



## ***Nevada Site Specific Advisory Board (NSSAB)***

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### **Full Board Meeting**

**Frank H. Rogers Science and Technology Building  
755 East Flamingo, Las Vegas, NV  
4:00 p.m. – September 20, 2017**

**Members Present:** Amina Anderson, Arcadio Bolanos, Francis Bonesteel (Vice-Chair), Pennie Edmond, Raymond Elgin, Cecilia Flores Snyder, Charles Fullen, Dick Gardner, Autumn Pietras, Steve Rosenbaum (Chair), Edward Rosemark, William Sears, Richard Stephans, Jack Sypolt, Dina Williamson-Erdag

**Members Absent:** Michael Anderson, Michael D'Alessio, Karen Eastman, Donald Neill, Richard Twiddy

**Liaisons Present:** Christine Andres (State of Nevada Division of Environmental Protection [NDEP]), John Klenke (Nye County Nuclear Waste Repository Project Office [NWRPO]), Phil Klevorick (Clark County), Vance Payne (Nye County Emergency Management [NCEM]), Jonathan Penman-Brotzman (U.S. National Park Service [NPS])

**Liaisons Absent:** Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), Carol McKenzie (White Pine County Commission), Dan Schinhofen (Nye County Commission), Delon Winsor (Esmeralda County Commission)

**Student Intern:** Anthony Graham (University of Nevada, Las Vegas [UNLV])

**Department of Energy (DOE):** Robert Boehlecke, Tiffany Lantow, Kelly Snyder (Deputy Designated Federal Officer [DDFO]), Bill Wilborn

**Facilitator:** Barb Ulmer (Navarro)

**Contractors:** Marc Klein (Navarro)

**Public Signed In:** Firmin J. Berta (Las Vegas, NV),

## **Open Meeting/Chair's Opening Remarks**

Chair Steve Rosenbaum welcomed everyone to the last meeting of the fiscal year. Following the Chair's opening remarks, Member Raymond Elgin moved to approve the agenda as presented. The motion was seconded and passed unanimously.

## **Public Comment**

There was no public comment.

## **Robert's Rules of Order Refresher** (*Frank Bonesteel, Vice-Chair*)

Vice-Chair Bonesteel conducted a refresher course including handouts for Robert's Rules of Order.

## **U.S. DOE Update** (*Robert Boehlecke, DOE*)

Mr. Robert Boehlecke opened by providing a budget update. For fiscal year (FY) 2017, the budget for Environmental Management (EM) Nevada Program activities at the Nevada National Security Site (NNSS) was \$62.6 million. For FY 2018, the budget for EM Nevada Program activities at the NNSS is expected to be \$60.1 million. There is a continuing resolution through December 8, 2017. Even with the reduction in funding, Mr. Boehlecke noted that the EM Nevada Program is planning on completing all scheduled activities for FY 2018.

Mr. Boehlecke noted that the Board received an email last week regarding an Environmental Impact Statement (EIS) [http://www.dtsc.ca.gov/sitecleanup/Santa\\_Susana\\_Field\\_Lab/](http://www.dtsc.ca.gov/sitecleanup/Santa_Susana_Field_Lab/) issued by the State of California regarding waste that may be disposed at the NNSS from the Energy and Technology Engineering Center at the Santa Susana Field Laboratory located about 30 miles northwest of downtown Los Angeles. Boeing, DOE, and NASA utilized the site jointly as an engine rocket test site, and the site is now undergoing a comprehensive environmental investigation cleanup program. Since Mr. Boehlecke's update, the public comment period has been extended to December 7, 2017. The potential low-level waste (LLW) and mixed LLW (MLLW) waste volumes are unclear and likely will not be shipped for three years or longer for the building demolition and seven years or longer for the contaminated soils.

Mr. Boehlecke reported that waste projections for LLW/ MLLW and classified waste is forecasted at 1.9 million cubic feet (ft<sup>3</sup>) for FY 2018. This is an increase from previous year's forecasts due to generators carrying over waste shipments from FY 2017 into FY 2018 and from soil remediation projects at Clean Slate II (~150,000 ft<sup>3</sup>) and Clean Slate III (~250,000 ft<sup>3</sup>) located at the Tonopah Test Range (TTR). For FY 2017, it is estimated that the NNSS will receive between 800,000-900,000 ft<sup>3</sup> of LLW/MLLW and classified waste.

Mr. Boehlecke continued that the soils remediation work at Clean Slate II has been delayed from schedule projections earlier this fiscal year. Field workers are conducting dry runs for the packaging of contaminated soil to determine that equipment/procedures are performing properly. First shipments are expected from the TTR to the Area 5 Radioactive Waste Management Complex (RWMC) in October 2017. (speaker inadvertently stated that the initial shipping dates would be in October 2017 and the actual date is November 2017)

Mr. Boehlecke provided an update on the new MLLW cell at the Area 5 RWMC. Excavation work began last week. The leachate tank and the liner are scheduled to be installed in the January 2018 timeframe with construction completed by April 1, 2018. NDEP will then review the quality assurance reports and approve the final construction before the new cell is operational.

