



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 10, 2009

The Idaho National Laboratory (INL) Site Environmental Management (EM) Citizens Advisory Board (CAB) held its bi-monthly meeting on Tuesday, July 14, 2009, at the Hilton Garden Inn, Idaho Falls, Idaho. An audio recording of the meeting was created and may be reviewed by phoning Support Services at 208-419-4158.

Members Present

R. D. Maynard, Chair
Richard Buxton
Doc DeTonancour
Harrison Gerstlauer
Fred Sica

Damond Watkins
Willie Preacher
Tami Sherwood (excused)
Bruce Wendle
Robert Rodriguez

Members Absent

John Bolliger (excused)
Nicki Karst (excused)
Seth Beal (excused)

Deputy Designated Federal Officer, Federal Coordinator, and Liaisons Present

Rick Provencher, 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), Region 10
Susan Burke, State of Idaho Department of Environmental Quality (DEQ)
Daryl Koch, DEQ
Brent Rankin, CWI

Others Present

Lisa Aldrich, Project Manager
Ceri Chapple, Support Services
Lori Isenberg, Support Services Facilitator
Natalie Packer, ICP
Ben Roberts, DOE
John Tanner, Coalition 21
Carl Lovell, ICP
Eric Simpson, ICP
Charles Ljungberg, DOE
Danielle Miller, DOE

Jim Cooper, DOE
Anna Carter, DOE
Bruce Culp, ICP
Scott Reno, ICP
Jeff Perry, DOE
Dave Sanderlin, Naval Reactors Facility (NRF)
Bruce LaRue, DEQ
Alan Jines, DOE
Nicole Hernandez, DOE

Opening Remarks

Chairman R. D. Maynard welcomed everyone to the meeting. Mr. Provencher welcomed everyone, thanked the CAB for their efforts, and provided brief updates. Additionally, the liaisons provided brief updates.

Recent Public Involvement

Mr. Provencher provided an overview of public involvement since the last meeting.

Progress to Cleanup

Mr. Provencher provided a status of the cleanup progress with active discussion among the CAB. The status included safety performance (CWI and Advanced Mixed Waste Treatment Project [AMWTP]), transuranic (TRU) waste disposition and the AMWTP. Mr. Provencher discussed the Waste Area Group (WAG) 7. In regard to WAG 7, Mr. Provencher outlined the Subsurface Disposal Area (SDA) Record of Decision and the Accelerated Retrieval Project interim actions. Mr. Provencher discussed the status of the Idaho Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Disposal Facility and CERCLA Remediation Projects: WAG 1 – Test Area North (TAN), WAG 3 – Idaho Nuclear Technology and Engineering Center (INTEC), and WAG 10 – Site wide Miscellaneous Sites/Snake River Plain Aquifer. He continued, discussing other CERCLA remediation projects. Mr. Provencher outlined the accomplishments and upcoming activities of the Idaho CERCLA Disposal Facility, INTEC CERCLA, and the Site-wide- Waste Area Group 10. Mr. Provencher outlined the Decontamination and Decommissioning (D&D) objectives. They plan to D&D 7 high risk facilities (6 completed) and 162 excess facilities (132 completed) under the baseline program. Additionally, they plan to D&D 90 facilities with the American Reinvestment and Recovery Act (ARRA) funding. Mr. Provencher discussed in detail the ARRA funded projects' objectives and accomplishments since July: Advanced Test Reactor (ATR) Complex, INTEC, and the Material and Fuels Complex (MFC). Mr. Provencher outlined the Integrated Waste Treatment Unit (IWTU) (Sodium-Bearing Waste) Project objectives, the Integrated Waste Treatment Unit Project (IWTU), INTEC Liquid Waste Facility (Tank Farm) Closure Project, the Spent Nuclear Fuel Disposition Project objectives, and the Calcine Disposition Project. Mr. Provencher summarized to the CAB key activities and completion dates on the aforementioned projects. Additionally, Mr. Provencher outlined where the six billion dollars of ARRA money is going and broke down the Idaho DOE Operations Office Recovery Act projects. He also briefed the CAB on how many jobs will be saved and created here in Idaho.

Mr. Provencher notified the CAB of upcoming items of potential interest: DOE plans to extend Bechtel BWXT contract through 01/31/2010.

