



Nevada Site Specific Advisory Board (NSSAB)

Full Board Meeting

**Frank H. Rogers Science and Technology Building
755 East Flamingo, Las Vegas, NV
4:00 p.m. – September 21, 2016**

- Members Present:** Amina Anderson, Michael Anderson, Pennie Edmond, Donna Hruska (Chair), Janice Keiserman (Vice-Chair), Michael Moore, Steve Rosenbaum, Edward Rosemark, William Sears, Jack Sypolt
- Members Absent:** Michael D'Alessio, Donald Neill, Cecilia Flores Snyder, Francisca Vega
- Liaisons Present:** Christine Andres (State of Nevada Division of Environmental Protection [NDEP]), Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), John Klenke (Nye County Nuclear Waste Repository Project Office [NWRPO]), Phil Klevorick (Clark County),
- Liaisons Absent:** Frank Carbone (Nye County Commission), Ralph Keyes (Esmeralda County Commission), Vance Payne (Nye County Emergency Management [NCEM]), Jonathan Penman-Brotzman (U.S. National Park Service [NPS])
- Department of Energy (DOE):** Robert Boehlecke, Tiffany Lantow, Jhon Carilli, Kelly Snyder (Deputy Designated Federal Officer [DDFO]), Scott Wade, Bill Wilborn
- Facilitator:** Barb Ulmer (Navarro)
- Contractors:** Alan Gertler (Desert Research Institute), Christy Morris (Navarro)
- Public Signed In:** Arcadio Bolanos (Las Vegas, NV), Francis Bonesteel (Pahrump, NV), Karen Eastman (Las Vegas, NV), Raymond Egin (Pahrump, NV), Charles Fullen (Pahrump, NV), Richard Gardner (Beatty, NV), Autumn Pietras (Henderson, NV), Richard Stephans (Boulder City, NV), Bonnie Swadling (Las Vegas, NV), Richard Twiddy (Mesquite, NV), Dina Williamson-Erdag (Pahrump, NV)

Open Meeting/Chair's Opening Remarks

Chair Donna Hruska thanked the members, liaisons, and incoming members for their commitment and attendance. In an absence of a quorum, DDFO Kelly Snyder approved the agenda.

Public Comment

There was no public comment.

U.S. DOE Update (*Scott Wade, DOE*)

Mr. Scott Wade opened by providing a budget update. For fiscal year (FY) 2016, the budget for Environmental Management (EM) activities at the Nevada National Security Site (NNSS) was \$62.3 million. For FY 2017, the budget for EM activities at the NNSS is \$62.1 million. There will likely be a continuing resolution for the first three months of FY 2017 and possibly longer. Mr. Wade utilized the NSSAB's baseline prioritization recommendations identified during the March 2016 Full Board meeting in internal agency discussions for the FY 2018 budget. The Department is waiting to see what the U.S. Congress and the new Administration plans for the FY 2018 budget. The President's budget request is routinely announced in early February 2017.

Mr. Wade reported that since the beginning of FY 2016, the NNSS has received 951,000 cubic feet of low-level waste (LLW) in 999 shipments and 56,000 cubic feet of mixed LLW (MLLW) in 103 shipments. Overall for FY 2016, projections remain between 1 – 1.1 million cubic feet. Projections for FY 17 is approximately 1.2 million cubic feet of LLW/MLLW, but will be dependent on federal appropriations to the other DOE sites and their compliance needs.

Mr. Wade continued that the EM Program complex-wide has an ongoing commitment to communicate its activities to the Board, other stakeholders, and the public. The Nevada Field Office's (NFO's) public outreach team is communicating successes/progresses through a number of avenues. One example is the Groundwater Open House that was held July 2016. The citizens that attended gained information and asked questions of the NNSS scientists regarding what has been learned and what they continue to study regarding groundwater flow and transport.

Beginning this calendar year, three meetings of the Low-Level Waste Stakeholders Forum (LLWSF) have been held in Las Vegas and Pahrump, NV. The topics are becoming broader and most recently have included updates from the Nevada Department of Transportation (DOT) in sharing information on its transportation priorities for improvements and the planning and timing of projects. Mr. Wade will continue to update the Board on future LLWSF meetings. The next meeting is planned for November 2, 2016 in Las Vegas, NV.

Mr. Wade noted that there has been an ongoing interest from both the Board and other stakeholders on LLW classification. The Department reached out to the National Academy of Sciences to review and discuss LLW classification at a workshop in October 2016 in Washington D.C. He has not seen a final agenda, but it shows an interest in having a robust discussion and gathering of different opinions on how the nation classifies LLW, whether it be the DOE or the Nuclear Regulatory Commission processes.

Mr. Wade stated that later in the evening he will be briefing on the history and the planned changes to the NNSS Waste Acceptance Criteria (WAC). The NFO has engaged and considered

comments from various stakeholders, but would entertain any thoughts or advice that the Board may have after the briefing.

