INL Site Environmental Management

CITIZENS ADVISORY BOARD

Meeting Minutes

May 12, 2010

The Idaho National Laboratory (INL) Site Environmental Management (EM) Citizens Advisory Board (CAB) held its bi-monthly meeting on Wednesday, May 12, 2010, 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
Seth Beal
Bruce Wendle
Teri Tyler
April Mariska
Willie Preacher

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
Daryl Koch, State of Idaho
Brent Rankin, CWI

Others Present

Lisa Aldrich, Project Manager
Ceri Chapple, Support Services
Lori Isenberg, Support Services Facilitator
Keith Lockie, DOE
Mark Arenez, DOE
Erik Simpson, ICP
David Hutchison, ICP
Marty Huebner, Coalition 21
Ed Ziemianski, DOE
Mary Magleby, ICP
Teresa Perkins, DOE
Beatrice Brailsford, Snake River Alliance
Elwood Glossbrenner, DOE
Mitchell Walker, DEQ
Danielle Miller, DOE
Nicole Hernandez, DOE
Ted Watanabe, ANS APS
Mary Wollen, KYNF
Daryl Siemer, Public
Jim Cooper, DOE
Carl Lovell, ICP
Michael Ebben, ICP
Bruce LaRue, DEQ
Ben Roberts, DOE
Mark Hutchinson, NRF
Don Rasch, DOE
Dave Sanderlin, Naval Reactors Facility (NRF)
Jeff Perry, DOE
William Lattin, DOE
Jerry Wells, DOE
Anna Carter, DOE
Pete Johansen, IDEQ
Mark Shaw, DOE

Opening Remarks

Chairman R. D. Maynard welcomed everyone to the meeting. Mr. Provencher welcomed everyone, thanked the CAB for its 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, including American Recovery and Reinvestment Act (ARRA) work. Mr. Provencher briefed the CAB on Transuranic Waste Disposition, the Advanced Mixed Waste Treatment Project, Waste Area Group 7 (Radioactive Waste Management Complex), the Subsurface Disposal Area Record of Decision, the Accelerated Retrieval Project Interim Actions, the Idaho CERCLA Disposal Facility, as well as CERCLA Remediation: Waste Area Group 1 – Test Area North, Waste Area Group 3 – Idaho Nuclear Technology and Engineering Center, and Waste Area Group 10 – Site-wide Miscellaneous Sites/Snake River Plain Aquifer. He continued by outlining the progress related to the decontamination and decommissioning in Test Area North (completed), the Advanced Test Reactor (ATR) Complex, Idaho Nuclear Technology and Engineering Center (INTEC), Radioactive Waste Management Complex (RWMC), the Power Burst Facility (ARRA), and the Materials and Fuels Complex (ARRA). Additionally, Mr. Provencher briefed the CAB on the Nuclear Materials Completion, the Integrated Waste Treatment Unit (Sodium-Bearing Waste), the INTEC Liquid Waste Treatment Facility (Tank Farm Closure), Spent Nuclear Fuel Disposition, and Calcine Disposition. The status update also included the safety performance for CWI and Advanced Mixed Waste Treatment Project (AMWTP).

Mr. Provencher provided an outline for the Transuranic Waste Disposition project, listing accomplishments and goals from 2006 to 2012. Mr. Provencher briefed the CAB on the accomplishments of the Transuranic Waste Disposition project since March. Operations at CPP-666 have commenced at 7 days/week. Remote-handled transuranic (RH-TRU) waste shipping to WIPP has resumed, including the first RH-TRU ARRA-funded shipment on March 11, 2010. There have been 11 ARRA-funded shipments to WIPP as of April 26, 2010. Thirty-three of the 130 HFEF-5 canisters have been processed as of April 23 (11 in CPP-659 and 22 in CPP-666). They have received 104 of 105 HFEF-5/ANL-E canisters of RH-TRU waste from MFC. Sixty percent of the design review for large liner/Sodium Loop Safety Facility (SLSF) transportation and storage equipment has been completed. All of the low level/mixed low-level waste (LL/MLLW) from AMWTP (U-233/ hot chemistry lab waste) has been received at INTEC. The 10-160B shipping casks (first shipment to NTS during week of April 19, 2010) have been received. Mr. Provencher highlighted the upcoming activities for the Transuranic Waste Disposition project. They will complete shipping RH-TRU target by July/August 2010. Additionally, they will award small business contract for the Sodium Process System Design.

Mr. Provencher outlined the accomplishments since March of the AMWTP. Since the October 1, 2009, contract extension, they have shipped 2,962 cubic meters of stored transuranic radioactive waste out of Idaho (through April 13, 2010). Since May 1, 2005, they have shipped out of Idaho 6,407 cubic meters of historically managed TRU waste, reclassified as MLLW, and shipped out 39,084 cubic meters of stored transuranic waste since 1999. Employees celebrated 10 million hours — more than six years — without a lost-time work accident. They have successfully completed all ARRA production and employment goals for the January–March extension period. Upcoming activities for AMWTP include the contract award that was announced March 29, 2010, and is currently under protest, and the planned receipt for the following offsite shipments: one shipment from General Electric Vallecitos Nuclear Center (GEVNC) (June 2010), eight shipments from Lawrence Livermore Laboratory LLNL (June 2010), approximately 85 shipments from Hanford (June–September 2010), and one shipment from Savannah River National Lab (SNL) (Summer 2010).

Mr. Provencher detailed the AMWTP contract extension. He explained that Bechtel BWXT Idaho, LLC, was awarded a contract extension from May 1, 2010, to August 31, 2010, with DOE having an optional extension from September 1–30, 2010. The scope includes the characterization, treatment, packaging, shipment, and disposal of TRU, MLLW, and LLW stored at the Idaho facility.