Discussion

Fred Sica asked what "TRU" waste is. Mr. Provencher responded that it means transuranic. It is an alpha emitter. It is a byproduct of uranium and plutonium. The transuranic waste is shipped to the Waste Isolation Pilot Plant (WIPP) in New Mexico.

Willie Preacher inquired about the Idaho CERCLA Disposal Facility (ICDF), wondering if they are monitoring to see if anything escapes "downwind". Mr. Provencher explained there is leakage protection for any liquids. It is a sound facility. There is an airborne monitoring program as well. Nothing of any concern has been found.

Willie Preacher inquired about the cause of the recent incident at MFC. Brent Rankin responded by explaining that a small canister 18" long and 8" in diameter filled with a gas used in radiation protection had a "hissing" sound coming from it. There are a total of 19 of them. They removed everyone from the area. They examined 8 workers. There was no exposure or intake. The gas would have been an irritant. They will proceed with greater caution.

Willie Preacher inquired if the Spent Nuclear Fuel discussed on slide 36 is included in the settlement agreement. Mr. Provencher responded yes, the fuel is covered and tracked. There is a cap in the settlement agreement; they track the fuel to be sure not to exceed that cap.

Damond Watkins inquired if it was difficult to maintain accountability for the ARRA money with the administration. Mr. Provencher responded saying it was a challenge, they must track everything separately. Mr. Provencher emphasized that there has been appropriate time allocated for base work and ARRA work.

Decisions/Disposition

The report satisfied the informational need for the CAB.

Update on Site-wide Groundwater, Miscellaneous Sites, and Future Sites (Operable Unit 10-08)

Nicole Hernandez briefed the CAB on the site-wide groundwater, Waste Area Group (WAG) 10-08. Ms. Hernandez outlined the scope for Operable Unit (OU) 10-08. She provided an overview of the INL CERCLA background and outlined the CERCLA process. Ms. Hernandez outlined the Plug-In approach and the schedule. She continued by briefing the CAB on the Remedial Design/ Remedial Action work plan. Ms. Hernandez summarized the findings and plans for site-wide groundwater at the INL. Ms. Hernandez concluded by briefing the CAB on the TSF-07 Disposal Pond at Test Area North Alternative 2 and outlined the schedule for the remediation project.

Decisions/Disposition

The report satisfied the informational need for the CAB.

Discussion

Mr. Sica inquired when the work plan will be completed. Ms. Hernandez responded that they will submit the work plan to the agencies by March, 2010. The agencies will need to approve the primary document.

Dennis Faulk commented this is a unique ROD and its implementation is unique. This ROD covers sites yet to be discovered. Ultimately they will issue a site specific sampling plan (instruction) for each waste site. It is difficult to set milestones out, because they are not sure when other sites will be discovered and how each project will take.

Harrison Gerstlauer inquired if there are other facilities throughout the DOE complex that will use this particular ROD. Ms. Hernandez explained that this particular ROD is specific to the INL; however the Plug-In approach is also used at Hanford.

R.D. inquired if there was any contamination found in the plants around the TAN disposal pond. Ms. Hernandez responded yes, they found cat-tails contaminated with Cesium. They surveyed the area with a back-pack system. They performed core sampling to monitor the mercury. They found that the cesium levels were all below 32.5, above risk based levels. The action was to put a fence around it because the area is outside of the TAN fence line.

Harrison Gerstlauer asked if any personnel or equipment had been contaminated. Ms. Hernandez responded there have been no events with personnel and the equipment is decontaminated.

Fred Sica inquired if any wild life had been contaminated. Ms. Hernandez explained that the mercury levels passed risk based levels. They will do a six year ecological evaluation. They take samples to help them understand what effect CERCLA is having on the environment.

Willie Preacher asked how they will monitor the area and if it would be possible to have the tribes involved the monitoring. Ms. Hernandez responded until 2095. They will provide fencing, monitoring and warning signs until 2095. They will sample groundwater initially and then expand to flora and fauna. In response to the tribal participation, Ms. Hernandez said that she would look into that.

Mr. Preacher asked how long EM will oversee the monitoring and when will NE takeover. Rick Provencher explained that EM will continue to do the maintenance and CERCLA surveillance. When cleanup is complete EM will turn over to NE but will still most likely continue sampling and monitoring in accordance with CERCLA expectations.