Lastly, Mr. Wade reported that the Department released a notice in August 2016 that a supplemental environmental impact statement (SEIS) for the Depleted Uranium Hexafluoride (DUF6) Conversion Facilities in Portsmouth, Ohio and Paducah, Kentucky. These are inactive uranium enrichment facilities that are subject to cleanup. These facilities have stored material that the Department needs to render in a manner for safe long-term disposition, recognizing that the enriched uranium is a nonproliferation issue that needs to be effectively managed. All federal agencies are required to consider all the environmental impacts of major federal actions, including any final disposition of waste materials. The NNSS has received a large amount of waste from the Portsmouth site, but not DUF6 material. Mr. Wade will continue to update the Board on the DUF6 SEIS process at future meetings.

Other NSSAB Business (*Donna Hruska, Chair*)

Chair Hruska reported that she, Vice-Chair Keiserman, Member Edward Rosemark, and Member Steve Rosenbaum attended the EM Site-Specific Advisory Board (SSAB) National Chairs' Meeting that was hosted by the DOE/EM Nevada Field Office and the NSSAB in Las Vegas on August 30 - September 1, 2016. The first day was a tour of the NNSS that was very well received by participants. The primary focus during the meeting was the collective editing of a transition paper that informs the next Administration of the mission and the specific goals of the EM SSAB. The Assistant Secretary of EM, Monica Regalbuto, attended the meeting and gave an EM Program Update. Other presenters were Frank Marcinowski, Associate Principal Deputy Assistant Secretary for Regulatory and Policy Affairs who provided Waste Isolation Pilot Plant (WIPP) and Waste Disposition Updates, and Connie Flohr, Deputy Assistant Secretary for Resource Management, and Lois Jessup, Director of Office of Program Planning, who provided a budget and strategic communications update.

Four letters were provided to Board members for informational purposes:

- NSSAB Recommendation for Air Monitoring Stations at the Tonopah Test Range (Work Plan Item #4) – dated July 20, 2016
- DOE Response to NSSAB Recommendation regarding Air Monitoring Stations (Work Plan Item #4) – dated August 22, 2016
- NSSAB Recommendation for Low-Level Waste Transportation (Work Plan Item #9) – dated July 20, 2016
- DOE Response to NSSAB Recommendation regarding Low-Level Waste Transportation (Work Plan Item #9) – dated August 29, 2016

Liaison Updates

Clark County (*Phil Klevorick*)

Liaison Phil Klevorick reported that he attended the DOE National Cleanup Forum last week in Washington D.C. An update on the status of WIPP in New Mexico was given at the conference. DOE's number one priority is worker safety and will not reopen WIPP until the facility is safe to enter, possibly in April 2017. The air ventilation system is the main concern that contractors are currently working. DOE is planning mock shipments this winter in states that transuranic waste shipments travel through that are destined for WIPP. The NSSAB will receive updates on WIPP at future meetings. In September 2016, Liaison Klevorick attended the RadWaste Summit in Las

Vegas. There was great information available at the meetings and important dialogues between sessions. He met with the Australian delegation who are touring facilities across the world to gather information in order to determine the feasibility of siting a high-level repository in southern Australia. Liaison Klevorick reiterated the importance of continuing the dialogue with interested stakeholders during meetings of the LLWSF. Next week, the local emergency planning group is hosting a local radwaste workshop that includes a radiological component for first responders and emergency managers. Next month, Liaison Klevorick will be involved in an annual meeting of the Western Governors' Association hosted in Las Vegas. The association includes representatives from the western states that are impacted by transportation of radioactive waste, particularly transuranic waste. One day of the meeting will be spent touring the NNSS, and the participants are enthusiastic for the tour to understand the current activities and also the historical aspects. Lastly, Liaison Klevorick will be attending the Intergovernmental Meeting in New Orleans with the DOE in November 2016.

CGTO (*Richard Arnold*)

