



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 26, 2018**

Members Present: Amina Anderson, Frank Bonesteel (Vice-Chair), Karen Eastman, Pennie Edmond, Raymond Elgin, Charles Fullen, Dick Gardner, Autumn Pietras, Steve Rosenbaum (Chair), William Sears, Cecilia Flores Snyder, Richard Stephans, Jack Sypolt, Richard Twiddy, Dina Williamson-Erdag

Members Absent: Michael D'Alessio, Donald Neill

Liaisons Present: Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), Richard Friese (U.S. National Park Service [NPS]), Phil Klevorick (Clark County), John Klenke (Nye County Nuclear Waste Repository Project Office [NWRPO]), Connie Simkins (Lincoln County Commission), Delon Winsor (Esmeralda County Commission)

Liaisons Absent: Chris Andres (State of Nevada Division of Environmental Protection [NDEP]), Scott Lewis (Nye County Emergency Management [NCEM]), Dan Schinhofen (Nye County Commission)

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

Facilitator: Barb Ulmer (Navarro)

Contractors: Marc Klein (Navarro), Randall Paylor (US Geological Survey [USGS]), Chuck Russell (Desert Research Institute), Jeffrey Sanders (USGS)

Public Signed In: Bill DeWitt (Amargosa Valley, NV), Rebecca Frus (Henderson, NV), Anthony Graham (Henderson, NV), Hepburn Klemm (Tonopah, NV), Janice Six (Tonopah, NV), CJ Wissmiller (Amargosa Valley, NV)

Open Meeting/Chair's Opening Remarks

Chair Steve Rosenbaum welcomed everyone to the meeting. Following the Chair's opening remarks, Member Dick Gardner moved to approve the agenda as presented. The motion was seconded and passed unanimously.

Public Comment

There was no public comment.

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

Mr. Robert Boehlecke opened that the President signed last Friday the Energy and Water, Legislative Branch, and Military Construction and Veterans Affairs Appropriations Act for 2019 that included funding for DOE. The Environmental Management (EM) Nevada Program received just over \$60.1 million for fiscal year (FY) 2019, which was in line with the budget request to accomplish all scheduled activities at the Nevada National Security Site (NNSS) for FY 2019.

Mr. Boehlecke updated that work on Clean Slate II started late last year and was completed in late July 2018. Total volume disposed was over 101,000 cubic feet of contaminated soil and debris. The waste material was put into bags, loaded onto flatbed trailers, and transported to the NNSS for disposal. There were a total of 422 bags that were shipped to the NNSS in 211 shipments. Initially, it was estimated that the project would require 300 shipments, and the lower number of actual shipments was due to less surface soil removed than planned.

At the completion of Clean Slate II, Mr. Boehlecke reported that excavation began at Clean Slate III the past several weeks. The expected volume is about 202,500 cubic feet, which is about twice the amount of waste at Clean Slate II. Shipments are expected to begin next week with excavation and shipping continuing into the spring timeframe, depending on site and weather conditions. The EM Nevada Program notified the Nye County and Esmeralda County Emergency Management regarding the upcoming shipments. One difference is the waste from Clean Slate II was disposed at the Area 5 Radioactive Waste Management Complex (RWMC) and waste from Clean Slate III will be disposed at the Area 3 Radioactive Waste Management Site (RWMS). Utilizing Area 3 RWMS increases efficiency as it will assist in the final closure as eventually the facility will need to be brought to grade and a closure cap installed.

Mr. Boehlecke continued that the waste volume projection for FY 2019 is about 1,462,000 cubic feet that includes waste from all generators and Clean Slate III. In FY 2018, the initial projection was 1.9 million cubic feet that decreased to a little over 1.1 million cubic feet due to generators shifting their waste disposal plans.

Mr. Boehlecke updated that construction of the new mixed low-level waste (MLLW) cell at the Area 5 RWMC was completed earlier this spring. NDEP approved the new MLLW cell for operations. Construction finished about \$250,000 under budget. The first waste container was placed in the new MLLW cell in August 2018. The former MLLW cell is expected to reach full capacity in FY 2019. The cell will then undergo closure under required regulatory guidelines.

Mr. Boehlecke commented that the LLW cells on the northern portion of the Area 5 RWMC will be nearing capacity in the next two years; so work has begun on expansion of the western portion for

future waste disposal. A potable water line is being rerouted around the Area 5 RWMC that is scheduled to be completed in October 2018. Construction of two segments of a flood control berm is expected to be completed in December 2018. Each segment is 2,000 linear feet.