Mr. Provencher briefed the CAB on the Waste Area Group (WAG) 7 project objectives. They will conduct Non-Time Critical Removal Actions at the Accelerated Retrieval Projects (ARP) I, II and III. They will exhume targeted

waste material from the Subsurface Disposal Area. The targeted waste, i.e., Rocky Flats 741, 742, and 743 sludges, graphite waste, roaster oxides, and filters/prefilters, will be dispositioned. Remediation work will be completed in accordance with the Record of Decision (ROD) for OUs 7–13/14. They will conduct In-situ grouting in SDA as per OUs 7–13/14 ROD through ARRA funding. Mr. Provencher provided an outline of accomplishments and goals from 2006 to 2012. Mr. Provencher outlined the project accomplishments since March. They have completed waste exhumation of 1.38 acres under the CWI contract, shipped 2,330 cubic meters of targeted waste out of Idaho and packaged 17,630 drums of targeted waste, received four drum packaging stations from Premier Technologies and placed in the Accelerated Retrieval Project (ARP) V (Pit 9) airlock, and completed piling installation and fabrication of foundation rebar for ARP VI. Successful off-site demonstration of in-situ grouting (ISG) equipment was performed at subcontractor facility. They have resumed shipping waste to WIPP following the volatile organic issue. Mr. Provencher highlighted some upcoming activities. They will initiate ISG in early June and complete construction of ARP V. The Management Self-Assessment (MSA) for ISG is scheduled for May 16, 2010. Award DOE a subcontract for construction of Pit 10W.

Mr. Provencher briefed the CAB on other CERCLA Remediation project objectives. He touched on the TAN Groundwater Remediation project. Remediation will be performed at INTEC CERCLA sites (e.g., Tank Farm soil remediation, remediation of releases located outside of Tank Farm, perched water reduction). They will also remediate at the WAG 10 CERCLA sites (e.g., groundwater monitoring, contaminated soil remediation, unexploded ordnance [UXO] remediation, ecological monitoring). Mr. Provencher provided a timeline of other CERCLA Remediation project accomplishments and goals from 2006 to 2012. The Idaho CERCLA Disposal Facility (ICDF) accomplishments since March include the receipt of 2,720 cubic yards of soil and debris into the landfill and the receipt of 6,359 gallons of water into the Evaporation Ponds. Upcoming activities include the receipt and disposal of soil and debris from various site areas. Mr. Provencher provided a graph depicting the ICDF project landfill utilization. Site wide – Waste Area Group 10 accomplishments since March include the submittal of the Draft OU 10-08 work plan to the agencies for review and comment and the public notification of the site-wide, CERCLA five-year process initiation. Upcoming activities include: completion of the five-year review of CERCLA sites and submittal of a draft to agencies for review and comment; TNT/RDX removal within the Naval Proving Grounds; and finalization of the OU 10-08 work plan. INTEC – Waste Area Group on-going activities include: monitoring of perched water levels with radio-controlled telemetry system; monitoring of water usage to prepare facility water balance (inflows are compared to outflows to calculate water loss); elimination of 8.5 million gallons of water leaks (recharge) and identification of another 3.3 million gallon per year recharge source; completion of annual perched water sampling event; and inception of Snake River Plain Aquifer annual sampling event. Upcoming activities include the continuation of Phase I part II of the OU 3-14 remedy, including lining 300 feet of existing drainage ditch with high-density polyethylene or concrete, and continuing to eliminate sources of facility water releases to the perched water in the northern portion of INTEC. Test Area North – Waste Area Group 1 on-going activities include: restarting of the New Pump and Treat Facility operating Monday through Thursday each week; injecting whey and sodium lactate approximately every other month; and collecting required groundwater samples to track the progress of the remedial action. Upcoming activities include the development of a new work plan for remediation strategy and beginning of the operation of the Air Stripper Treatment Unit (ASTU).

Mr. Provencher outlined some D&D objectives. They will decommission and demolish under the baseline program 7 high-risk facilities (6 completed) and 162 excess facilities (135 completed). Under ARRA funding they will decommission and demolish 87 facilities: 5 high-risk facilities (MTR Reactor, TRA Hot Cells, EBR-II Reactor, CPP 601, and CPP 640), and 82 excess facilities (38 completed). The ARRA D&D – Advanced Test Reactor Complex (ATRC) Project Objectives include the demolition of 15 excess facilities and 2 high-risk facilities (MTR Reactor and TRA Hot Cells). Mr. Provencher provided a timeline illustrating the accomplishments and goals of the Advanced Test Reactor Complex/Power Burst Facility D&D from 2006 to 2012. The ARRA D&D - Advanced Test Reactor Complex Project accomplishments since March include: removal of exterior and top thermal shields at Materials Test Reactor (MTR) vessel; continued demolition preparation of TRA-604 MTR Building Wing A; continued work on TRA-632 Hot Cell demolition/deactivation; and beginning of TRA-632 concrete floor cutting in

support of the hot cell drain line network removal. Some upcoming activities include: remove the MTR vessel interior thermal shield plates; complete TRA-604 exterior demolition; complete removal of nonload-bearing TRA-632 interior walls and other interferences in preparation for TRA-632 Hot Cell Drain Network (HCDN) concrete floor cutting and drain line removal actions; complete TRA-632 Hot Cell 3 interior hazards removal; complete engineering for TRA-632 Hot Cell 1 structural analysis/modeling and feasible deactivation and removal alternatives; and award DOE contract for remediation of contaminated soil and vault.

ARRA D&D – INTEC Project Objectives include the demolition of 59 excess facilities and the demolition of 2 high-risk facilities: CPP-601 (Fuel Processing Facility) and CPP-640 (Head End Fuel Processing Facility). Mr. Provencher provided a timeline that depicts the accomplishments and goals for the D&D – INTEC Project from 2006 to 2012. Some accomplishments since March include: continued D&D of CPP-602; completion of demolition of CPP-712, -760, -751, -752, and -796; removal of 20,000 pounds of lead for a total of 396,400 pounds from CPP-601/640; and beginning of exterior demolition of Fuel Reprocessing Building (CPP-601).Upcoming activities include: continue exterior demolition of Fuel Reprocessing Building (CPP-601); complete CPP-762 demolition; complete demolition of CPP-781, -782, and -784, and Tank Farm Structures; and complete the Nuclear Safety downgrade of CPP-602.

The ARRA D&D – Materials and Fuels Complex (MFC) Project Objectives include the demolition of eight excess facilities and the demolition of one high-risk facility, the EBR-II Reactor. Mr. Provencher provided a timeline of accomplishments and goals for the ARRA D&D – Materials and Fuels Complex (MFC) Project from 2009 to 2012. Accomplishments since March include: continued asbestos abatement in the Sodium Boiler Building (MFC-766); completion of 50% of the sodium/bicarbonate treatment bench-scale testing; and issuance of EBR-II Action Memo. Upcoming activities include: complete final sodium bench-scale tests; continue asbestos removal in EBR-II; commence sodium steam treatment in the west basement of MFC-766; commence external demolition of MFC-795; complete engineering analysis on Haul Road and select action, and finalize EBR-II Historical Preservation Actions and establish interest group.