Liaison Richard Arnold participated in a meeting with Mr. Wade as a representative and CGTO spokesperson regarding the proposed revisions to the NNSS WAC. Based on this meeting, a letter was sent to the tribes that acknowledged the meeting outcome. CGTO has been involved with the LLWSF in order to keep current on local LLW transportation activities. Liaison Arnold stated that six tribal members, in consultation with tribal elders, have been working collaboratively with the DOE to find solutions to revegetate the 92-acre area at Area 5 of the Radioactive Waste Management Complex. Along with ecologists and ethno-ecologists, tribal members have received DOE presentations and a site visit to Area 3 and Area 5 in order to explore options for revegetation of the area. Tribal members undertook a literature review to obtain additional information, utilizing traditional ecological knowledge, and developed and submitted a summary report to DOE. Future activities with the revegetation effort will be identified in the next phase, and tribal members will work closely with the DOE and hopefully achieve successful results. The CGTO is also involved in ongoing archeological projects at various sites on the NNSS that include a tribal component. Liaison Arnold continues to be involved in meetings of the National Transportation Stakeholders Forum to ensure Nevada is represented and that the tribal perspectives are included in the discussions. Along with four tribal members, Liaison Arnold participated in a meeting of a nuclear fuel and storage group in Chicago that looks at high-level waste issues from various perspectives that includes a tribal component in which the CGTO is engaged. Liaison Arnold made a presentation to the commissioners of the Nuclear Regulatory Commission this week in its effort to develop a tribal policy statement which received positive results. Liaison Arnold will be involved in a meeting of the Nuclear Energy Tribal Group in Washington D.C. He will be meeting with Canadian nuclear waste management organizations to discuss how the tribes have interfaced with various organizations in the United States. Lastly, Liaison Arnold will also be participating in the Intergovernmental Meeting in New Orleans next month, along with attending meetings of the State Tribal Government Working Group during this conference.

NDEP (*Christine Andres*)

Liaison Christine Andres updated the Board on an item that she reported on at the May 2016 NSSAB meeting. She received a demonstration today on a piece of equipment that has been purchased and is currently available for the NNSS fire stations to identify unknown chemicals for incidents at the NNSS and surrounding counties. This was a result of an agreement between the National Nuclear Security Administration and NDEP for a Supplemental Environmental Project to satisfy a fine from an incident in FY 2015. Liaison Andres attended the EM SSAB National Chairs'

meeting and noted that it was interesting to hear the perspectives of each of the eight DOE/EM boards across the nation. She compared it to the perspectives of the same states that participate in the National Governors' Association Federal Facilities Task Force, which she is a member. Liaison Andres also attended the RadWaste Summit and will be attending the Intergovernmental Meeting next month. In October 2016, a sixty percent design meeting will be held for the proposed new MLLW cell at the NNSS. In the last quarter, Liaison Andres noted that NDEP also participated in revised WAC and LLWSF meetings.

NWRPO (*John Klenke*)

Liaison John Klenke updated the Board that the Nye County Tritium Sampling Monitoring Program will add ten wells next year to the existing ten core wells to conduct groundwater sampling in conjunction with the Community Environmental Monitoring Program.

Having reached a quorum of the Board, Chair Hruska returned to the first "Other NSSAB Business" agenda item by informing the Board that a draft recommendation letter created throughout FY 2016 by the NSSAB regarding Communication Improvement Opportunities (Work Plan Item #10) was included in the meeting packet. Vice-Chair Keiserman made a motion to approve the draft recommendation letter as written. The motion was seconded and passed unanimously.

Industrial Sites FY 2016 Wrap Up and FY 2017 Planned Activities (*Tiffany Lantow, DOE*)

- **Industrial Sites FY 2016 Wrap Up**
 - Planned: Submit Resource Conservation and Recovery Act (RCRA), Non-RCRA, and Tonopah Test Range (TTR) Post Closure Reports to NDEP
 - Status:
 - RCRA Post Closure Report submitted in March 2016
 - TTR Post Closure Report submitted in March 2016
 - Non-RCRA Post Closure Report submitted in May 2016
 - Planned: Continue to address revegetation efforts at CAU 111
 - Status: Stakeholder input received from NSSAB and CGTO subgroup
 - Planned: Review existing post-closure monitoring/inspection requirements for potential changes
 - Status: Review is ongoing; changes will be recommended to NDEP (if necessary) – when appropriate
- **Industrial Sites FY 2017 Planned Activities**
 - Submit RCRA, Non-RCRA, and TTR Post Closure Reports
 - Continue to address revegetation efforts at CAU 111
 - Review existing post-closure monitoring/inspection requirements for potential changes
- **FY 2016 NSSAB Work Plan Item**
 - Provide a recommendation suggesting a path forward regarding the cover at CAU 111
 - NSSAB Recommendation – May 2016
 - DOE Response – June 2016

Soils FY 2016 Wrap Up and FY 2017 Planned Activities (Tiffany Lantow, DOE)