Mr. Boehlecke reminded the Board that he has provided updates for over a year regarding a generator that shipped waste containers containing MLLW that were mischaracterized as LLW as the waste contained a hazardous component under the Resource Conservation and Recovery Act. In October 2017, NDEP issued a Finding of Alleged Violation to the NNSS as a result. NDEP issued a final Finding and a draft Settlement Agreement that gave the EM Nevada Program the option of performing a Supplemental Environmental Project (SEP) in lieu of a fine. The EM Nevada Program is working with NDEP on the language of the final Settlement Agreement and the SEP that is expected to be finalized in the next couple of months.

Mr. Boehlecke commented that the current Environmental Program Services contract with Navarro to conduct Environmental Restoration and Radioactive Waste Acceptance Program work will expire in January 2020. The process to identify a new contractor has been initiated with the draft Request for Proposal (RFP) announcement on July 26, 2018. During the week of August 13, 2018, the EM Nevada Program held an Industry Day for potential bidders and one-on-one sessions to collect input from industry to consider for the final RFP. DOE is preparing the final RFP, although a final schedule for its availability is not available at this time. Mr. Boehlecke will keep the NSSAB apprised of the status during future updates.

Mr. Boehlecke noted that three members of Senator Dean Heller's staff toured both National Nuclear Security Administration (NNSA) and EM sites on the NNSS on August 2, 2018, and other members of the Senator's staff toured NNSA and EM sites on the NNSS today. These tours resulted from an inquiry by Senator Heller's staff regarding the types of outreach that the EM Nevada Program provides for the community.

Mr. Boehlecke mentioned recent events/stakeholder meetings that were attended by EM Nevada Program staff:

- Mr. Boehlecke, DDFO Kelly Snyder, Vice-Chair Frank Bonesteel, and Chair Rosenbaum attended the EM Site-Specific Advisory Board (SSAB) National Fall Chairs' meeting on September 11, 2018 and the EM National Cleanup Workshop on September 12-13, 2018, both held in Alexandria, Virginia.
- Tiffany Gamero attended the Community Environmental Monitoring Program (CEMP) workshop in Las Vegas with Ms. Gamero presenting an EM update on July 25, 2018. The CEMP workshop is held every two years to provide training and information on NNSS activities for the Community Environmental Monitors who monitor air stations at various locations throughout southern Nevada.
- EM staff attended the Office of Legacy Management (OLM) Long-Term Stewardship conference in Grand Junction, Colorado in August 2018. OLM is the DOE office that is tasked with oversight for sites that remediation is complete and do not have a long-term mission. OLM also is tasked with records management for various DOE sites. The EM Nevada Program will work with OLM as its mission nears completion. There have been no final decisions made at this time.
- Mr. Boehlecke, Vice-Chair Bonesteel, and Member Amina Anderson attended the RadWaste Summit in Henderson, Nevada on September 4-6, 2018. EM Assistant Secretary, Anne White, presented at the conference and shared her vision for EM that focuses on closure actions versus ongoing activities whenever possible.

Mr. Boehlecke concluded with upcoming presentations/meetings/conferences of interest to be conducted by the EM Nevada Program:

- An orientation for the NSSAB in Las Vegas, NV on October 10, 2018
- Community Conversations outreach event focused on groundwater that will be held in Amargosa Valley and Beatty, Nevada on October 16, 2018
- An NNSS tour for the NSSAB on October 24, 2018
- Quarterly LLW Stakeholders Forum meeting in Las Vegas on November 7, 2018
- Next NSSAB Full Board meeting in Las Vegas on November 7, 2018
- A formal meeting held every six-months with NDEP will be scheduled in conjunction with the Intergovernmental Meeting in New Orleans in mid-November 2018

In response to a question regarding recent media reports related to plutonium movement, Scott Wade, Assistant Manager for Operations and Safety with the NNSS, provided the following response. At the NNSS, there are a number of historical sites, although there are considerable operational activities that are also in progress. The NNSS is a secure location where experimentation is conducted with nuclear materials, such as plutonium. For example, there are activities at the U1a complex that utilize plutonium in experiments with temperatures and pressures where criticality cannot occur. Due to the unique conditions, security, and safety envelope, experiments are conducted with pressures utilizing plutonium at the Joint Actinide Shock Physics Experimental Research Facility at the NNSS. These facilities support another NNSS facility called the Device Assembly Facility (DAF). This facility was constructed in the late 1980s during nuclear weapons testing, and activities are currently conducted at the DAF. The DAF includes a National Criticality Experiments Research Center and nuclear materials staging and storage. With a nuclear material, such as plutonium, there is a cadre of requirements for safeguarding, protecting, accounting for, and securing the material, which is performed at the DAF.

