



## *Nevada Site Specific Advisory Board*

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### **Full Board Meeting**

**West Career and Technical Academy  
11945 West Charleston Blvd., Las Vegas, NV  
5:00 p.m. – March 21, 2012**

Members Present: Kathleen Bienenstein (Chair), Matthew Clapp, Daniel Coss, Thomas Fisher, Arthur Goldsmith, Donna Hruska, Robert Johnson, Barry LiMarzi, John McGrail, Gregory Minden, Michael Moore, Walt Wegst (Vice-Chair)

Members Absent: James Weeks

Liaisons Present: John Klenke (Nye County), Cielomina Gumabon (West Career and Technical Academy [WCTA]), Phil Klevorick (Clark County), Justine Leavitt (WCTA), Tim Murphy (State of Nevada Division of Environmental Protection [NDEP]), Scott Wade (Department of Energy [DOE])

Liaisons Absent: Genne Nelson (National Park Service)

U.S. Dept. of Energy (DOE): Rob Boehlecke, Kevin Cabble

Facilitator: Denise Rupp (Navarro-Intera)

Public Present: Christine Andres (NDEP), Richard Gross (Knoxville, TN), Dave Hemelright (Lenoir City, TN), David Martin (Harriman, TN), Fay Martin (Oak Ridge, TN), Gloria Mei (Oak Ridge, TN), Maggie Owen (Oak Ridge, TN)

### **Chair Comments**

Chair Kathleen Bienenstein welcomed members of the Oak Ridge Site Specific Advisory Board and thanked West Career and Technical Academy for their hospitality in conducting the meeting at the high school.

### **Agenda Review**

Member Daniel Coss moved to accept the agenda as presented. The motion was seconded and passed unanimously.

## **Liaison Updates**

### **Clark County** (*Phil Klevorick*)

- The State of Nevada is currently looking at long-term rail needs including a north-south rail line from Reno to Las Vegas; Clark County did not provide comments due to Yucca Mountain issues
- A review of state laws regarding waste transportation across the country was presented at a recent Nevada State Legislature High Level Waste Committee meeting; many states are establishing or revising their laws, possibly triggered by the influx of Environmental Impact Statements over the last year and a half; the Committee is also looking at changes to the definitions of low-level and mixed low-level waste

### **Nye County** (*John Klenke*)

- Darrel Lacy, Director of the Nye County Nuclear Waste Repository Project, met with Scott Wade to discuss the disposition of U-233 at the Nevada National Security Site (NNSS) and appreciates the opportunity to be involved in the process

### **State of Nevada Division of Environmental Protection** (*Tim Murphy*)

- Possible changes to the State of Nevada's definitions of high level waste to include low-level and mixed low-level waste were proposed during the 2011 legislative session without action; it is yet to be seen if similar legislation is proposed in the 2013 session
- NDEP was contacted by legislators from the State of Utah expressing an interest in NDEP's agreement with the DOE and the waste program at the NNSS; specifically how NDEP interacts with DOE as a state regulator

### **U.S. National Park Service**

No report

### **West Career and Technical Academy** (*Cielomina Gumabon and Justine Leavitt*)

- As part of their student liaison role, a student project is being conducted to determine the community's knowledge and awareness of the Nevada National Security Site and the NSSAB
- Questions will cover knowledge of the Site, the NSSAB, physics, and geography and will be modified for better quantitative analysis
- The survey will be presented to all WCTA students during English class with results compiled in April and a presentation on the survey results will be given at the May Full Board meeting

### **U.S. Department of Energy**

- Corrective Action Unit (CAU) 547 (*Rob Boehlecke*)
  - Closure is nearing completion at Industrial Sites CAU 547 (plutonium-contaminated piping)
  - NDEP will inspect the site March 22
  - The Closure Report will be completed and submitted to NDEP for approval
- Nye County and U-233 Disposition (*Scott Wade*)
  - DOE met with representatives from Nye County regarding the disposition of U-233 at the NNSS

- Nye County issues were not so much with safety or security but routing through Nye County
- DOE provided clarification regarding DOE's authority to dispose of U-233 in Area 5 of the NNSS
- Oak Ridge will conduct thorough transportation evaluations for the U-233
- No changes are planned for the transportation routing
- DOE will continue to work with Nye County regarding their concerns
- Waste Management Open House (*Scott Wade*)
  - Similar to past Groundwater Open Houses, the DOE will be conducting a Waste Management Open House 5 to 8 p.m. June 19 at Ruud Community Center in Pahrump and the NSSAB is invited to participate
- Asset Revitalization Initiative (ARI) Implementation (*Scott Wade*)
  - The final draft of the Integrated Program Team Charter for the DOE ARI will be submitted for approval next week
  - The Phase I report was done by the Office of Legacy Management and the Office of Environmental Management
  - The Phase II panel will be led by Cynthia Anderson and will look at all sites to explore possibilities for asset revitalization
  - ARI is a DOE-wide effort to advance the beneficial reuse of its unique and diverse mix of assets, including land, facilities, infrastructure, equipment, technologies, natural resources, and a highly skilled workforce
  - Due to the ongoing security mission in Nevada, there is not much interest in purely commercial activities, re-use would most likely be mission-related
  - In Nevada there is discussion of a solar power development and demonstration project and possible re-use alternatives for the Engine Maintenance Assembly and Disassembly (EMAD) Facility
  - Inquiries have been made regarding EMAD re-use including Plutonium 238 radioisotope production and spent nuclear fuel storage, and a possible partnership with Los Alamos in the development of a small reactor
  - Any and all re-use proposals would be submitted to the Administrator of the National Nuclear Security Administration