The Integrated Waste Treatment Unit (Sodium-Bearing Waste) Project Objectives are to design, construct, test, and operate the Sodium Bearing Waste Treatment Facility and process all sodium-bearing waste material no later than December 31, 2012. Mr. Provencher provided a timeline of the accomplishments and goals for the Integrated Waste Treatment Unit (Sodium-Bearing Waste) Project from 2006 to 2012. Accomplishments since March include: initiation of installation of the fire protection systems with the subcontractor; installation of building water and sewer connections; beginning to pull thousands of feet of wire for power and instrumentation; continuation of piping installation; and finishing of pipe chases on the main confinement structure. Upcoming activities include: completion on the building ventilation systems; completion of operator training in advance of oral tests; systems testing/turnover; and construction completion in August/September 2010.

Mr. Provencher provided a timeline of accomplishments and goals for the INTEC Liquid Waste Facility (Tank Farm) Closure Project from 2006 to 2012. Accomplishments since March include the Idaho DEQ approved pre-grout and grout certifications prepared by an independent professional engineer for seven 300,000-gallon tanks and four 30,000-gallon tanks, and continuation of D&D to remove above-ground structures on the Tank Farm. One upcoming activity, after IWTU begins processing waste, will be the resumption of tank washing in 2011.

Mr. Provencher briefed the CAB on the Spent Nuclear Fuel Disposition Project Objectives. They will transfer legacy, EM-owned spent nuclear fuel (SNF) from wet storage to appropriate dry storage. SNF from the Advanced Test Reactor and receive Domestic and Foreign Research Reactor SNF will be received for storage. They will prepare the SNF facilities for transition to another government entity by installing a segregation fence. Additionally, they will provide safe, regulatory-compliant, routine operations for INTEC SNF handling and storage facilities. Mr. Provencher provided a timeline of the accomplishments and goals for the Spent Nuclear Fuel Disposition Project from 2006 to 2012. Accomplishments since March include completion of 3,057 of 3,186 (96 percent complete) wet-to-dry transfers. Upcoming activities include the complete wet-to-dry scope by June 30,

2010: Advanced Test Reactor (1,824 of 1,880), Tory IIA (May 2010), and completion of three Domestic Research Reactor fuel receipts (Summer 2010).

The Calcine Disposition Project Objectives are to meet the requirements of the Idaho Settlement Agreement; issue a Record of Decision regarding the treatment of calcine by December 31, 2009 (Completed); submit an application for a RCRA Part B Permit governing the treatment and in-state disposition of calcine (transport and interim storage, if necessary); render calcine in a "road-ready" form (ready to be shipped out of State) by a "target" date of December 31, 2035; and meet the requirements of the Idaho Site Treatment Plan for the safe management of calcine as a mixed hazardous waste under the Resource Conservation and Recovery Act per permits and agreed-upon milestones. Mr. Provencher provided a timeline of accomplishments and goals for the Calcine Disposition Project from 2006 to 2012. Accomplishments since March include the subcontract requests for proposal issued (surrogate calcine and hot isostatic press) and design engineering moving forward. Upcoming Activities include: complete 30% of CD-1 Design Review Package; complete IWTU Usage Report; produce Risk Management Plan; and commence waste form development/acceptance tests.

Mr. Provencher provided a map illustrating where the $6 billion of ARRA-DOE funding is going. Additionally, he provided a map and a graph showing the state of the Cleanup from 2005 vs. 2011. Mr. Provencher illustrated the financial details of the INL Recovery Act Projects with a pie chart. He provided a table with an update of the ARRA – Jobs Retained/Created. ARRA Performance Measures were illustrated in a table. Mr. Provencher provided a timeline of accomplishments and goals related to key activities and completion dates from 2005 to 2013. The Idaho Project Milestones – Post 2012 were also displayed in a timeline up to 2027.

In conclusion, Mr. Provencher discussed a few items of potential interest. He detailed the White Paper Development on Idaho HLW Calcine and Spent Fuel. Mr. Provencher outlined the 2012 Budget Development. He briefed the CAB on the DOE-EM Greater than Class C Environmental Impact Statement. Finally, Mr. Provencher discussed the American Nuclear Society Workshop on D&D, August 29 – September 2, 2010, in Idaho Falls.

Discussion

R.D. Maynard asked who makes the determination with the protested contract. Mr. Provencher explained that the determination is made independent of DOE and goes to general accounting.

Fred Sica asked if there have ever been successful protests. Mr. Provencher explained that there have been successful protests, but that the odds are generally against them.

Doc DeTonancour asked if the segregation fence was part of the original project scope. Mr. Provencher explained that the fence is already in place. It was erected to segregate fuel aspects from other parts of INTEC.

Mr. Sica asked if there any plans after the cleanup is done to make any part of the INL public access. Mr. Provencher explained that the INL has an ongoing future mission for nuclear energy, so the site would not be made available to the public in the future.

Mr. Beal wondered if there are any plans for an energy park in the future. Mr. Provencher explained that there is no active pursuit for an energy park at the INL. Mr. Beal asked about possible historic preservation of EBR-II. Mr. Provencher said that all depended on public interest.

Decisions / Disposition

The report satisfied the informational need for the CAB.