In South Carolina, a Federal court ordered DOE to move one metric ton of plutonium material out of the state by the end of calendar year 2019. NNSA considered facilities in its complex, such as, Los Alamos, the NNSS, as well as Pantex. These facilities were reviewed with the end use of the plutonium materials in mind. Ultimately, it was determined that the plutonium from Savannah River would be used for pit production for nuclear weapons maintenance activities. This activity is supported at Los Alamos. NNSA conducted an analysis to determine how to safely move the one metric ton of plutonium material. A National Environmental Policy Act (NEPA) document was published the end of August 2018 that leveraged the NNSS Site-Wide Environmental Impact Statement as well as a number of other documents. The NEPA document studied moving the plutonium material to either the NNSS or Pantex site for temporary staging, and then ultimately moving the material to Los Alamos for processing at a later date.

The decision not to move the material initially to Los Alamos was due to a number of factors. With nuclear material, a number of elements need to be considered – criticality, including any criticality reactions, the container the material is stored in, the design basis elements that contribute to a safe envelope of operation, a hazard analysis of operations, and the configuration of the facilities. There are a number of nuclear materials at Los Alamos, and there are limitations on the amount of material that can be moved at any given time, including the amount of nuclear materials that can be stored of a particular material for a process; therefore, Los Alamos could not accept the material at this time. Los Alamos will continue to work through its backlog of material that they are currently managing, and once that material is depleted then the material at the NNSS will be transported to Los Alamos for its next wave of production.

Once the decision was made to transport to the NNSS, a number of states and stakeholders became involved that resulted in a series of tiered communications that led to the news reporting that initiated the Board question. Mr. Wade clarified that there were questions whether the plutonium was material or waste. He clarified that this is a valuable nuclear material that the Department must safeguard and secure. This material will not be disposed at the Area 5 RWMC at the NNSS, nor will it go to Yucca Mountain if it should reopen. Mr. Wade concluded by stressing that these decisions included how to safely transport the material. The transportation was conducted by Federal agents from DOE's Office of Secure Transportation that move nuclear materials around the United States.

Liaison Updates

Clark County (*Phil Klevorick*)

Liaison Phil Klevorick added to Mr. Wade's update that the current court order in South Carolina is for one metric ton of material, although there will be a greater volume to consider in future years. He reported that he did not attend the RadWaste Summit this month as the conference predominantly focuses on discussions regarding Yucca Mountain. Liaison Klevorick attended the annual National Cleanup Workshop hosted by the Energy Communities Alliance (ECA) with the cooperation of EM and the Energy Facilities Contractors Group in September 2018. The ECA is a membership organization that supports elected and appointed officials from local governments that are directly impacted by DOE activities to help promote a united message across the DOE Complex. The next ECA meeting will be held in New Orleans, but he will not be in attendance. Liaison Klevorick noted that he was recently appointed to the Clark County School District's Science, Technology, Engineering, and Mathematics (STEM) board. It will be advantageous as the next ECA meeting after New Orleans will be STEM-focused. He concluded that he will not be in attendance on the NSSAB tour as he will be attending meetings in Portland, Oregon.

CGTO (*Richard Arnold*)

Liaison Richard Arnold updated that the Tribal Revegetation Project at the Area 5 RWMC has been a collaborative effort of the tribes in partnership with DOE, supported by a recommendation by the NSSAB. Techniques have been incorporated with transplants with an estimated success rate of about 85 percent. NDEP, the EM Nevada Program, the Tribal Revegetation Committee, DRI, and Portland State University recently shared insights on the progress of the revegetation project. Liaison Arnold is a member of the Tribal Radioactive Materials Transportation Committee that will be participating in the 2019 National Transportation Stakeholders Forum (NTSF) in Crystal City, Virginia. The tribes are a sponsor for the meeting; so they are involved in the coordination of various stakeholders participating in the conference. Along with the National Conference of State Legislatures, this group is hosting a webinar in October 2018 focused on high-level radioactive waste (HLW). This will increase awareness of the responsibilities, authority, intervention, and involvement of the tribes in the area of transportation. Liaison Arnold attended the RadWaste Summit, and reiterated that it focused on HLW. He felt that a key presentation was Anne White sharing her view of the future for EM. He is involved with the Nuclear Energy Tribal Working Group (NETWG) that will be holding a meeting in October 2018 to formalize plans for the NTSF. The State and Tribal Government Working Group is one of the intergovernmental groups that will be meeting in New Orleans in November 2018 to share thoughts, describe collaborations, and plan for the future. The CGTO, which Liaison Arnold represents and is Spokesperson, has developed a Tribal Planning Committee comprised of six people who have been appointed by the 16 tribes of the CGTO to act as a conduit for sharing information and decimating it to the larger group. The committee will guide and manage some of the future activities at the NNSS, both with