Last week, Mr. Boehlecke attended the annual EM Cleanup Workshop in Washington D.C. The Assistant Secretary for EM, Jim Owendoff, spoke as well as other DOE site managers from larger sites. It was a good opportunity to meet staff from the DOE/EM complex and discuss potential decisions for cleanup items that have been delayed.

Lastly, Mr. Boehlecke noted that the next meeting of the LLW Stakeholders Forum is scheduled for November 9, 2017, from 1-3 p.m. at the Frank Rogers Science & Technology Building.

## **Liaison Updates**

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

Liaison Phil Klevorick reported that he attended the RadWaste Summit this month that focused on discussions regarding Yucca Mountain. He also attended the third annual EM National Cleanup Forum last week in Washington D.C. There was information on the various cleanup activities across the DOE complex, although he noted that the NNSS was not mentioned even though Nevada delegates have praised the activities at the Area 5 RWMC on numerous occasions for its role in helping other DOE sites reach their cleanup objectives. During the workshop, Liaison Klevorick stated that the Energy Community Alliance (ECA) drafted a white paper on clarifying the definition of radioactive waste based on its composition not its origin, i.e. commercial versus defense waste. The president of the ECA is presenting the white paper before the House next week. Liaison Klevorick met with two subcontractors for the incoming NNSS contractor and introduced them to other county commissioners in Nevada who were in attendance in an effort to build positive relationships and involvement within the community. During the intergovernmental meeting with liaisons conducted by EM Nevada Program prior to the NSSAB meeting, Liaison Klevorick commented that interactions that included National Nuclear Security Administration (NNSA) management regarding NNSS activities was proactive and encouraged their continued participation.

### **NWRPO (*John Klenke*)**

Liaison John Klenke updated that this is the third year that Nye County has conducted the Tritium Sampling Monitoring Program in areas downgradient of the NNSS. The program includes 10 core wells, and an additional 10 wells were sampling last year. The NWRPO is presenting in Beatty and Amargosa Valley next week to accept public input on wells or springs for inclusion in next year's sampling program.

### **NDEP (*Christine Andres*)**

Liaison Christine Andres reinforced comments Liaison Klevorick provided in his update that Nevada needs to showcase its accomplishments at national meetings, such as the RadWaste Summit and the upcoming Intergovernmental Meeting in San Antonio, Texas, in November 2017. She reiterated that Nevada is often overlooked even with the big role that the NNSS plays within the DOE complex regarding cleanup initiatives. She is on the planning committee for the Intergovernmental Meeting and has requested that Mr. Boehlecke be included as a speaker. Liaison Andres noted that NDEP will be reviewing the Santa Susana EIS, although she does not

know if the State will provide comments at this time. The State of Nevada will be providing comments on the ECA white paper.

**NPS** (*Jonathan Penman-Brotzman*)

Liaison Jonathan Penman-Brotzman noted that availability for another draft EIS for the Sailing Stones area will be available soon in the Federal Register. The NPS completed public scoping periods recently for two Environmental Assessments (EA) for the Bonnie Claire road construction and the Scotty's castle historical district rebuild resulting from the 2015 food disaster. The NPS also completed public scoping for an EA for a joint U.S. Department of Defense Navy radar site on Rogers Peak in the Panamint Range. This EA includes a commercial enterprise element and will be completed within the next few months. Lastly, Liaison Penman-Brotzman reported that the NPS is looking to conduct an EA on the Stovepipe Wells Village planning.

**UNLV Student Intern** (*Anthony Graham*)

UNLV Student Intern Anthony Graham reported that students are back for the fall semester. He will continue to produce the newsletter and distribute to a wide range of students and faculty. UNLV Student Intern Graham added that he will continue to promote the NSSAB meetings and the educational sessions to the UNLV student body. He is researching the use of the UNLV Rebel Connect system to send out daily mass mailers to announce upcoming NSSAB meetings and educational sessions.

**Other NSSAB Business** (*Steve Rosenbaum, Chair*)

**NSSAB Recommendation Development for Communication Improvement Opportunities (Work Plan Item #9)**

During every FY 2017 Full Board meeting, the NSSAB provided suggestions for ways that DOE can improve/enhance communication to the public. These suggestions were documented in the official minutes of each meeting. A draft recommendation letter including these suggestions was provided to the NSSAB for final action, as follows:

- **DOE should videotape and produce DVDs of educational sessions, briefings, groundwater open houses, etc., and make them available to the public in rural communities in southern Nevada.** DDFO Kelly Snyder noted that DOE has videotaped the FY 17 educational sessions. In the evaluations conducted in August 2017, a majority of the members did not support continuing to allocate the resources to videotape the educational sessions based on the number of hours to produce the video versus the number of views received on YouTube. Therefore, this suggestion is not consistent with the recent NSSAB evaluation. Member Dick Gardner made a motion to remove this bullet from the draft recommendation. The motion was seconded and passed unanimously.
- **DOE should increase advertisement of the public tours of the NNSS.** DDFO Snyder provided additional information that the public tours to the NNSS are full for the next fiscal year; therefore there is not a lack of interest by the public in NNSS tours. The NNSA, not the EM Nevada Program, hosts the public tours to the NNSS. Member Jack Sypolt made a motion that the word advertisement in the bullet be changed to frequency. The motion was seconded. After further Board discussion, Member Dina Williamson-Erdag made an amended motion to eliminate this bullet, and rephrase an upcoming bullet to read as

follows: **DOE should conduct additional tours of the NNSS for the public and for local high school students.** The motion was seconded and passed unanimously.

- **DOE should provide follow-up and possibly an ongoing series on the NSSAB and NNSS on KPVM-TV.** Member Charles Fullen made a motion to accept this suggestion as written. The motion was seconded and passed unanimously.
- **DOE should reach out to the Nye County liaisons to encourage attendance at the NSSAB meetings.** DDFO Snyder explained that annually a letter is sent to both current and potential liaison organizations to confirm their intent to participate on the NSSAB. This letter reiterates the responsibilities for participation and providing liaison updates. From all the current liaisons, the NSSAB Office received written confirmation that the liaisons would continue to participate in FY 2018. DDFO Snyder suggested that Nye County NSSAB members contact their Nye County Commission liaison to encourage participation at future NSSAB meetings. Vice-Chair Bonesteel made a motion to remove this bullet from the draft recommendation. The motion was seconded and passed unanimously.
- **DOE should host a booth at the annual Earth Day event in Pahrump, NV.** DDFO Snyder reported that DOE has participated in various public outreach events, including Earth Day, harvest festivals, and county fairs. In the past, there has been little community interest in DOE's booth as the message was not in alignment with the mission of these community events. Since it has been several years since DOE has participated in Earth Day, DDFO Snyder noted that the environment may have changed and DOE would be willing to participate if the NSSAB supported this endeavor. Member Edward Rosemark made a motion to remove this bullet from the draft recommendation. The motion was seconded and passed unanimously.
- **DOE should increase public involvement with the kiosk and utilize the UNLV student intern newsletter as a model to get information into other universities/colleges in southern Nevada.** Member Sypolt stated that UNLV Student Intern Graham's August newsletter was well done and would be of value to the student bodies of other local colleges and universities. UNLV Student Intern Graham agreed that this would be beneficial to students from the College of Southern Nevada and Nevada State College. Member Williamson-Erdag inquired whether the information would also be beneficial to high school students. UNLV Student Intern Graham agreed to look into dispersing his newsletter to a wider distribution for both college and high school students. Member Pennie Edmond suggested that the newsletter be sent to the high school science teachers who would be most likely to utilize the information. Member Sypolt made a motion to accept this suggestion as written. The motion was seconded and passed unanimously.
- **DOE should do an interview on KPVM-TV before the NSSAB Full Board meeting in Pahrump, NV.** Member Fullen made a motion to accept this suggestion as written for any future meetings in Pahrump, NV. The motion was seconded and passed unanimously.
- **DOE should conduct additional tours of the NNSS for local high school students.** For NSSAB action on this bullet, refer to second bullet above.
- **DOE should simplify the path to the NSSAB pages on its website.** Member Fullen made a motion to accept this suggestion as written. The motion was seconded and passed unanimously.

- **DOE should include more Nevada-specific articles in the Environmental Management (EM) Updates newsletter that is published by EM Headquarters.** DDFO Snyder explained that more articles are published for Savannah River, Hanford, Oak Ridge, and Idaho due to the activities and the amount of cleanup occurring at these DOE sites. Member Sypolt made a motion to remove this bullet from the draft recommendation. The motion was seconded. Chair Rosenbaum called for a hand vote with 6 members in favor of the motion with 7 members against the motion. The motion did not receive a majority and failed. After further Board discussion regarding the benefit of articles published on the NNSS on the vital role that it plays across the DOE Complex, Member Williamson-Erdag made a motion to accept this suggestion as written. The motion was seconded and passed unanimously.
- **DOE should target certain communications to the intended audience rather than to the general public. DDFO Snyder requested clarification on the NSSAB's intent for this recommendation.** Member Williamson-Erdag responded that the key word is "certain" communications, i.e. groundwater, radioactive waste, should be targeted to the intended audience. DDFO Snyder responded that DOE does tailor its message to the intended audience based on the subject, for example, if transportation is the topic then communities along the transportation routes are targeted. Member Rosemark made a motion to remove this bullet from the draft recommendation. The motion was seconded and passed unanimously.
- **DOE should reach out to communication students to write short articles of interest on the NNSS.** Further Board discussion centered on that high school students are not aware of the activities at the NNSS and would need to attend an NNSS tour in order to have enough information to write an article. DDFO Snyder added that a tour for students attending the Pahrump Valley High School is scheduled for next week, and the EM Nevada Program is open to assisting with future tours for high school students. Member Rosemark made a motion to remove this bullet from the draft recommendation. Chair Rosenbaum called for a hand vote with 8 members in favor of the motion and 5 members against the motion. The motion was seconded and passed with a majority.