OU 10-04 Long-Term Ecological Monitoring Overview (2003–2008)

Ms. Nicole Hernandez briefed the CAB on the OU 10-04 Long-term Ecological Monitoring Overview. She explained that the ecological risk assessment (ERA) is defined in the Framework (EPA 1992) as a process that evaluates the likelihood that adverse ecological effects are occurring or may occur as a result of exposure to one or more stressors. Effects can be physical, contaminant, or biological. Ms. Hernandez described how CERCLA evaluates contaminant effects. Adverse responses can range from sublethal chronic effects in individual organisms to a loss of ecosystem function. Effects should be evaluated at the population level, except for federally listed (threatened and endangered) species. Effects at the population level may be more difficult to measure. Effects at the individual level are generally easier to measure and may give an early indication that population effects are happening. Ms. Hernandez provided a flowchart illustrating the INL Guidance Manual (1995) phased approach. Phase 1 and 2 - WAG ERAs results presented in individual RODs starting in 1997 state that ecological risk would be addressed in OU 10-04 ERA. Phase 3 - OU 10-04 ROD (2002), a Site-wide ERA, integrated the results of the WAG ERA. The ROD, Section 11.2.1, states that no action with long–term ecological monitoring will be implemented because of concerns at the INL to sustain a healthy environment and the many uncertainties that resulted from the Comprehensive INL-wide ERA. The Phase 3 Post ROD: LTEM Plan Risk-Focused Monitoring verified site-wide risk assessment modeling, uptake rates, and concentrations in receptors. They developed a comprehensive baseline across a range of receptors for future monitoring, in which they attempted to select the most appropriate species and effects for future efforts. Ms. Hernandez provided a map showing an aerial view of an example Waste Area Group Plot. Analytical data are used to characterize the concentration of contaminants in the environment, uptake for risk assessment modeling, and background concentrations in biotic and abiotic media. The media sampled for Analytical data included: surface and sub-surface soil, deer mice, sagebrush, and grass (preferably native). The Effects data collected included: population/ community data, individual characteristics (gross weights, histopathology), and soil toxicity tests (EPA standardized tests).The population data can be used to determine a species' richness and diversity. The less disturbed a site is, the more diversity it has and the more evenness within that diversity (Fraser 2007).

Current sampling provides a snap shot in time of the site and allows for trending in the future. Plants, small mammal, soil fauna, reptile, amphibian, and bird data were collected. The effects to individual mammals were measured by histopathology (inflammation, necrosis, hemorrhage, parasite, mineralization, neoplasia), body-to-kidney/liver-weight ratios, sex ratios, and body weight. Ms. Hernandez explained the Soil Toxicity Testing (Standard ASTM Methods. The plant toxicity of five species was tested: carrot, corn, onion, radish, and soybean. Germination, emergence, and growth were measured, as well as plant height and above- and below-ground mortality. Earthworms were tested using the Standard ASTM Methods, measuring survival (indicated by mortality) and growth (indicated as body weight change). The LTEM Plan Approach (2004) DQO Principal Study Question asked, Do yearly site-specific sampling data or associated studies indicate a difference in contamination levels or effects as compared with the reference sites? If the answer is yes, the need—in addition to continuing the site-specific monitoring and surveillance required to verify that the remedial objectives specified in INL CERCLA RODs are maintained for ecological receptors—is to collect supplemental data to help determine if the difference could result in unacceptable long-term INL site-wide ecological impacts. If the answer is no, the need is continuation of site-specific monitoring and surveillance at an appropriate level for trending; ensuring that the remedy remains ecologically protective; supporting five-year reviews; continuing to evaluate site-specific data for potential INL site-wide impacts, and evaluating locations/reasons for site-wide data collection.

Ms. Hernandez explained that there will be future tribal involvement regarding the long-term ecological monitoring at the INL. A Tribal Co-sampling Agreement is currently pending signature with the Tribes and DOE-ID. The Agreement embraces the Tribal desire to become more involved in monitoring selected contaminated sites and cleanup effectiveness. The Tribes will co-sample groundwater, flora, and fauna with the INL cleanup contractor. The samples will provide additional independent confirmatory results on existing conditions and

cleanup performance. The Tribes and DOE-ID will develop a Sampling Plan after the Agreement is signed that specifies sampling locations, media, parameters, protocol, quality assurance, analysis, and reporting.

Ms. Hernandez outlined the current schedule for the OU 10-04 Long-Term Ecological Monitoring Overview (2003–2008). Currently Agency comments are being resolved. A final report will be issued by the end of the calendar year. The report will identify the areas that will require future ecological monitoring. By early 2011 briefings will be provided to the Tribal Council and the Citizens Advisory Board.

Discussion

Fred Sica asked if the Tribal lab equipment is the same as the equipment used by the INL. Ms. Hernandez explained that the Tribes currently do sampling at the INL and may use its equipment. This gives the Tribes the opportunity to be present. The samples are sent to independent certified labs for analysis.

Bruce Wendle asked if the Tribes have the same sampling procedures and monitoring plans as the INL. Ms. Hernandez explained that the Tribes have their own plans and procedures; however, they do not have their own wells. The Tribes and DOE have been through a very elaborate negotiation process with the monitoring program. The funding is used to process the sample findings that are used in the data. The monitoring program will be expanded to include the Tribes.

Decisions / Disposition

The report satisfied the informational need for the CAB.

INL Site-wide Five-Year Review CERCLA Long-Term Ecological Program

Ms. Nicole Hernandez briefed the CAB on the Site-wide Five-Year Review of the INL. The objectives of the review were to follow regulatory requirements and to provide a Five-Year Review history at the INL, identifying the purpose, scope, past performance, and schedule at the site.

The regulatory requirements for the Five-Year Review are as follows:

> Section 121(c) of CERCLA 42 U.S.C. § 9621(c) states that Statutory Reviews are conducted when Hazardous substances remain on site following remediation, the ROD was signed on or after October 17, 1986, and complete reviews no less often than every five years (more frequently if necessary). Reviews are triggered by the initiation of remedial actions, or signature or previous Five-Year review.
>
> The Federal Facility Agreement and Consent Order necessitates the Idaho National Engineering Laboratory to implement the requirement of Section 121(c) of CERCLA 42 U.S.C. § 9621(c.).
>
> EPA guidance (OSWER 9355.7-03B-P) calls for the need for statutory reviews.

Ms. Hernandez outlined the Five-Year Review History at the INL. Prior to 2005 WAGs conducted individual Five-Year Reviews to meet individual schedules. In 2005 all WAGs were consolidated under DOE-ID control into a single site-wide review (one schedule). A second site-wide review was conducted in 2010.

The purpose of the Five-Year Review is to evaluate the implementation and performance of remedial actions, review/summarize sampling and monitoring results, review original assumptions, toxicity values, action levels, etc., and to determine the protectiveness of remedies, and identify any corrective actions.

Two factors determine the scope of the Five-Year Review. First is to evaluate the implementation and performance of remedial actions at all WAGs under DOE Idaho control. Second is to determine the protectiveness of remedial actions at all WAGs under DOE Idaho control; this includes all WAGs except WAG 8 (NRF).