- **Remediation Processes**
 - Corrective Action Investigation Plan (CAIP) – Details the investigation plan and provides information for planning investigation activities
 - Site Investigation – Act of conducting field characterization activities
 - Corrective Action Decision Document (CADD) – Describes the results of the characterization, multiple corrective action alternatives, and the recommended corrective action alternative and the rationale for its selection
 - Corrective Action Plan (CAP) – Plan for implementing the selected correction action
 - Closure Field Work – Implementation of the selected corrective action at the site
 - Closure Report (CR) – Documented overview and results of corrective actions implemented, closure verification information, and use restriction and monitoring requirements (when applicable)
 - **Note: All documents must be approved by NDEP**
- **Alternative Remediation Processes**
 - CADD/CR can be used when only “minor” corrective actions are needed, as agreed to by NDEP
 - CADD/CAP can be used when site knowledge gained through characterization and similar historical corrective actions is sufficient, as agreed to by NDEP, for planning corrective actions
 - Housekeeping process can be used when removal and disposal of debris/materials (such as batteries or drums) can be easily accomplished, and verification of clean closure is achieved through visual inspection and/or laboratory analysis of soil samples
 - Streamlined Approach for Environmental Restoration (SAFER) process may be used only when extensive process knowledge or sampling data exists – this process combines the CAIP, CADD and CAP into one plan
- **FY 2016 Soils Wrap Up**
 - Small Boy (CAU 541)
 - Planned: Submit the final CADD/CR to NDEP
 - Status: CADD/CR submitted August 2016
 - Double Tracks Plutonium Dispersion (CAU 411)
 - Planned: Submit the final Closure Report to NDEP
 - Status: Closure Report submitted June 2016
 - Clean Slate I Plutonium Dispersion (CAU 412)
 - Planned: Submit the final Closure Report to NDEP
 - Status: Closure Report submitted August 2016
 - Clean Slate II Plutonium Dispersion (CAU 413)
 - Planned: Submit the final CAIP Rev 1 to NDEP
 - Status: CAIP Rev 1 submitted April 2016
 - Area 3 Plutonium Dispersion Sites (CAU 568)
 - Planned: Submit the final CAP to NDEP
 - Status: CAP submitted May 2016
 - Alpha Contaminated Sites (CAU 573)
 - Planned: Submit final CADD to NDEP
 - Status: CADD/CAP submitted February 2016

- **FY 2016 NSSAB Work Plan Item**
 - Provide a recommendation on which corrective action alternative (closure in place or clean closure) should be selected by the NFO for CAU 573 – Alpha Contaminated Sites
 - NSSAB Recommendation – November 2015
 - DOE Response – January 2016
 - Provide a recommendation regarding the proposed changes to current long-term requirements at closed sites at the TTR
 - NSSAB Recommendation – May 2016
 - DOE Response – June 2016
 - Provide a recommendation for whether air monitoring at stations at the TTR should be discontinued, the stations should be moved to different locations, maintained at the current locations, or the sampling approach be modified
 - NSSAB Recommendation – July 2016
 - DOE Response – August 2016
- **FY 2017 Soils Planned Activities**
 - Clean Slate II Plutonium Dispersion (CAU 413)
 - Submit the final CADD to NDEP
 - Clean Slate III Plutonium Dispersion (CAU 414)
 - Submit the final CADD to NDEP
 - Area 3 Plutonium Dispersion Sites (CAU 568)
 - Submit the final Closure Report to NDEP
 - Alpha Contaminated Sites (CAU 573)
 - Submit the final Closure Report to NDEP
 - Miscellaneous Radiological Sites and Debris (CAU 576)
 - Submit the final CAIP to NDEP
 - Submit the final CADD to NDEP
- **Proposed FY 2017 NSSAB Work Plan Items**
 - Corrective Action Alternatives for CAU 576, Miscellaneous Radiological Sites and Debris
 - Clean Slate II Path Forward
 - Proposed Changes to Long-term Monitoring Soils and Industrial Sites at Closed Sites

Mr. Wade added that there has been great progress in environmental restoration in both the industrial and soils sites. For soils, there have been 144 corrective action sites identified, and EM has finished and closed 116. For industrial sites, there has been 1001 identified, and EM has finished and closed 999. Liaison Andres added that leaves only five soils corrective action units remaining with most of these on the TTR, and progress to closure with the US Air Force is moving ahead on these sites.

In response to Board questions, the following clarifications were provided:

- The last two corrective action sites for industrial sites is Engine Maintenance Assembly and Disassembly (EMAD) and its support elements. This facility was built in the 1960s for the National Aeronautics and Space Administration's space nuclear-propulsion activities and has not be utilized since the early 1990s. There has not been another mission identified for the EMAD facility; so it is currently planned for EM demolition early next decade.
- Control Point was the centralized location on the NNSS that nuclear weapons tests were controlled during the nuclear test era. In the last year, all personnel were moved out of this

historical structure as it was becoming a maintenance challenge as it was built in the 1960s. All historical structures undergo a process under the National Historical Preservation Act to decide the final outcome. No final decisions have been made on Control Point structures.