Member Gardner made a motion to approve the revised draft recommendation letter and submit to DOE. The motion was seconded and passed unanimously.

Two letters were provided to Board members for informational purposes:

- NSSAB Recommendation for Internal Peer Review Process Improvement for Yucca Flat CADD/CAP (Work Plan Item #6) – dated June 21, 2017
- DOE Response to NSSAB Recommendation regarding Internal Peer Review Process Improvement for Yucca Flat CADD/CAP (Work Plan Item #6) – dated September 6, 2017

#### **Radioactive Waste Acceptance Program (RWAP) Assessment Improvement Opportunities (Work Plan Item #4)** (*Dick Gardner, DOE*)

Members Gardner and Richard Twiddy observed a surveillance of the Idaho National Laboratory (INL) generators in Idaho Falls, Idaho, on August 29 – 30, 2017. This work plan item was to provide a recommendation, from a community perspective, for ways to improve the RWAP assessment process. NSSAB members were accompanied by Jhon Carilli, the DOE LLW Facility Technical Lead, Idaho staff, and the RWAP Team from Navarro. The purpose of the surveillance

was to determine whether the generator is in continued compliance with the NNSW Waste Acceptance Criteria.

Member Twiddy submitted a written report of his observations of the surveillance, although he was unable to attend the NSSAB meeting. Member Gardner provided a verbal narration of his two days of observations to the Board during the meeting. He included accounts of his experiences while touring the various facilities at INL, including observations of the packaging and preparation of LLW/MLLW packages for shipment, the encapsulation of barrels of waste, and a crusher utilized to reduce 55-gallon waste drums to a height of 4 - 5 inches. Member Gardner noted that he was impressed that safety was top of mind and a priority, and a key part to safety was the overall cleanliness of all the sites visited. He concluded his report by stating that he gained knowledge on the processing, packaging, and the preparation involved for waste shipping, not only to Nevada, but other destinations as well. Member Gardner thanked the Board for the opportunity to participate in the RWAP surveillance.

Member Gardner moved that his and Member Twiddy's written reports of their observations be accepted and filed into the NSSAB archives. The motion was seconded and passed unanimously.

Chair Rosenbaum asked Member Gardner if he had suggestions for recommendations for this work plan item. Member Gardner added that the time they spent in Idaho was primarily a two-day tour of the facilities and not an observation or shadowing of the RWAP auditors during the surveillance process.

Based on Member Gardner's comments and further Board discussion during the meeting, the following suggestion was offered to the Board for its consideration for improvements/enhancements to the RWAP process to include NSSAB members to observe future facility evaluations of NNSW generators by scheduling the first day for a site tour and the second day to shadow RWAP auditors conducting interviews of generator staff and filling out the respective RWAP checklists, particularly for Quality Assurance and Waste Transportation.

Member Fullen moved that the preceding suggestion be included in a recommendation letter and submitted to the DOE for consideration. The motion was seconded and passed unanimously.

### **FY 2018 Chair/Vice-Chair Election and Results**

The nominee for the Chair position was Steve Rosenbaum and for the Vice-Chair position was Frank Bonesteel. Additional nominations were requested from the floor. Receiving none, Steve Rosenbaum will serve as Chair and Frank Bonesteel will serve as Vice-Chair for FY 2018.

### **Long-Term Monitoring FY 2017 Wrap Up and FY 2018 Planned Activities** (*Tiffany Lantow, DOE*)

- **Long-Term Monitoring**
  - Long-Term Monitoring sites include Corrective Action Sites that are now closed under the Federal Facility Agreement and Consent Order (FFACO) and require some form of reporting, maintenance, or inspections
    - Closed Soils Sites
    - Closed Industrial Sites
    - Closed Underground Test Area (UGTA) Sites (Frenchman Flat)

- **Long-Term Monitoring FY 2017 Wrap Up**
  - Planned: Submit Resource Conservation and Recovery Act (RCRA), Non-RCRA, and TTR Post-Closure Reports to NDEP
    - Status:
      - RCRA Post-Closure Report submitted in March 2017
      - TTR Post-Closure Report submitted in March 2017
      - Non-RCRA Post-Closure Report submitted in May 2017
        - No significant items were identified
  - Planned: Continue to address revegetation efforts at CAU 111
    - Status: CGTO subgroup continuing to plan test plots on CAU 111 cover
  - Planned: Review existing post-closure monitoring/inspection requirements for potential changes
    - Status: Review is ongoing; changes will be recommended to NDEP when appropriate
  - Planned: Complete second year of long-term groundwater monitoring at Frenchman Flat
    - Status: Completed May 2017
      - Monitoring did not identify any concerns
- **FY 2017 NSSAB Work Plan Item**
  - Provide a recommendation regarding the proposed changes to current long-term requirements at closed Industrial Sites and Soils sites at the NNSS
    - NSSAB Recommendation – August 2017
    - DOE Response – Pending
- **Long-Term Monitoring FY 2018 Planned Activities**
  - Submit Post-Closure Reports to NDEP
  - Continue to address revegetation efforts at CAU 111
  - Review existing post-closure monitoring/inspection requirements for potential changes
  - Conduct annual Frenchman Flat closure sampling by March 2018
  - Complete Frenchman Flat Post-Closure Monitoring Report by June 2018