Ms. Hernandez discussed the past performance of the remedial actions at the WAGs. Subsidence was identified at the CFA Landfill III that compromised the integrity of the cover, creating the potential to allow surface water to contact the waste and potentially carry contaminants into the SRPA. Subsidence at CFA landfill was filled and repaired. Repairs are documented in the annual IC report. An evaluation of the significance of the nitrate detections encountered in the vadose zone was performed at WAG 7. The significance of nitrate detections was evaluated and discussed in the OUs 7–13/14 RI/FS. The Sanitary Lagoons at MFC (site ANL-04) remain active, prohibiting administrative closure of WAG 9, despite completion of remedial actions at all other sites. The sanitary lagoon site (ANL-04) was transferred from WAG 9 to WAG 10 OU 10-08 in 2005. The final transition requirements were documented in the OU 10-08 ROD. Diesel was found in perched aquifer wells at WAG 2. Annual monitoring will continue to track concentrations and rate of removal via the petroleum traps, with an update provided in the next five-year review. VOCs were found in the vadose zone at WAG 4. Annual monitoring will continue of soil gas vapors to determine if concentrations of VOCs reflect variability in concentration or a migrating front, with an update provided in the next five-year review. Nitrate concentrations in the Snake River Plain Aquifer above maximum contaminant levels (MCLs) were discovered at WAG 4. Continual annual monitoring will be performed to determine if concentrations of nitrates will decline below MCLs by 2095, with an update provided in the next five-year review.

Ms. Hernandez provided the CAB with a timeline of the schedule for the Five-Year Review. In November 2009–July 2010 they will compile and evaluate data and prepare the draft report. An Agency review will be conducted in July–August. In September the report will be finalized and published. In October–December, briefings on Five-Year results and recommendations will be given.

Decisions / Disposition

The report satisfied the informational need for the CAB.

Sodium-Bearing Waste Integrated Waste Treatment Unit Construction—Operational Readiness Plans

Mr. Keith Lockie briefed the CAB on the Sodium-Bearing Waste Treatment Project overview and update. He explained that the Idaho Cleanup Project contract contains the Sodium-Bearing Waste Treatment Project scope, which is to design, construct, and commission a new treatment facility. The total project cost is estimated at $570.9 million.

Mr. Lockie outlined the mission of the Sodium-Bearing Waste Treatment Project. The new facility is to treat 900,000 gallons of radioactive liquid waste currently stored in underground tanks at the INTEC Tank Farm. The tank waste referred to as sodium-bearing waste (SBW) is a mixture of decontamination solutions from cleanup of equipment and facilities, laboratory wastes, tank heels with solids, highly acidic radioactive liquid, and is relatively high in sodium salts from decontamination solutions. The Idaho Settlement Agreement requires treatment of the tank waste by December 2012. The Consent Order requires the remaining INTEC Tank Farm tanks to be emptied by December 2012. The Tank Farm tanks' secondary containments are non-compliant with RCRA.

Mr. Lockie provided a detailed description of the project. The steam reforming technology converts acidic radioactive liquid waste to solid carbonate particles. The new facility includes a process building with reinforced concrete process cells inside a structural steel building, along with a product storage building. Within the process building approximately 650 remote-handled waste canisters will be processed. The product storage building will

provide interim storage for entire product volume. The Project is also referred to as the Integrated Waste Treatment Unit (IWTU). Mr. Lockie provided a flow-sheet illustrating the Sodium-Bearing Waste Treatment process.

The Project is approximately 82% complete overall (design/construct/commission) with work in place at approximately 63% complete. The fabrication and installation of all major process vessels/skids is complete. The concrete placements for the complex process building shield walls have been completed. The majority of steel erection work has been completed. The building was "closed-in" November 2009. Installation of piping, ventilation ductwork, and electrical continues. Setting of equipment is still in progress — blowers, electrical panels, instrument racks, etc. The last major procurements are to be received this month — for transfer bell crane and HEPA filter equipment. Systems turnover and testing are beginning. Operator training/qualifications are in progress.

The top issue for the Sodium-Bearing Waste Treatment Project is the construction execution underperformance. Current estimates are to complete construction showing little margin between available funds and estimated costs. To increase margin, the project is proceeding with an internal reprogramming of $4.9 million to shift funds from operating contingency to line item. New construction senior management, added craft supervision, and improved work packages have been added to increase craft productivity. Corporate contractor reach-back efforts will continue. They are working to identify line-item cost reduction opportunities and to structure new contract incentives. The current schedule analysis shows that the majority of schedule contingency will be used to complete construction, reducing contingency available during testing/startup phase. They are working to increase efficiencies in the system testing and startup sequence, planning, and execution to minimize schedule risks and increase schedule contingency during the testing/startup phase. Forecasts still show a start of operations by August 2011 baseline date and 1–2 months of float between estimated treatment completion and Settlement Agreement milestone.

Mr. Lockie provided a table illustrating upcoming Project Milestones. He also provided an artist's rendition of the SBW Treatment Facility Location at INTEC, as well as progress photos. The photos showed the early basemat formwork, July 16, 2007; process cells concrete work, September 16, 2008; structural steel work continues, April 29, 2009; first mercury adsorber set into place, June 17, 2009; waste feed tank skid delivery, June 23, 2009; external siding work in progress, October 19, 2009; facility enclosed, November 2009; off-gas building ventilation ducting, February 14, 2010; HEPA filter housing at vendor shop, March 2010; product storage building progress, March 2010; and process cells/pipe chase/maintenance crane, April 15, 2010.

Mr. Lockie summated that they will be wrapping up major construction activities this year. The sequence of construction turnover of individual facility systems for testing/verification is commencing. Testing Program and Readiness Review activities will occur over the next year. Full operations are planned to commence by August 2011. The Waste Treatment Campaign is to complete by the December 2010 Settlement Agreement milestone.

Discussion

Harrison Gerstlauer wondered if the sodium-bearing waste must be warmed before it can be pumped. Mr. Lockie explained that it will just be dissolved sodium ions; therefore, it will not need any special treatment to be pumped.

Fred Sica inquired as to why the operation needs to be continuous, 24/7. Mr. Lockie explained that the operation runs more smoothly that way.

Dick Buxton asked if the operation would need extra ventilation. Mr. Lockie explained that there is not much decay heat left, so no forced ventilation will be required.

R.D. Maynard asked if there will be a second mission for the calcine treatment facility. Mr. Lockie said that there is a potential future mission. The shield walls already exist and design requirements have already been met for a future mission.

