its waste generator services. It does not go to AMWTP. Faulk pointed out that a very small percentage of waste constituted MLLW; most of it is TRU.

In response to a request from Daryl Koch, Hain explained the different types of radioactive waste managed by DOE. Initially, DOE managed high-level waste (HLW) from spent fuel processing and everything else was LLW. Then waste with long lived radionuclides that is not HLW was identified to be managed separately as TRU waste. The primary concern with TRU waste is inhalation. The particles are not soluble and once it gets into your lungs it can remain for a long time. The goal of retrieval is to capture as much of the TRU without mixing in materials that need not go to WIPP.

Preacher commented that in the past waste was split into compactable and non-compactable waste. He asked if all this waste went to the Subsurface Disposal Area (SDA). Hain replied that compaction saves space and also helps avoid subsidence. Bohrer clarified that in the 1980s INL compacted all its compactable waste prior to disposal at RWMC.

Bohrer asked what was done to the ground surface under the ARPs. Hain replied that clean soil is brought in to assure that all soil surfaces are clean (surveys show no radiological concern).

Hain described the treatment of the carbon tetrachloride that is emitted from the Organic Contamination Vadose Zone units.

McBride asked if the soil that was needed to prepare caps over contaminated sites could be obtained from off of INL. Hain described the different types of soils needed for a cap, all of which were available at the INL. She also noted that price is an issue, but if soil must be collected from offsite it can be done.

Small Business Subcontracting Programs of DOE and INL Contractors

Whitham, DOE, provided a discussion of the DOE and INL Contractor Small Business Subcontracting Programs. The presentation is available on the INL Site EM CAB website: <http://inlcab.energy.gov/>.

McBride asked why we try to meet the small business goals if they are so difficult to meet. Gerstlauer asked what the criteria are for a small business. Whitham explained that there are different categories of small businesses based on size and revenue. A business is either small or large, there is not intermediate category. Gerstlauer asked if there was a process for identifying potential contractors. He knows of several people who are interested in doing business at the Site. Whitham replied that there is a federal web site that is used for the contracting process. Whitham identified that Jennifer Cate is the small business contracting officer. He will provide CAB information on how a small business can get involved.

Roberts asked if the small business subcontracting goal is mandated or is it just a goal. Whitham replied that it is termed a goal but it is watched very closely for compliance.

Sherwood commented that the small business discussion sounds like politics. She is disappointed that politics becomes an obstacle to the work DOE is trying to accomplish.

Koch asked for explanation of plans for INTEC utility replacements. Whitham explained that some of the buildings that will continue at INTEC are known to be needed in the future. These facilities then present opportunities to upgrade them to meet future mission needs. This is one area where DOE is working on small business contracting. Koch expressed concern about having new contractors digging at INTEC. Whitham agreed and noted that digging in radioactive areas would not be part of small business contracts unless the business is fully prepared to conduct the work.

Idaho Cleanup Project Contract Accomplishments/Miscues Summary

Ken Whitham provided a discussion of ICP contract accomplishments and miscues. He did not include a presentation.

Bohrer observed that he thinks the relationship between DOE, the State, EPA, and the contractors has come a long way in the last few years. As a member of the public, he thinks the solutions that have been reached on disputes such as the dispute over 'all means all' is a real tribute to the cooperative nature of the relationship. It is a great example of how the agencies can work together.

Public Comment

No public comment was offered at this time.

CAB Work Session

The CAB discussed a letter it had drafted on small business contracting. Whitham provided information on what other sites were doing and whether they were having issues. This has been a topic of interest among the DOE EM sites.

I certify that these minutes are an accurate account of the September 20, 2012 meeting of the Idaho National Laboratory Site Environmental Management Citizens Advisory Board.



Willie Preacher, Chair
Idaho National Laboratory Site Environmental Management Citizens Advisory Board
WP/ph