### **Soils FY 2017 Wrap Up and FY 2018 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
- **Soils FY 2017 Wrap Up**
  - Clean Slate II Plutonium Dispersion (CAU 413)\*
    - Planned: Submit the final CADD to NDEP
      - Status: CADD/CAP submitted in May 2017 and approved by NDEP in June 2017
        - \* CAU is tied to a FY 2017 NSSAB Work Plan Item
  - Clean Slate III Plutonium Dispersion (CAU 414)
    - Planned: Submit the final CADD to NDEP
      - Status: CADD/CAP milestone moved to December 2017
  - Area 3 Plutonium Dispersion Sites (CAU 568)
    - Planned: Submit the final Closure Report to NDEP
      - Status: Closure Report submitted in June 2017 and approved by NDEP in July 2017
  - Alpha Contaminated Sites (CAU 573)
    - Planned: Submit the final Closure Report to NDEP
      - Status: Closure Report submitted to and approved by NDEP in April 2017
  - Miscellaneous Radiological Sites and Debris (CAU 576)\*
    - Planned: Submit the final CAIP to NDEP
      - Status: CAIP submitted in December 2016 and approved by NDEP in January 2017
    - Planned: Submit the final CADD to NDEP
      - Status: CADD milestone moved to May 2018
        - \*CAU is tied to a FY 2017 NSSAB Work Plan Item
- **Soils FY 2017 Wrap Up Additional Activities**
  - Area 15 Miscellaneous Sites (CAU 575)
    - Planned: Submit the final Closure Report to NDEP
      - Status: Closure Report on schedule for submittal by September 2017 milestone
- **FY 2017 NSSAB Work Plan Items**
  - Provide a recommendation as to which path forward option should be pursued for Clean Slate II
    - NSSAB Recommendation – November 2016
    - DOE Response – January 2017
    - Updated: DOE continues to pursue clean closure for the Clean Slate II site
      - Contaminated soil removal scheduled to begin late September 2017
      - Waste shipments will likely begin late October 2017

- Provide a recommendation on which corrective action alternative (closure in place or clean closure) should be selected by the DOE for CAU 576 – Misc. Radiological Sites and Debris
  - NSSAB Recommendation – January 2017
  - DOE Response – March 2017
  - Update: DOE still assessing closure options for CAU 576
- **Soils FY 2018 Planned Activities**
  - Clean Slate II Plutonium Dispersion (CAU 413)
    - Planned: Contaminated soil removal
    - Planned: Submit the final Closure Report to NDEP
  - Clean Slate III Plutonium Dispersion (CAU 414)
    - Planned: Submit the final CADD/CAP to NDEP
    - Planned: Contaminated soil removal
  - Miscellaneous Radiological Sites and Debris (CAU 576)
    - Planned: Submit the final CADD/CAP or CADD/CR to NDEP
- **Proposed FY 2018 NSSAB Work Plan Item**
  - Path forward for responsibility for closed environmental restoration sites at the Tonopah Test Range

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

- Clean Slate II is a large project with much preparation, including approval of contracts by the DOE service center, readiness reviews, briefings, etc., which accounts for delays that DOE has encountered at this site.
- There has been no decisions made on the historic preservation of the radiochemical piping at the Kennebec site (CAU 576). The Desert Research Institute is working on the documentation that considers the site's historic significance.

**Underground Test Area (UGTA) FY 2017 Wrap Up and FY 2018 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 2017 Wrap Up**
  - Yucca Flat/Climax Mine
    - Planned: Perform Well Development, Testing and Sampling for Yucca Flat Wells ER-3-3 and ER-4-1
      - Status: Field activities completed February 2017
    - Planned: Finish drilling reports for Yucca Flat Wells ER-2-2, ER-3-3, and ER-4-1
      - Status: Completed July 2017
    - Planned: Perform Model Evaluation of new data at Yucca Flat
      - Status: On-going – completion planned for FY 2018