Underground Test Area (UGTA) FY 2016 Wrap Up and FY 2017 Planned Activities (Bill Wilborn, DOE)

- **UGTA CAUs**

- There are five CAUs that make up the UGTA activity:
 - Frenchman Flat (CAU 98)
 - Yucca Flat/Climax Mine (CAU 97)
 - Rainier Mesa/Shoshone Mountain (CAU 99)
 - Central Pahute Mesa (CAU 101)
 - Western Pahute Mesa (CAU 102)
 - Western and Central Pahute Mesa area managed as one entity

- **UGTA FY 2016 Wrap Up**

- Planned: Complete drilling of Well ER-20-12 on Pahute Mesa
 - Status: Completed January 2016
- Planned: Begin well development, testing and sampling (WDTS) at Well ER-20-12
 - Status: Completed August 2016
- Planned: Sample four wells throughout Pahute Mesa
 - Status: One WDTS (ER-20-12) completed and four wells sampled
- Planned: Begin and complete drilling of three wells (ER-2-2, ER-3-3 and ER-4-1) in Yucca Flat
 - Status: Completed in April 2016
- Planned: Begin WDTS of three wells in Yucca Flat (ER-2-2 cannot be developed)
 - Status:
 - Rescheduled in FY 2017
 - Start Well ER-3-3 in October 2016
- Planned: Finalize Frenchman Flat Closure Report
 - Status: DOE and NDEP signed final report in August 2016
- Planned: Begin Rainier Mesa Supplemental Analysis of any additional modeling that may be required based on DOE, NDEP, and Preemptive Review Committee input
 - Status: Ongoing
- Planned: Complete sampling of four Rainier Mesa wells
 - Status:
 - Well ER-12-3 and ER-12-4 completed September 2016
 - Wells ER-19-1, UE18t, and E Tunnel ponds now scheduled to begin in October 2016

- **UGTA FY 2016 Wrap Up Additional Activities**

- Well ER-20-12 in Pahute Mesa:
 - Drilling completed
 - Completion report done
 - WDTS performed
 - Preliminary update to Hydrostratigraphic Framework Model completed in August 2016
- Pahute Mesa modeling report completed by September 2016

- **FY 2016 NSSAB Work Plan Item**
 - Provide a recommendation as to if the Frenchman Flat long-term monitoring plan (Closure Report) meets communities' expectations and if there are any recommended changes
 - NSSAB Recommendation – November 2015
 - DOE Response – January 2016
 - DOE met with US Air Force to present use restriction boundaries in Closure Report – May 2016
 - Six monitoring wells sampled – June 2016
 - Signed Closure Report by DOE and NDEP – August 2016
 - Provide a recommendation if the Board supports the path to closure for Rainier Mesa/Shoshone Mountain and how it could be enhanced
 - NSSAB Recommendation – November 2015
 - DOE Response – January 2016
 - Presented current results to NDEP – August 2016
 - Sampled Well ER-12-3 – September 2016
- **FY 2017 UGTA Planned Activities**
 - Frenchman Flat –CAU is closed; FY 2017 activities will be:
 - Complete first year of long-term monitoring
 - Present Frenchman Flat annual briefing to NDEP
 - Yucca Flat – CAU is moving toward model Evaluation phase; FY 2017 activities will be:
 - Perform WDTS for Yucca Flat Wells ER-3-3 and ER-4-1
 - Finish drilling reports for Yucca Flat Wells ER-2-2, ER-3-3, and ER-4-1
 - Perform Model Evaluation of new data at Yucca Flat
 - Rainier Mesa – CAU is moving toward External Peer review; FY 17 activities will be:
 - Complete draft Rainier Mesa Flow and Transport Model
 - Select External Peer Review panel
 - For all CAUs; FY 2017 activity will be:
 - Complete regional flow model
- **Proposed FY 2017 NSSAB Work Plan Items**
 - Groundwater Sampling Techniques
 - Internal Peer Review Process Improvement
 - Groundwater Interactive Map

In response to a Board question, the following clarification was provided:

- There are two tunnels that were used for underground nuclear weapons testing that have filled with a significant amount of water. After conducting tests in the tunnel complex, DOE sought to isolate these tunnels and installed engineered barriers or tunnel plugs in order to segregate the internal contaminated environment from any release. These plugs were engineered to contain a nuclear test and continues to contain groundwater in the tunnels as a secondary feature. In addition to the tunnel plugs, a portal is in place at the tunnel opening for secondary protection. DOE has confidence in the tunnel plugs, but will continue to reevaluate their reliability to ensure worker safety.

Waste Management FY 2016 Wrap Up and FY 2017 Planned Activities (Jhon Carilli, DOE)