TRA-632 Hot Cells EE/CA

Mark Shaw briefed the CAB on the Engineering Evaluation Cost Analysis (EE/CA). Mr. Shaw began with a history of the TRA-632 Hot Cells. He continued by explaining some of the regulatory framework. Mr. Shaw provided photos and a map of TRA-632 and photos of the three hot cells contained within. Mr. Shaw provided the Radionuclide Inventory (Dose Rate) for the CAB. He outlined the Risk Assessment used to determine the alternatives suggested. Mr. Shaw briefed the CAB on the three alternatives: 1) No action, 2) No action with continued surveillance and maintenance and 3) Removal of the TRA-632 hot cells and building. He explained that the preferred alternative is Alternative 3.

Discussion

Willie Preacher asked what Cell #1 contained. Mr. Shaw explained the entire area is covered in stainless steel tables. It was used as a decontamination cell: CO₂ pellet blasting and acid etching. The residue went down the drain and plugged the drain.

Bruce Wendle inquired if there was an effort made to use the equipment somewhere else or for something else. Mr. Shaw explained that they had gone to great lengths to find another use for the equipment.

Fred Sica asked if there will be any maintenance needed after D&D. Mr. Shaw responded there will be no institutional controls.

Bruce Wendle asked what the cost figure is. Mr. Shaw answered \$6.5 million for Alternative #3.

Robert Rodriguez asked if the cells were above ground. Mr. Shaw explained that yes they are and they will be taken to ground level and grouted.

Mr. Sica asked Daryl Koch if the EPA is satisfied with Alternative #3. Mr. Koch responded yes, the state has reviewed Alternative #3 and the state is satisfied with that option.

Harrison Gerstlauer inquired why Alternative #2 wasn't chosen. Mr. Shaw explained that there would be significant maintenance costs until 2095.

Robert Rodriguez asked if the money for the D&D of the TRA Hot Cells is coming from the American Recovery and Reinvestment Act (ARRA). Mr. Shaw said yes, all of the D&D money is coming from the ARRA.

Doc DeTonancour asked what the difference is between the TRA Hot Cells and the TAN Hot Cells. Mr. Shaw explained that the TRA Hot Cells have a much higher dose rate than those at TAN.

Dick Buxton inquired if there are many personnel risks. Mr. Shaw responded that they have considered that. There is no plan to decon the cells, so there are only the standard industrial hazards to consider.

Decisions/Disposition

The report satisfied the informational need for the CAB.

Remote-Handled Transuranic Waste Update, Progress and Plans

Alan Jines briefed the CAB on the location of the Remote Handle Transuranic Waste, the remaining RWMC Retrieved Waste, the Sludge Pan Container (SPC) Transfers, the HFEF-5 cans (MFC Waste), Nuclear Energy (NE) to Environmental management (EM) transfers, Labyrinth work, INTEC 666 and the FDP Hot Cell activity, as well as the schedule. Mr. Jines s outlined the remaining RWMC retrieved waste. Mr. Jines explained that 67 sludge pan containers are being shipped to INTEC from NRF and another 25 will follow later. He provided photos of the SPC shipment leaving NRF and arriving at INTEC. Mr. Jines provided a photo of the Interim Storage Area (ISA) #1 at INTEC. He provided a detailed outline the Radioactive Scrap and Waste Facility (RSWF) at MFC. Mr. Jines provided photos of the HFEF-5 Canisters, HFEF-5 Can removal, the transfer of four HFEF-5 canisters in ISC and their transportation from MFC to INTEC. He also provided photos of the INTEC 659 repackaging of HFEF-5 canisters. He provided a drawing and an aerial view of the INTEC CPP 666 facility. Mr. Jines also provided photos of the Eastside excavation outside the Fluorinel Dissolution (FDP) Hot Cell, the new trailer, the new FDP Hot Cell hatch covers, and of the recent FDP Hot Cell work. Mr. Jines outlined the scope of the Nuclear Energy (NE) Environmental Management (EM) transferred RH-TRU. Mr. Jines concluded by outlining the schedule for the remaining retrieved RH-TRU waste at the INL.