### **Use Restrictions and Long-Term Monitoring at Closed Industrial Sites**

(*Kevin Cabble, DOE*)

- The briefing provided the NSSAB with information regarding Industrial Sites Long-Term Monitoring Use Restrictions (URs) for the Board's use in developing a recommendation regarding UR reduction, frequency of inspection, inspection criteria, and potential enhancements
- URs are necessary when contamination remains after site remediation activities are complete, always consider risk, and must be accepted by NDEP
- 125 of the 1,814 closed Industrial Sites are Use Restricted
- URs are posted and recorded in the Facility Information Management System to prevent inadvertent intrusion
- Monitoring of UR sites on annual or every five year schedule (Resource Conservation and Recovery Act (RCRA) sites are inspected quarterly or bi-annually
- Monitoring inspection criteria includes subsidence, erosion, integrity of fencing, animal burrows, and site-specific requirements
- Total annual costs to perform inspections averages \$60,000

- 35-45% of inspected sites require repair
- Average annual cost of repairs is \$125K for seven RCRA sites, \$135K for 118 non-RCRA sites, and \$50K for Tonopah Test Range sites
- An evaluation is under way to determine if some URs can be eliminated
- Criteria to evaluate each UR site includes:
  - Landfills – not being considered for UR removal due to size and costs
  - Revised Final Action Levels – changes in action levels due to implementation of risk-based approach and/or Environmental Protection Agency revisions to threshold concentrations
  - Additional Sampling – sampling where original data is limited
- The Post-Closure Inspection Checklist currently in use was provided as a reference
- Anticipated analysis of UR sites could allow reduction of 20-30 sites
- Sites that remain restricted after evaluation will be further reviewed to potentially reduce the frequency of inspection based on past results
- Evaluation of the 125 UR sites will be completed by June 1, 2012
- Removal of URs where no field work is required and evaluation of inspection frequency will be completed by September 30, 2012
- Removal of URs where additional sampling is required will be completed by June 1, 2013
- DOE is requesting a recommendation from the NSSAB by May 31, 2012 to include the following:
  - Is the UR evaluation plan appropriate from a community perspective?
  - What criteria should be used to determine if the frequency of inspections can be reduced?
  - Are there ways to enhance inspections?
  - Is the field monitoring inspection criteria appropriate?
  - Are there ways to enhance the criteria?

In response to NSSAB member questions, the following clarifications were provided:

- Cost numbers provided are estimates and averages; these cost estimates would be appropriate for additional sites in the future
- The high cost of repairs to the RCRA-regulated sites is due to regulatory requirements for additional inspection/monitoring criteria
- Burrows are filled; landfill sites must avoid pooling of water on caps
- Inspections are conducted by a two-person team with any required repair work to be completed within 60 days
- There was no a specific written document that covers all aspects of the “plan” as described in the presentation
- One of the major items for repair are signs; mostly affected by wind but also some problems with wild horses rubbing against them
- An environmental evaluation is conducted before any intrusive work is done
- Signs include the universal symbol for radioactive contamination at sites where levels exceed 10 CFR 835 or site specific radiological requirements; there is no universal symbol for other contamination
- No physical work is conducted at the NNSS without worker training and qualification; workers are not in proximity of a posted area without need
- All site closures are based on the assumption control of the Nevada National Security Site will remain with the DOE

- Field investigation is used to evaluate closure and monitoring of sites as contamination is of a historic nature; there is not underground mapping of contamination
- The term “plan” as used in the briefing refers to an “approach” rather than a formal written plan/document

The Board expressed concern regarding exactly what is to be reviewed for this recommendation. While the Post-Closure Inspection Checklist could be reviewed, a formal plan detailing the process DOE intends to go through to evaluate existing URs does not exist. DOE will make the work plan used for monitoring available for Board review. If it has not been previously reviewed for public release it may take some time to make it available. In order to prepare a recommendation regarding reduction of costs and possible reduced frequency of inspections, the NSSAB felt that more information is required.

The Board requested DOE provide them with a more formal plan for review. Mr. Boehlecke agreed to have staff prepare the document. This document will take several weeks to prepare and a delivery date for distribution of this document will be determined by March 29.

Chair Bienenstein suggested further discussion of this matter be tabled until the next meeting with the additional documentation to be distributed to the Board for review prior to that meeting. Vice-Chair Wegst moved to table discussion of the Long-Term Monitoring at Closed Industrial Sites until the next Full Board meeting and requesting DOE provide a more detailed plan for Board review prior to that meeting. The motion was seconded and passed unanimously.

### **Public Comment**

No public comment.