- **Waste Management FY 2016 Wrap Up**
 - Planned: Safely dispose approximately 1.5 million cubic feet (ft³) of forecasted LLW and MLLW at the NNSS
 - Status: As of June 30, 2016, the NNSS safely disposed of over 759K ft³ of LLW/MLLW
 - FY 2016 total volume revised projections for over 1.2 million ft³ of LLW/MLLW
 - Planned: Submit annual Performance Assessment Summary Report to the LLW Federal Review Group (LFRG)
 - Status: Submitted in April 2016
 - NNSS conclusions were the Performance Assessment/Composite Analyses assumptions are still valid
 - LFRG draft review found only editorial issues
 - Expect final LFRG report by end of the fiscal year
 - Planned: Submit annual NNSS Groundwater Monitoring Program Area 5 Radioactive Waste Management Site Data Report to NDEP
 - Status: Submitted in March 2016
 - Planned: Complete planning activities for new MLLW cell
 - Status:
 - Contractor has been hired and is currently working on design
 - Path Forward:
 - NFO plans to submit permit to NDEP by the end of the calendar year
 - Public meeting hosted by NFO scheduled for December 2016 timeframe
 - Upon approval of the permit by NDEP, construction planned to begin in August 2017
 - MLLW new replacement cell is to be operational in the winter 2018
 - ✓ At current MLLW disposal rates, the current MLLW cell will be at capacity in fourth quarter of FY 2017 or first quarter FY 2018
- **FY 2016 NSSAB Work Plan Item**
 - Provide a recommendation for ways to improve the Radioactive Waste Acceptance Program (RWAP) assessment process
 - NSSAB Recommendation – May 2016
 - DOE Response – June 2016
- **Waste Management FY 2017 Planned Activities**
 - Safely dispose almost 1.3 million ft³ of forecasted LLW/MLLW at the NNSS
 - Submit annual Performance Assessment Summary Report to the LLW Federal Review Group
 - Submit annual NNSS Groundwater Monitoring Program Area 5 Radioactive Waste Management Site Data Report to NDEP
- **Proposed FY 2017 NSSAB Work Plan Item**
 - Radioactive Waste Acceptance Program Assessment Improvement Opportunities

In response to a Board question, the following clarification was provided:

- For perspective purposes, there are approximately 8,000 packages in 1,100 shipments in one million cubic feet of waste on average. The quarterly waste volumes and transportation reports are publicly available at www.nss.gov/pages/programs/RWM/Reports.html

EM FY 2016 Wrap Up and FY 2017 Planned Activities (Scott Wade, DOE)

- **FY 2016 NSSAB Work Plan Item**
 - Provide recommendations on how waste transportation could be improved by DOE
 - NSSAB Recommendation – July 2016
 - DOE Response – August 2016
 - Provide a recommendation on ways the DOE can improve/enhance communication to the public
 - NSSAB Recommendation – Board action tonight
 - DOE Response – pending upon receipt of recommendation
 - Review FY 2018 baseline funding needs and provide a recommendation to the DOE prioritizing the work by activity
 - Budget Guidance Issued by EM HQ to Field Offices – March 2016
 - NSSAB Recommendation – March 2016
 - DOE Response to NSSAB – March 2016
 - NFO Presented Budget Briefing to EM HQ – April 2016
 - Integrated Priority List Submitted to EM HQ – April 2016
 - Office of Management and Budget (OMB) Budget Decisions Issued – August 2016
 - Final DOE Budget to OMB – TBD ~ September 2016
 - OMB Passback – TBD ~ December 2016
 - President's Budget to Congress – TBD ~ February 2017
- **Proposed FY 2017 NSSAB Work Plan Item**
 - FY 2019 Baseline Prioritization
 - Communication Improvement Opportunities

Recognition of Outgoing Members

Mr. Wade and DDFO Snyder recognized outgoing members Donna Hruska, Janice Keiserman, and Michael Moore for their service and commitment to the NSSAB. Thomas Seley was not available for the presentation.

FY 2017 Chair/Vice-Chair Election Results

The nominee for the Chair position was Steve Rosenbaum. There were no interested nominees for the Vice-Chair position. Steve Rosenbaum was elected as Chair for FY 2017. A formal announcement was made during the meeting that an election for Vice-Chair will be held at the next Full Board meeting in November 2017.

FY 2017 Work Plan Development

FY 2016 Evaluation Results

DDFO Snyder highlighted some key items in response to the recent NSSAB member FY 2016 evaluations. Based on past feedback, there were a number of evaluation questions that requested input from both the incoming and current members for additional information to utilize in an effort to make the meetings shorter in FY 2017.

- 71% of the incoming and current members said that they would like the number of meetings to be dictated by the work plan items. In response, the NFO took that into

consideration when developing the proposed DOE work plan items that will be presented later in the meeting. The work plan items recommended tonight will determine the NSSAB meeting schedule for FY 2017.

- 54% were in favor and 46% were not in favor of starting Full Board meetings at 4 p.m.
- There were several comments that the Board would like increased rural participation at the meetings. When the incoming members begin on October 1, the Board will be nearly two-thirds from rural communities. DDFO Snyder encouraged rural members to invite citizens from their communities to attend the meetings in order to get the rural perspective.
- There were several comments that members would like to review the presentation materials prior to the meeting. Often, the briefings are being finalized until the morning of the meetings. When briefings are ready prior to the meetings, the NSSAB Office will email them to the membership.
- There were comments that the members would like more background information and other comments that members would like less background on work plan items. Since there are a number of new members beginning in FY 2017, the NFO will be providing more background information as a foundation so members understand the history involved in EM activities. DDFO Snyder asked that the Board provide constant feedback on briefings.
- Lastly, DDFO Snyder noted that there was a comment to have more meaningful work plan items. The DOE Activity Leads worked on developing more meaningful proposed work plan items that will be proposed later in the meeting.