Discussion

Harrison Gerstlauer asked how the sodium is rendered inactive. Alan Jines responded that there are a number of different options. CWI has received some bids and therefore there is some proprietary information involved. Mr. Jines explained that the process involves moisture and a controlled reaction. The moisture is introduced to the sodium at a controlled rate, keeping the reaction manageable. The ventilation system may need an upgrade; they know that they will need to do a RCRA permit modification.

Bruce Wendle asked if these hot cells will eventually need D&D. Mr. Jines responded that he is not sure about the long-term plan for hot cells. He explained he didn't feel confident in making any speculations. Mr. Provencher interjected, explaining that the hot cells are wet fuel basin hot cells and may have a potential to be transferred to another program after their current use. The plan will be to D&D if no future use can be found.

Decisions/Disposition

The report satisfied the informational need for the CAB.

EBR II D&D Overview

Jeff Perry briefed the CAB on the decontamination and decommissioning of the EBR II nuclear reactor. Mr. Perry provided some background information on EBR-II. He gave a physical description of the reactor building. Mr. Perry provided a cut away sketch of the EBR-II building and the primary coolant tank. Mr. Perry briefed the CAB on the current state of the reactor. He explained that four alternatives are being considered. Alternative 1 is no action. Alternative 2 no action with continued surveillance and maintenance. Mr. Perry provided a cut away sketch of the end state of alternatives 1 & 2. Alternative 3 involves Grouting the EBR-II reactor vessel in place and demolition of the containment building. Mr. Perry provided a cut away sketch of the end state for Alternative 3. Alternative 4 involves the removal of the EBR-II reactor vessel and demolition of the containment building. He provided a cut away drawing of the Alternative 4 end state. Mr. Perry concluded by explaining the EE/CA should be ready for the public and CAB review by the scheduled November 17 CAB meeting. There will be a 30 day review period.

Discussion

Fred Sica asked why the Breeder reactor was discontinued. Mr. Perry responded that the reactor creates U-239 which can be used in bomb-making, which caused the government moved away from it.

Mr. Sica asked if it was realistic to assume the building would collapse in 85years. Mr. Perry said that is the assumption however it most likely will take much longer.

Bruce Wendle inquired if there were any thoughts to cutting the reactor into pieces. Mr. Perry responded that they will take the dome off and the rest of the reactor will remain intact.

Mr. Perry remarked that there was a State Historic Preservation Office (SHPO) analysis and that adequate mitigation actions have been pursued. He continued by explaining that there were 10-12 Breeder reactors and that DOE still has the Fast Flux Tester facility at Hanford.

Decisions/Disposition

The report satisfied the informational need for the CAB.

Public Comment

No public comment was provided.

Announcements and Other Board Business

The next meeting will be held November 17, 2009, in Idaho Falls, Idaho at the Hilton Garden Inn.

CAB Work Session

The CAB developed and approved Recommendation #144 concerning the Decommissioning of the TRA-632 Hot Cells EE/CA, Alternative #3.

The CAB developed an agenda for topics of the November meeting:

In Situ Grouting - draft RD/RA - Work Plan

Comments Discussion - Hot Cell EE/CA

Radiation Education

Calcine ROD

The CAB reviewed and approved the Top Three Issues:

1. Address the issue of a permanent repository for calcine and spent nuclear fuel to enable preparation for the storage of calcine which is currently at the INL in manner that will be accepted at a permanent repository.
2. Support continued funding for the DOE mission and long-term monitoring.

3. Adequate funding for the treatment of calcine to ensure compliance with the settlement agreement.

Action Items:

1. Lisa Aldrich will finalize Recommendation #144 and post it to the INL CAB website.
2. Support staff will coordinate and distribute travel information to CAB members attending the November meeting in Idaho Falls, Idaho.

Members provided written feedback forms to support services at the conclusion of the meeting.

Attachments (8) to these minutes are available on request from the INL Site EM CAB support office.

I certify that these minutes are an accurate account of the September 10, 2009, meeting of the Idaho National Laboratory Site Environmental Management Citizens Advisory Board.

R. D. Maynard, Co-Chair

October 19, 2009



Idaho National Laboratory Site Environmental Management Citizens Advisory Board
RDM/cc