Susan Burke asked who might be manufacturing the canisters. Mr. Lockie said that Premier Technologies may manufacture the canisters, saying that the design had been completed.

Beatrice Brailsford asked if the NRC has done any evaluation of the treatment facility. Mr. Lockie explained that the defense board has been involved only in the regulatory process.

Bill Seivers wondered if the process will be handled by experienced naval operators. Mr. Lockie explained that they are looking for experienced/qualified operators. Mr. Rankin followed up by explaining that the operators are strictly screened and involved in an intensive training program for longer than a year.

Decisions / Disposition

The report satisfied the informational need for the CAB.

D&D Status Update

Mr. Mark Shaw briefed the CAB on the D&D activities at the Idaho National Laboratory. All D&D work is funded by the ARRA. The Scope of the D&D includes 90 buildings/structures totaling 812,277 ft^2. As of May 1, they have completed 52 buildings/structures (58% complete), 336,310 ft^2 (45% complete).

The original plan for the TRA-632 Hot Cells was to grout the three cells, remove the cells, and dispose of the cells at ICDF. The current plan for Cell #1 is to grout the cell up to the window, apply lockdown to the upper section, demolish the upper section with the processor, and cut out the lower section and dispose of at ICDF. The current plan for Cells #2 and #3 is to remove the contents, apply lockdown to interior surfaces, and demolish with the processor. Mr. Shaw provided photos of Hot Cell #1, the tables in Cell #1, Hot Cell #2, the removing of manipulators from Cell #2, Hot Cell #3, debris on floor of Cell #3, pipe waxing preparations, the MTR Reactor, MTR Reactor (during D&D), the MTR Reactor Thermal Shield, the Top Thermal Shield being removed, the MTR Reactor (about a month ago), the MTR Reactor (last week), and the Hitachi Excavator with the long reach arm.

Concerning the EBR-II D&D, Mr. Shaw explained that the Action Memo was signed and they have selected the alternative to grout the reactor in place. The alternative includes an EBR-II display at the EBR-I Museum, public involvement, sodium (Na) treatment (to begin in June), asbestos removal from the dome, and the schedule of an extension to perform bench-scale Na treatment tests. Mr. Shaw provided photos displaying the bench-scale Na treatment tests. Additionally, he provided photos of the Bottom of a Na Drain Tank, Passivated Na, and a Na Drain Tank.

The current schedule is to complete TRA-632 Hot Cells demolition by September 2011, to complete demolition of MTR reactor by December 2010, and to complete demolition of the MTR Reactor Building by July 2011. They will begin EBR-II Na treatment by June 2010 and complete demolition of EBR-II Reactor Building by March 2012.

Discussion

Beatrice Brailsford asked for more clarification on the D&D process of Cell #1. Mr. Shaw explained that they will cut out the grouted monolith. The grout is used to eliminate void space, not to stabilize waste. The sodium from the reactor will taken out and treated.

Decisions / Disposition

The report satisfied the informational need for the CAB.

Public Comment

Mr. Daryl Siemer provided public comment.

DOE-ID White Paper on Spent Fuel and High-Level Waste

Mr. Jim Cooper briefed the CAB on the DOE-ID white paper on Spent Nuclear Fuel (SNF) and High-Level Waste (HLW). Mr. Cooper referred to the Blue Ribbon Commission (BRC) advisory committee charter, explaining that there are certain items that DOE Headquarters recognizes as Blue Ribbon commission responsibilities and requirements for SNF and HLW. Mr. Cooper highlighted Item 3 of the charter, Objectives and Scope of Activities, which emphasizes the focus on the back end of nuclear fuel, particularly the process for storage and disposal. He asked the CAB to pay particular attention to Items 3b, 3c, 3d, and 3f. Item 3b states that the BRC examine options for safe storage of used nuclear fuel while final disposition pathways are selected and deployed; Item 3c states that the BRC should examine options for permanent disposal of used fuel and/or high level nuclear waste, including deep geological disposal; Item 3d states that the BRC should examine options to make legal and commercial arrangements for the management of used nuclear fuel and nuclear waste in a manner that takes the current and potential full fuel cycles into account; and Item 3f states that the BRC needs to examine options to ensure that decisions on management of used nuclear fuel and waste are open to transport, with broad participation.

Mr. Cooper continued by referencing Mr. Frank Marcinowski's presentation, "Overview of DOE's Spent Nuclear Fuel & High-Level Waste," which was presented to DOE corporate earlier this year. Mr. Cooper reviewed the types of SNF in DOE Inventory. Defense fuel is defined as DOE Production Reactors and Research and Development (R&D) Reactors. Non-Defense is defined as Core Debris from the Three-Mile Island Reactor, Commercial Power Demonstration Projects like Shippingport, Peach Bottom, and Fort St. Vrain, Domestic Research Reactors (DRR), and Foreign Research Reactors (FRR).

The current State commitments from the Idaho Settlement Agreement state that the spent nuclear fuel needs to placed in dry storage by December 31, 2023. All EM spent fuel will be placed into dry storage by the end of June 2010. The settlement agreement states that all spent nuclear fuel has to be out of Idaho by January 1, 2035. The penalty if this milestone isn't reached would be the suspension of SNF receipts into Idaho and payment to the State of Idaho $60,000 per day for each day in violation, subject to appropriations.

The Colorado Commitment states that the Fort St. Vrain spent nuclear fuel must be out of Colorado by January 1, 2035. Hanford's has currently moved all SNF from wet to dry storage. The SNF is stored in ~400 multi-canister overpacks and other dry casks. Idaho National Laboratory currently has a diverse inventory of SNF in different waste configurations, which includes both DOE-origin and commercial SNF. The INL has diverse storage facilities, with numerous dry storage methods as well as a wet storage pool in use. The INL will continue to receive Foreign Research Reactor (until 2019) and Domestic Research Reactor fuel. Fort St. Vrain currently has 15 metric tons of SNF in dry storage facilities, managed by DOE. Savannah River Site's SNF is currently in wet storage.

Mr. Cooper explained that the FRR program supports the U.S. Non-proliferation policy. More than 9,200 assemblies from 29 countries have been received as of March 2010. Current plans are to receive FRR until 2019.