### **Radioactivity and Radioactive Decay**

*(Walter F. Wegst, PhD)*

In response to recent discussions of U-233, basic information on radioactivity and radioactive decay was presented, including:

- Radioactivity originates in the nucleus of an atom and is not affected by the chemical or physical state of the atom
- Bohr Model of Atom
- Nucleus and Chart of the Nuclides
- Radioactivity and Radioactive Decay
- Diagram of Alpha and Beta Decay
- Half Life Decay
- Uranium Isotope Series
- Decay Series for U-232

### **Work Plan Item #3 – U-233 Disposition Recommendation Development**

*(Chair Bienenstein)*

A draft recommendation letter based on February 16 meeting discussion was distributed via email to Board on February 23. After review and discussion, there were no substantive changes to the draft recommendation. Member Coss moved to accept the recommendation as written. The motion was seconded and passed unanimously.

## **Soils Committee Update - Work Plan Item #4 Soils Risk-Based Corrective Action (RBCA) Decision Process Document** *(Committee Chair John McGrail)*

- The Committee was briefed on the RBCA Decision Process Document on January 25, 2012
- The Board is being asked to provide a recommendation on ways to improve the process and/or the document
- After review, the Committee did not feel it had the technical or regulatory expertise to offer improvement or suggestions on the technical process and document
- The Committee agreed with the concept of basing corrective actions on relative risk while providing for the most cost effective clean up to allow best use of limited funding
- A draft recommendation was prepared by the Committee for Board consideration

After discussion, the Board agreed with the draft recommendation. Member Robert Johnson moved to accept the draft recommendation as written. The motion was seconded and passed unanimously.

### **Other NSSAB Business**

#### **Environmental Management Site-Specific Advisory Board (EM SSAB) February 23, 2012 Chairs Conference Call** *(Chair Bienenstein)*

- The February 23 Chairs Conference Call dealt with preparation for the April 2012 EM SSAB Chairs meeting to be held in Paducah

#### **EM SSAB Chairs Topics and Achievements** *(Denise Rupp)*

- Submission for the EM SSAB Chairs Topics and Achievements are to include two topics/issues for discussion during the Round Robin session with David Huizenga, Senior Advisor for Environmental Management and one cross-cutting issue relevant to the entire EM complex
- Input was requested of the Board
- Proposed Round Robin topics included:
  - Student Liaison Educational Project
  - U-233 Waste Disposition
  - Membership Recruitment
- Proposed Cross-cutting topics included:
  - Waste disposal
  - Communication between sites when Board discussion affects other sites
  - Sharing of process methods
- After discussion, the Board agreed on the following topics:
- Round Robin – Student Liaison Educational Project and U-233 Waste Disposition
- Cross-Cutting – Sharing of process methods to including addressing work plan items as a committee of the whole with use of ad hoc committees as needed, field processes, technological advances and investments, field processes, and methods for stakeholder input
- Member Thomas Fisher moved to submit the agreed upon topics for discussion at the April EM SSAB Chairs meeting in Paducah; the motion was seconded and passed unanimously

#### **April EM SSAB Meeting** *(Chair Bienenstein)*

There is one representative spot still open for the June 16-19 EM SSAB Chairs meeting to be held in Paducah. Members were asked to check their schedules and advise Denise Rupp, Facilitator, if they are interested and able to attend.

**June 19 Waste Management Open House** (*Denise Rupp, Facilitator*)

- A Waste Management Open House will be held from 5 – 8 p.m. on Tuesday, June 19, 2012 at the Bob Ruud Community Center in Pahrump
- The NSSAB will have a table with the NSSAB display and information regarding the Board Members were encouraged to participate

**Membership Recruitment Update** (*Denise Rupp, Facilitator*)

- Advertising is complete for the current membership recruitment
- Outreach efforts included postcards to rural southern Nevada communities, newspaper advertising, and personal contact with more than a dozen local community organizations
- 46 people have responded and resulted in 18 applications
- Recruitment closes March 30 at which time applications will be reviewed
- The Membership Committee will participate in the interview process and develop a recommendation of candidates to DOE

**April Meeting Agenda** (*Chair Bienenstein*)

- The only item currently on the April agenda is an information briefing on the Emergency Preparedness Work Group, which is not time-specific
- Without agenda items of a more timely nature, the Board agreed to cancel the April meeting scheduled to be held in Pahrump
- The July Full Board meeting will be scheduled in Pahrump, pending availability

**Next Meeting**

- The next Full Board meeting is scheduled for 5:00 p.m., Wednesday, May 16, 2012, at the National Atomic Testing Museum, 755 East Flamingo Road, Las Vegas, Nevada

**Meeting Assessment** (*Denise Rupp, Facilitator*)

Members were asked to assess the effectiveness of addressing Work Plan items as a committee of the whole. The majority of members agreed that the hybrid method of addressing Work Plan items as a committee of the whole when possible and utilizing ad hoc committees for more technical or specific needs was working well.

Member Michael Moore moved the meeting be adjourned. The motion was seconded and passed unanimously.

Meeting adjourned at 7:45 p.m.