- Rainier Mesa/Shoshone Mountain
  - Planned: Complete draft Rainier Mesa Flow and Transport Model
    - Status: Completion expected by end of FY 2017
  - Planned: Select External Peer Review panel
    - Status: Completion expected by end of FY 2017
- **UGTA FY 2017 Wrap Up Additional Activities**
  - For all CAUs
    - Planned: Complete Death Valley Regional Flow System model
      - Status: Modeling basically completed, reviews and documentation to be completed in FY 2018
  - Completed (or planned to be completed) sampling of 28 well completions:
    - 20 in Pahute Mesa
    - 1 in Yucca Flat
    - 7 in Rainier Mesa
  - Submitted Hydraulic Head Monitoring Report
  - Submitted calendar year 2016 Annual Sampling Report
  - Completed Yucca Flat CADD/CAP - approved by NDEP in August 2017
  - Conducted Internal Peer Reviews for YF/CM and RM/SM CAUs
  - Continued funding support for Nye County Tritium Monitoring Program and internal peer review membership
- **FY 2017 NSSAB Work Plan Items**
  - Provide a recommendation regarding use of existing and potential sampling techniques
    - NSSAB Recommendation – April 2017
    - DOE Response – June 2017
    - Received draft cost estimates from BESST, Inc. – July 2017
  - Provide a recommendation as to how the internal peer review process could be enhanced
    - NSSAB Recommendation (RM/SM) – April 2017
    - DOE Response (RM/SM) – June 2017
    - NSSAB Recommendation (YF/CM) – June 2017
    - DOE Response (YF/CM) – September 2017
- **UGTA FY 2018 Planned Activities**
  - Yucca Flat – CAU is in Model Evaluation phase; FY 2018 activity will be:
    - Perform Model Evaluation Data Analysis through September 2018
  - Rainier Mesa – Preparing for External Peer Review; FY 18 activity will be:
    - Conduct External Peer Review – completion by June 2018
  - Pahute Mesa – CAU is in CAI phase; FY 2018 activities will be:
    - Complete CAIP Revision by July 2018
    - Conduct Internal Peer Reviews – analysis and evaluation of geology and hydrology –varied completion dates
- **Proposed FY 2018 NSSAB Work Plan Items**
  - Core Library
  - Internal Peer Review Process for Pahute Mesa (Carryover from FY 2017)

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

- In Yucca Flat, valuable data was collected on two of the three new wells. The third well collapsed during drilling, and UGTA decided not to invest any additional resources into the well. This is a challenge of drilling into the alluvium and the tuffs at the NNSS.

- While Yucca Mountain was operational, a regional model was under development, and the UGTA Activity was concurrently developing a regional model for its missions. These two models have since been combined into the Death Valley Regional Flow System (DVRFS) model. The UGTA Activity continues to develop the DVRFS model as a tool to understand the regional flow systems that in turn assists modelers to better understand the smaller-scale CAU models and vice versa.
- The flooded tunnels are contained within the RM/SM CAU.

### **Waste Management FY 2017 Wrap Up and FY 2018 Planned Activities** *(Rob Boehlecke, DOE)*

- **Waste Management FY 2017 Wrap Up**
  - Planned: Safely dispose almost 1.3 million cubic feet (ft<sup>3</sup>) of forecasted LLW, MLLW, and classified waste at the NNSS
    - Status: As of June 30, 2017, the NNSS safely disposed of over 580K ft<sup>3</sup> of LLW/MLLW/classified waste
    - FY 2017 total volume revised projections for 1.0 million ft<sup>3</sup> of LLW/MLLW/classified waste
  - Planned: Submit annual Performance Assessment Summary Report to the LLW Federal Review Group
    - Status: Submitted in April 2017
  - Planned: Submit annual NNSS Groundwater Monitoring Program Area 5 Radioactive Waste Management Site Data Report to NDEP
    - Status: Submitted in April 2017
  - Planned: Submit permit modification application to construct new MLLW cell
    - Status: Approved by NDEP in July 2017
- **Waste Management FY 2017 Additional Activities**
  - RWAP conducted 26 facility evaluations
- **FY 2017 NSSAB Work Plan Item**
  - Provide a recommendation for ways to improve the RWAP assessment process
    - NSSAB members attended RWAP surveillance in Idaho Falls, Idaho – August 2017
    - NSSAB Recommendation – Pending
- **Waste Management FY 2018 Planned Activities**
  - Safely dispose almost 1.3 million ft<sup>3</sup> of forecasted LLW/MLLW/classified waste at the NNSS
  - Submit annual Performance Assessment Summary Report to the LLW Federal Review Group
  - Conduct RWAP facility evaluations
  - Submit annual NNSS Groundwater Monitoring Program Area 5 Radioactive Waste Management Site Data Report to NDEP
  - Construct new MLLW disposal cell
    - Mobilization of equipment on-site in September 2017
    - Operational by late winter or early spring 2018
- **Proposed FY 2018 NSSAB Work Plan Items**
  - Real-Time Radiography Usage on LLW Packages
  - Location of Monitoring Well at the Area 5 Radioactive Waste Management Complex

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

- The operational cover for a waste cell as it is being filled is four feet with an additional four feet as a final cover.