Mr. Cooper reviewed the 2010 DOE HLW Inventory. Idaho has projected 3,590–5,090 canisters. Hanford has a projected 9,700 canisters. West Valley has a projected 275 canisters by 2010. Savannah River has a projected 2,900 canisters by 2010 and 6,300 canisters total projected. The total HLW inventory will be 3,175 canisters by 2010 and

19,865–21,365 canisters total projected. Savannah River Site has produced about 2,900 canisters (of 6,300 planned). However, 31 million of the 37 million gallons of tank waste remain to be treated (51 tanks; 2 closed) at Savannah River. The Idaho National Laboratory has three waste streams:4,400 m^3 of calcine (a granular solid) stored in 7 bin sets (43 bins) to be converted to monolithic solid by hot isostatic pressing; projected to produce 2,900–4,400 canisters; Sodium-Bearing Waste (SBW) – 900,000 gallons stored in four tanks to be treated by steam reforming – about 590 10-foot canisters of granular powder will be produced, 7 of 11 tanks closed; Sodium bonded fuel, FFTF fuel (Hanford), to be treated at MFC with NE funding, should be completed by 2011. Hanford has 53 million gallons of liquid waste (177 tanks, 6 emptied) awaiting treatment in the Waste Treatment Plant (WTP).

Mr. Cooper outlined the path forward for HLW. Savannah River Site and Hanford will vitrify/immobilize tank waste and store the canisters of treated waste on-site. Idaho National Laboratory will treat HLW calcine by hot isostatic pressing to form a monolithic solid; and treat SBW by steam reforming and store the canisters of treated calcine and SBW onsite.

Mr. Cooper emphasized that the main stakeholder concern is that the waste may be stored onsite indefinitely, but DOE must uphold state commitments, the Hanford TPA, the Idaho Settlement Agreement, and the South Carolina Federal Facility Agreement. DOE will maintain institutional controls, develop technical basis for extended storage, and assess environmental impacts.

In conclusion, DOE will continue the safe management/storage of HLW and SNF, without any significant near-term technical or safety impacts for 50+ years. DOE will continue to develop improved techniques to reduce treatment costs and schedules. There are potential compliance issues with affected states without a disposal path for defense wastes.

Discussion

Seth Beal asked if Item 3c, when referring to a deep geological disposal, included Yucca Mountain as a possible consideration. Mr. Cooper explained that it is a gray area, and that Yucca Mountain may be considered. Mr. Beal asked about Item 3d, in reference to the commercial management and storage of SNF and waste, if the waste would be processed or if it will be untreated. Mr. Cooper explained that there will be both processed and unprocessed fuel and waste in storage. There are commercial entities that have the capability to treat some of the waste. Mr. Beal asked if commercial management would be long-term storage. Mr. Cooper expressed that he wasn't sure. Mr. Provencher explained that the reactors are currently using commercial capabilities for long-term storage.

Harrison Gerstlauer asked where all the money went for Yucca Mountain. Mr. Cooper explained that hasn't been decided yet, and the Blue Ribbon Panel will make suggestions.

Beatrice Brailsford asked what the purpose of the white paper is, wondering what Idaho could tell DOE. Mr. Cooper explained that DOE-ID has taken the initiative to answer questions about fuel, in the anticipation of questions that may be asked by the Blue Ribbon Panel. DOE-ID wanted to portray the collective interests of the community, being proactive in defining what is here in Idaho.

Decisions / Disposition

The report satisfied the informational need for the CAB.

Multi-Purpose Haul Road

Mr. Jeff Perry briefed the CAB on the INL Multi-Purpose Haul Road Status. He explained the need for a haul road. There are several thousand planned shipments over the next 10 years between MFC and the rest of the INL site facilities (approximately 4 shipments per week). The current approach requires the closure of Highway 20 for

radiological shipments. This requires: coordination with Idaho DOT; newspaper ads; use of three closure crews (two on Hwy 20, one on Hwy 26); shipments are scheduled for 2:00 a.m. to minimize public impact; approximately 3–4 hours per shipment (actual road closure time is approximately 30–40 minutes). There are many impacts associated with the current approach. The total project impacts in terms of cost and schedule are significant, limiting the ability to efficiently manage a project. The public is inconvenienced. It increases safety risk by increasing exposure of the public to multiple shipments across public roadways. Mr. Perry provided a table of the transportation needs assessment between MFC and the balance of the INL.

Mr. Perry outlined the road benefits. The cost of road closure is approximately $3,500 per shipment. The haul road would be paid back in approximately 2,500 shipments. The cost savings range is $25 million –, $53 million. The haul road eliminates approximately 1200 shipments associated with public risk and promotes operational efficiency.

Mr. Perry provided a map of the alternatives being considered. One alternative is No Action, use Highway 20. Another alternative is to use road T-24 from MFC to PBF connecting to existing site roads. The Preferred Alternative is to use the new/existing road in T-25 corridor.

Mr. Perry discussed other alternatives considered but eliminated from detailed analysis. T-3 from MFC to INTEC was evaluated in previous NEPA evaluation (Pu-238 EIS), but eliminated due to a pristine route and a river crossing. The new road in the Highway 20 corridor was eliminated due to the accident exclusion zone of 650 meters. The T-25 would need an upgrade from MFC to ARA to accommodate a crawler and or heavy hauler. U.S. Highway 20 with Fillmore turnoff was also considered but eliminated.

The environmental impacts analyzed with regard to the haul road were cultural resources, ecological resources, air quality, accidents, intentional destructive acts, and cumulative impacts.

Mr. Perry provided two photos of the T-25 Roadway. Additionally, he provided a table of the evaluation matrix for natural resource aspects, comparing Alternatives 1 (T-25) to Alternative 2 (T24).

Mr. Perry outlined the Ecological Resource Operational Controls. To avoid impacts to sage-grouse lek activity between March 15 and May 15, they will restrict shipments to 10 a.m. through 5 p.m. To avoid impacts to sage-grouse nesting and brood rearing between March 15 and June 30, surface disturbing and/or disruptive construction activities would be prohibited or restricted. To comply with the Migratory Bird Treaty Act, no vegetation removal or surface-isturbing activities would take place between May 1 and September 1 without first conducting surveys to confirm the absence of nesting birds. All disturbed areas would be re-vegetated with native species of local origin. A weed management plan would be developed and implemented.