In response to Board questions/comments, the following clarifications were provided:

- In filling out the evaluation, 60% of the NSSAB wanted one – two meetings held in a rural community.
- With the evaluation choices of one time per month, every other month, or dictated by the work plan, 71% of the NSSAB noted that they wanted the schedule to be dictated by the work plan.

The NFO proposed nine work plan items related to EM activities planned for FY 2017 for the NSSAB's consideration. The DOE Activity Leads communicated whether the deadline for the recommendations for each of the work plan items was linked to a milestone deadline. The presenters also pointed out comparisons to work plan items that are similar to ones in past fiscal years.

Other NSSAB Task Input

Member Michael Moore proposed a work plan item to provide a recommendation on preservation of historical sites at the NNSS. Member Rosemark proposed a work plan item to provide a recommendation on a path forward for tunnels on the NNSS. After extensive Board discussion and questions, the NSSAB chose not to include either as a proposed work plan items but as future educational sessions. Upon receiving more information on each of these topics, a work plan item can be added during the fiscal year with a majority vote of the NSSAB.

After reviewing the tasks, members voted on each task separately and all nine tasks received a majority vote:

DOE FY 2017 Proposed NSSAB Work Plan Tasks:

1. From a community perspective, the NSSAB will provide a recommendation on which corrective action alternative (closure in place or clean closure) should be selected by DOE for corrective action unit (CAU) 576.
2. From a community perspective, the NSSAB will provide a recommendation as to which path forward option should be pursued for Clean Slate II.
3. From a community perspective, the NSSAB will provide a recommendation regarding the proposed changes to current long-term requirements.
4. From a community perspective, the NSSAB will develop a recommendation for ways to improve the RWAP assessment process.
5. From a community perspective, the NSSAB will provide a recommendation regarding use of existing and potential sampling techniques.
6. From a community perspective, the NSSAB will provide a recommendation as to how the internal peer review process could be enhanced.
7. From a community perspective, the NSSAB will provide a recommendation as to what type of tool should be developed to help communicate groundwater related topics to the general public.
8. From a community perspective, the NSSAB will review the FY 2019 baseline funding needs and provide a recommendation prioritizing the work by activity.
9. From a community perspective, provide recommendation(s) on way that DOE can improve/enhance communication to the public (i.e. presentations, open houses, documents, fact sheets).

Vice-Chair Keiserman moved to approve the draft Work Plan Recommendation letter to DOE with the work plan tasks. The motion was seconded and passed unanimously.

FY 2017 Meetings and Locations

- **Approval of Proposed Schedule**

A proposed schedule was provided based on the timing of briefings and due dates of recommendations included in the FY 2017 Work Plan. The Full Board meeting schedule for FY 2017 was decided by the NSSAB, as follows:

- Wednesday, November 9, 2016
- Wednesday, January 18, 2017
- Wednesday, February 15, 2017
- Wednesday, March 15, 2017
- Wednesday, April 19, 2017
- Wednesday, June 21, 2017
- Wednesday, August 16, 2017
- Wednesday, September 20, 2017

DDFO Snyder started a discussion on whether the NSSAB would prefer meetings start at 4 or 5 p.m. on meeting dates. After further dialogue, the incoming and current members voted to start the official meetings at 4 p.m. with the educational session to start at 3 p.m.

DDFO Snyder will look into the feasibility of videotaping the educational sessions in order for them to be viewed on the NNSS YouTube channel by members who either work or have school during this time frame.

Update on Revisions to the NNSS Waste Acceptance Criteria (Scott Wade, DOE)