### **EM FY 2017 Wrap Up and FY 2018 Planned Activities** (Rob Boehlecke, DOE)

- **FY 2017 NSSAB Work Plan Items**

- Review FY 2019 baseline funding needs and provide a recommendation to the DOE prioritizing the work by activity
  - NSSAB Recommendation – March 2017
  - DOE Response to NSSAB – March 2017
  - Draft Budget Guidance Issued by EM HQ to Field Offices – May 2017
  - Draft Integrated Priority List Submitted to EM HQ – May 2017
  - EM Nevada Program Presented Draft Budget Briefing to EM HQ – June 2017
  - Final DOE Budget to Office of Management and Budget (OMB) – TBD ~ September 2017
  - OMB Passback – TBD ~ December 2017
  - President's Budget to Congress – TBD ~ February 2018
- Provide recommendation if additional communication tools should be developed to help communicate groundwater-related topics to the general public
  - NSSAB Recommendation – August 2017
  - DOE Response – September 2017
- 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

- **Proposed FY 2017 NSSAB Work Plan Items**

- Community Interest Analysis
- FY 2020 Baseline Prioritization

### **FY 2018 Work Plan Development**

### **FY 2017 Evaluation Results**

DDFO Snyder highlighted some key items in response to the recent NSSAB member FY 2017 evaluations. She thanked members for taking the time to complete the evaluation as the information is helpful in determining the current Board's preferences in order to plan for FY 2018.

- The majority of respondents were supportive of the 4 p.m. start for the Full Board meetings with a 3 p.m. start for the educational sessions.
- Overall, most members felt that the educational sessions were valuable and would like them to continue.
- The majority of respondents were satisfied with the types of work plan items presented in FY 2017 and felt the information presented was at the right level.
- The majority of the respondents indicated that they would be willing to meet as often as monthly rather than the schedule be dictated by the work plan. The schedule proposed this evening is based on the proposed work plan, although if additional meetings are requested by the NSSAB, DOE can evaluate and respond to the request. Because of the expenses incurred for additional meetings, this would require a reduction in other areas, such as

NSSAB participation in EM SSAB National Chairs' meetings, conferences, workshops, RWAP assessments, etc.

- The majority of respondents supported having one–two meetings in rural areas, which is consistent with FY 2017 and the proposed schedule for FY 2018.
- Various updates were useful to the majority of the respondents. A comment received that addressed the Liaison Updates specifically was forwarded to the liaisons.
- Less than fifty percent of respondents answered that they viewed the educational sessions on YouTube, and even a smaller percentage responded that they found the videos useful. Based on NSSAB responses from the evaluation, DOE will evaluate on a case-by-case basis whether it would be beneficial to videotape an educational session for YouTube or whether resources could be better utilized in another area.
- Social media is not a preferred method of communicating information to the NSSAB; therefore the NSSAB Office will continue providing information to the NSSAB in the current manner.
- Other suggested improvements by NSSAB members included:
  - Board members should listen a little more because they repeat things that have already been discussed.
  - There was a couple of suggestions to limit the amount of time for discussion.
  - There was a comment to change the room setup.
  - One comment was to limit what is being discussed in order to stay on topic.
  - Lastly, there was a suggestion that DOE offer a mentoring program to pair new members with existing members.

The EM Nevada Program proposed seven work plan items related to EM activities planned for FY 2018 for the NSSAB's consideration. DOE staff explained each of the proposed work plan items and the recommendation associated with the task.

### **Other NSSAB Task Input**

Vice-Chair Bonesteel made a motion to add the RWAP Assessment Improvement Opportunities to the FY 2018 work plan. The motion was seconded and passed unanimously.

Member Rosemark initiated discussion on the status of the tunnels at Rainier Mesa as a potential work plan item. Mr. Boehlecke responded that this item is not within the EM-scope and cannot be added as a work plan item, but can be included as a future educational session. The EM Nevada Program has participated in numerous discussions with the Defense Threat Reduction Agency, NNSA, and contractors in the past fiscal year for a path forward for the Rainier Mesa tunnels. Mr. Boehlecke and DDFO Snyder thanked Member Rosemark for raising awareness for this issue.

Member Stephans noted that Yucca Mountain was also outside the EM-scope, although he does get questions and inquired whether the Board could receive background and additional information. Mr. Boehlecke responded that the EM Nevada Program could not speak for Yucca Mountain, but could invite speakers from the Office of Civilian Radioactive Waste Management to conduct an educational session. DDFO Snyder added that the NSSAB Chair and Vice-Chair could network during the upcoming EM SSAB National Chairs' meeting and get more information regarding the high-level waste disposal needs at other sites across the DOE Complex.

Member Williamson-Erdag stated that it would be interesting to have an educational session on earthquakes and its ramifications on the NNSS. Mr. Boehlecke added that the NNSS looks at

various natural events, including earthquakes, flooding, climate change, and water level changes, which could be included in an educational session.