Mr. Perry discussed the mitigation actions required. If T-24 is selected, mitigation of impacts would be required. Many of the potential impacts to ecological resources could be eliminated or reduced by successfully re-vegetating the disturbed areas. However, the soils found along T-24 are known to be unsuitable to support successful re-vegetation. Mitigation would require implementation of demonstrated successful methods for overcoming these limitations.

Mr. Perry concluded his presentation by outlining the path forward. The Environmental Assessment is currently available for public review and comment. The Public Comment period is May 10 – June 9, 2010. There will be an Environmental Assessment discussion with the tribes. They will conduct public presentations as requested. The Environmental Assessment will be finalized. When a decision is made and an alternative chosen, a small-business contract will be awarded. They will initiate the contract by August 2010.

Discussion

Dennis Faulk asked if the road will be gravel or paved. Mr. Perry said it would be gravel.

Willie Preacher expressed Tribal/cultural concerns with the haul road.

Teri Tyler asked if they would need to limit travel during INL operating hours. Mr. Perry explained that the road would be a limited-use road, used only for big shipments.

Decisions / Disposition

The report satisfied the informational need for the CAB.

AMWTP Extension Modification Statement of Work

Ms. Anna Carter briefed the CAB on the Advanced Mixed Waste Treatment Project contract extension. The AMWTP contract was awarded to CH2M HILL Newport News Nuclear, LLC (CHN) on March 29, 2010. The 30-day contract transition started immediately. The contract has an estimated value at $592 million, including about $8 million of work funded under the ARRA. The contract period of performance is from May 1, 2010 – September 30, 2015.

The Award is being protested. Both unsuccessful offerors protested the contract award to CHN on April 13, 2010. The protests were filed to the Government Accountability Office (GAO). There is a 100-day GAO determination period. The decisions on the protests are expected by July 22, 2010.

With regard to the path forward, the existing AMWTP contract has been extended to maintain operations during the GAO determination period and a 30-day contract transition. The existing contractor is Bechtel BWXT, Idaho, LLC (BBWI).

The period of contract extension, assuming the GAO will take the full 100 days to determine a protest outcome by July 22, 2010, will be a four-month extension (May 2010 – August 2010) at $44 million (includes $2.6 million funded by ARRA) with a one-month option (September 2010) at $11 million (includes $650,000 funded by ARRA).

Ms. Carter outlined the work scope under the contract extension. They will accelerate TRU waste out of Idaho, increasing retrieval, treatment/repackaging, shipping, and working off the backlog of ARP TRU waste. They plan to do 18–19 shipments per week through the extension period. Offsite TRU waste receipt and processing will include: one shipment from GE Vallecitos (June), eight shipments from Lawrence Livermore National Lab (June), approximately 85 shipments from Hanford (June–September), and one shipment from Sandia National Laboratory (summer 2010).

Ms. Carter updated the CAB on the volatile organic compound (VOC) status. The VOC concentrations at Waste Isolation Pilot Plant (WIPP) are approaching the action limits specified in the New Mexico Environment Department (NMED) permit. The Carlsbad Field Office (CBFO) suspended Idaho's VOC waste shipments. The CBFO requested Temporary Authorization (TA) and a permit modification request to revise the action limits. The NMED approved the TA to allow receipt of waste streams, provided that the containers were overpacked. Idaho resumed VOC waste shipments in late April 2010. Ms. Carter provided a graph of the production curve.

In conclusion, the contract extension will allow DOE to continue meeting the commitments of the Idaho Settlement Agreement, the Site Treatment Plan, and the accelerated TRU waste shipment schedule at the Waste Isolation Pilot Plant.

Discussion

Seth Beal asked if September 1, 2015, will be the final date even with the contract protest. Ed Ziemienski explained that September 1, 2015, will be the term date no matter what, it is a completion contract.

Willie Preacher asked if VOCs emitted through the drum filters were still an issue at WIPP. Jerry Wells explained that there are two types of drum filters, one meeting DOT requirements and one made special for WIPP. The new filters will eliminate the emission of VOCs due to safety concerns for the workers.

Susan Burke asked if after 2015 there could be TRU waste from other sites coming through AMWTP. Rick Provencher explained that AMWTP is currently funded to operate for a short period of time to process waste, most likely just a nominal amount. They do not anticipate running AMWTP in the long term.

Decisions / Disposition

The report satisfied the informational need for the CAB.

Public Comment

Mr. Daryl Siemer provided public comment.

Announcements and Other Board Business

The CAB orientation and radiation tutorial will be July 13, 2010. The full board and public meeting will be held July 14, 2010, in Idaho Falls, Idaho, at the Shilo Inn.

CAB Work Session

The CAB formed two subcommittees:

The Whitepaper/ Blue Ribbon Commission:
Bruce Wendle, Seth Beal, Teri Tyler, R.D. Maynard, Harrison Gerstlauer, Willie Preacher, and Fred Sica
Haul Road Environmental Assessment:
R.D. Maynard, Harrison Gerstlauer, Seth Beal, Willie Preacher, April Mariska, and Doc DeTonancour

The CAB developed an agenda for topics of the July 13 orientation:

Radiation Training
Board Member Safety/Security
CAB Business Process
Waste Area Group Status and Location
Regulatory Drivers (Settlement Agreement, FFA/CO, RODs) CERCLA/RCRA
EPA and DEQ Roles, Tribal Involvement

The CAB developed an agenda for topics of the July 14 public meeting:

Progress to Cleanup
Complete New Contract – ICP
White Paper for the Blue Ribbon Panel
Completion Transfer Wet to Dry Storage
WAG 7 Update

IN-Situ Grouting
Haul Road EA Results
EBR-II Facilities Sodium Treatment

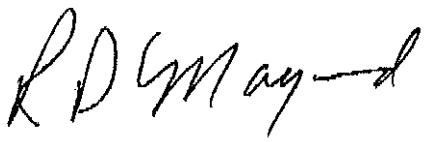
Action Items:

1. Lisa Aldrich will schedule a conference call for the Haul Road EA Subcommittee.
2. Lisa Aldrich will finalize and submit Recommendation #147.
3. Support staff will coordinate and distribute travel information to CAB members attending the July meeting in Idaho Falls, Idaho.

Members provided written feedback forms to support services at the conclusion of the meeting.
Attachments 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 May 12, 2010, meeting of the Idaho National Laboratory Site Environmental Management Citizens Advisory Board.

R. D. Maynard, Chair 07/30/2010



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