- **NNSS Waste Acceptance Criteria Update**
 - The NNSS Waste Acceptance Criteria (WAC) establishes specific requirements for waste generator sites and their proposed waste streams. These criteria govern generator waste characterization and quality assurance policies, as well as the practices associated with waste inspection, packaging, shipping, and disposal
 - As committed to in the December 2014 Memorandum of Understanding between DOE and the State of Nevada, any changes to the WAC will be coordinated with the State of Nevada and communicated to stakeholders prior to finalization
 - Proposed changes address: recent changes in Federal regulations and DOE Directives; comments from the State of Nevada; enhancements to NNSS Operational and Worker/Public Safety requirements; document clarity; and necessary administrative language and editorial corrections
 - Redline/strikeout draft revision completed and undergoing internal review
 - Revision process and proposed changes have been discussed with representatives of Nye and Clark County, City of Las Vegas, NWRPO, and the CGTO
 - Anticipate issuing updated Criteria this calendar year
- **Proposed Changes to NNSS Waste Acceptance Criteria**
 - Clarified use of “dedicated-service vehicles” for waste shipments to the NNSS vs. “exclusive-use”
 - Updated labeling requirements for regulated asbestos packages
 - Clarified that Form 741 may be submitted via e-mail
 - Clarified requirements for complying with DOE regulations for the disposal of classified waste/matter
 - Updated the asbestos waste notification process
 - Streamlined profiling process for waste containing hazardous constituents that must be disposed in the RCRA-permitted cell
 - Clarified mixed waste and classified non-radioactive hazardous waste/matter approvals will be granted for a finite volume of waste and a defined number of containers
 - Updated EPA codes for consistency with the current hazardous waste permit
 - Updated NFO waste acceptance roles and responsibilities
 - Clarified that more than one waste stream may be packaged in a disposal container, except for those that must be profiled separately
 - Clarified that waste generators shall continue to evaluate motor carriers; notify the NFO when carriers are evaluated or routes reviewed, when shipments experience delays or there is a transportation incident/emergency situation; avoid the Hoover Dam bypass bridge
 - Clarified requirement for advanced submittal of expected package contamination levels
 - Clarified when waste shipments containing accountable nuclear material may be rejected
 - Corrected section number reference for Determinations of Equivalent Technology (for Macroencapsulation Equivalency)

- Clarified requirements for Petroleum Hydrocarbon Burdened Waste
- Revised NNSS Waste Profile and Instructions to clarify that a full, formal waste profile revision is not necessary for new packaging already approved for disposal at the NNSS
 - Related change only – not specified in NNSS WAC
- Updated Section 6.6, Funding and Forecasting, to correct the required information and intended recipients so that the NNSS receives timely and accurate waste forecast data
- Revised the definition of “Explosives” to align with DOE Order 435.1
- Updated the Shipment Consignment Address
- Clarified process for submitting Waste Profiles
- Updated titles for Radioactive Waste Acceptance Program designations
- Corrected dates and document names in the Historical Note
- Corrected the spelling of “classified” in Section 3.3.8.1

In response to Board questions/comments, the following clarifications were provided:

- The Atomic Energy Act of 1954 includes the laws for defining various DOE waste categories. Transuranic is waste with an atomic number more than 92 and greater than a hundred nanocuries. Transuranic waste is not accepted under the NNSS WAC for disposal at the NNSS, but is disposed at the WIPP in New Mexico. Neither spent nuclear fuel nor high-level waste is accepted under the NNSS WAC for disposal at the NNSS. Since the Yucca Mountain shutdown, the Department is going through a consent-based siting process for a repository for spent nuclear fuel and high-level waste. LLW is the waste that remains, although it is not necessarily low hazard and is handled via stringent regulations and requirements contained in the NNSS WAC. LLW may be debris, Tyvek, pieces of concrete, filtered media, etc. MLLW is LLW that contains a hazardous component, i.e. lead, chromium, and is regulated separately by statute. Also accepted at the NNSS, classified waste requires protection for national security reasons and cannot be declassified. It may be legacy documents that are strictly matter and are not radioactive or hazardous. Other examples are weapon components and circuit boards from weapons system. Classified waste may contain a hazardous component and may be radioactive in which a cadre of regulations and requirements are imposed upon DOE, including the Military Munitions Act.
- The NNSS WAC precludes the shipment of multiple origin containers on the same truck. This requirement is not based on the safety of the transportation as it complies with US DOT packaging requirements. It was an agreement resulting in discussions with NDEP.
- The NFO will discuss methods to clearly show users what changes were made to the NNSS WAC when posted on the NNSS website.
- Based on decisions made during the National Academy of Sciences workshop on the definition of LLW, the NNSS WAC may be revised again in the near future depending on the needs of the Department and whether any substantive clarifications need to be made to the document.
- The new document to memorialize these changes will be called NNSS WAC 2016.

After all Board questions and comments, Mr. Wade asked the NSSAB if there is anything that would give the Board pause, from a community perspective, on the NFO proceeding with this revision. Receiving no feedback, Mr. Wade thanked the NSSAB for their time and attention on this agenda item.

Meeting Wrap-Up and Adjournment

Upcoming calendar of events:

- NSSAB Orientation in Las Vegas – October 13
- UGTA Technical Information Exchange – October 13
- NSSAB Work Plan Tour of the NNSS – October 26
- Low-Level Waste Stakeholder Forum in Las Vegas – November 2
- Next NSSAB Meeting in Las Vegas – November 9

Any questions on the calendar of events, please contact the NSSAB Office at 702-630-0522.

Member Rosemark moved that the meeting be adjourned. The motion was seconded and passed unanimously.

Meeting adjourned at 8:45 p.m.