Member Cecilia Flores Snyder suggested that a work plan could be a committee assigned to brainstorm potential educational sessions based on the needs of the NSSAB. DDFO Snyder explained that a work plan item requires an actual recommendation to the DOE. A running list of educational sessions for the NSSAB is maintained and additional topics can be added by NSSAB members informally at any time.

Member Pennie Edmond noted that an educational session on culture was intriguing. Member Arcadio Bolanos offered to conduct an educational session on different cultures and what culture means. DDFO Snyder added that this could also be incorporated into the NSSAB's Community Interest Analysis work plan item.

Chair Rosenbaum stated that a potential work plan item could be emergency management at the NNSS. DDFO Snyder replied that NNSA is the landlord at the NNSS and is responsible for emergency management; therefore it would not be within the purview of the NSSAB. However, the EM Nevada Program is one of the resources and participates in the NNSS emergency management plan. DDFO Snyder informed the Board that a speaker has been confirmed to provide an educational session in November 2017 on this topic.

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

#### **DOE FY 2018 Proposed NSSAB Work Plan Tasks:**

1. From a community perspective, the NSSAB will provide a recommendation on its preferred path forward for the Environmental Restoration Sites at the Tonopah Test Range.
2. From a community perspective, the NSSAB will provide a recommendation on its preferred path forward for the Core Library.
3. From a community perspective, the NSSAB will provide a recommendation as to how the internal peer review process could be enhanced. (carryover item from FY 2017)
4. From a community perspective, the NSSAB will develop a recommendation regarding where they think the well should be placed.
5. From a community perspective, the NSSAB will provide a recommendation on its preferred use of the technology in regard to Low-Level Waste.
6. From a community perspective, the NSSAB will develop a plan for gathering information from fellow community members regarding their EM interests and to gauge their level of concern regarding these activities. The NSSAB will then provide a recommendation for how the EM NV Program could shape its outreach based on the results of the community feedback.
7. From a community perspective, the NSSAB will review the FY 2020 baseline funding needs and provide a recommendation prioritizing the work by activity.
8. From a community perspective, the NSSAB will provide a recommendation for ways to improve/enhance the RWAP assessment process. (added by NSSAB)

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

### **Liaison/Student Intern Updates (continued)**

#### **NCEM (Vance Payne)**

Liaison Vance Payne noted that he attended the RadWaste Summit this month, which included very interesting dialogue and exchange of information and different ideas and thoughts regarding Yucca Mountain. There were side-bar conversations regarding the location for the interim storage of high-level waste if Yucca Mountain was put back onto the table. Liaison Payne commented that the transportation of radioactive materials on the nation's highways is the main concern from an emergency manager's point of view. Liaison Payne concluded that there is an impending brain drain of the experts in high-level waste, but the positive news is that new technologies are being advanced that were displayed at the summit.

### **FY 2018 Meetings and Locations**

#### **Approval of Proposed Schedule**

A proposed schedule was provided based on the timing of briefings and due dates for recommendations included in the FY 2018 Work Plan. Vice-Chair Bonesteel made a motion to accept the proposed meeting dates for FY 2018. The motion was seconded and passed unanimously. Vice-Chair Bonesteel made a motion that the January 17, 2018 meeting be held in Beatty, Nevada. The motion was seconded and passed unanimously.

Based on Board motions, the Full Board meeting schedule for FY 2018 as follows:

- Wednesday, November 8, 2017 – Las Vegas, Nevada
- Wednesday, January 17, 2018 – Beatty, Nevada
- Wednesday, March 14, 2018 – Las Vegas, Nevada
- Wednesday, May 16, 2018 – Las Vegas, Nevada
- Wednesday, July 18, 2018 – Pahrump, Nevada
- Wednesday, September 19, 2018 – Las Vegas, Nevada

Member Rosemark inquired whether DOE funding was available for an additional NSSAB member to attend the EM SSAB National Chairs' meeting in Hanford, WA. Member Bolanos made a motion that another NSSAB member attend the EM SSAB National Chairs' meeting in Hanford, Washington in October 2017 if DOE funding was available. The motion was seconded and passed with a majority. Member Bolanos made a motion that Member Rosemark be approved to attend the EM SSAB National Chairs' meeting in Hanford, Washington in October 2017 if DOE funding is available. The motion was seconded and passed with a majority.

### **Meeting Wrap-Up and Adjournment**

Upcoming calendar of events:

- EM SSAB National Chairs' Meeting – October 16-19 in Hanford, Washington
- NSSAB Work Plan Tour of the NNSS – October 25
- NSSAB Educational Session in Las Vegas - November 8 starting at 3 p.m., Topic: Emergency Management at the NNSS
- NSSAB Full Board Meeting in Las Vegas – November 8 starting at 4 p.m.

- LLW Stakeholder Forum in Las Vegas – November 9
- Community Conversations at Tonopah Library – December 12

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

Member Williamson-Erdag moved that the meeting be adjourned. The motion was seconded and passed unanimously.

Meeting adjourned at 8:55 p.m.