EM and NNSA. Liaison Arnold concluded that the tribes have taken the initiative through the NETWG to develop a white paper on STEM initiatives. This will be a catalyst for other DOE tribal working groups to build upon when planning for supporting youth to integrate into technical and engineering fields.

Esmeralda County Commission (*Delon Winsor*)

Liaison Delon Winsor reported that the current focus in Esmeralda County is the establishment of mines.

Lincoln County Commission (*Connie Simkins*)

Liaison Connie Simkins stated that she has been unable to attend the various meetings and conferences that the other liaisons have reported on, although she has kept apprised of NSSAB activities via the internet.

NWRPO (*John Klenke*)

Liaison John Klenke updated that this is the fourth year that Nye County has conducted the Tritium Sampling and Monitoring Program in areas downgradient of the NNSS. The program includes 10 core wells, and an additional 10 wells will be selected for next year's sampling program. The NWRPO will be sending groundwater samples to the lab by the end of the year and notifying DOE of the results in January 2019. There are plans to publish these results in an article in the Pahrump Valley Times in April 2019.

NPS (*Richard Friese*)

Liaison Richard Friese stated that the NPS will be partnering with a conservation group called Peaceful Valley Donkey Rescue to conduct a burro roundup in areas of high burro populations and impact. He also reported that construction will begin on Bonnie Claire road next month.

Other NSSAB Business (*Steve Rosenbaum, Chair*)

On September 11 - 13, 2018, Chair Rosenbaum reported that he and Vice-Chair Bonesteel attended the EM SSAB National Chairs' Meeting and EM National Cleanup Workshop in Alexandria, Virginia. During the national meeting, the EM SSAB developed a draft recommendation for "EM SSAB Chairs Recommendation Regarding Site-Specific Advisory Board Involvement in Enhancing Stakeholder/Public Engagement." This draft recommendation utilized the NSSAB's Community Analysis Work Plan #7 as a baseline, which was well-received by the national board. Vice-Chair Bonesteel made a motion to endorse this draft recommendation as presented. The motion was seconded and passed unanimously. The NSSAB Office will notify EM Headquarters that the draft recommendation was passed by the NSSAB.

Incoming members in attendance introduced themselves, and current members welcomed them to the Board. Their terms are effective on October 1, 2018. Mr. Boehlecke and DDFO Snyder recognized outgoing members Cecilia Flores Snyder, Jack Sypolt, and Bill Sears for their service to the NSSAB. Member Michael D'Alessio was not available for the presentation.

Two letters were provided to Board members for informational purposes:

- NSSAB Recommendation for Community Analysis (Work Plan Item #7) – dated July 18, 2018
- DOE Response to NSSAB Recommendation for Community Analysis (Work Plan Item #7) – dated September 25, 2018

Rainier Mesa (RM) External Peer Review (EPR) Update (*Bill Wilborn, DOE*)

The RM EPR was an independent panel of industry experts and regulators that were engaged to review and provide feedback on the RM modeling work conducted by the Underground Test Area Activity (UGTA). NSSAB members observed three meetings for the RM EPR since January 2018.

Mr. Bill Wilborn updated that the RM EPR was completed last spring. This is an important step in the UGTA Groundwater Closure Strategy in moving forward to closure at an UGTA corrective action unit (CAU). The EPR is a verification of the work and the path that is to be followed scientifically for a CAU to move to closure. For RM, the UGTA team worked with NDEP to develop an alternative modeling strategy (AMS) due to the site, the location, the risks the CAU did or did not pose to the public for transport of contamination off the NNSS. From this analysis, it was determined that there was a smarter approach at RM; so a AMS was implemented, although the outcome was unknown. The RM EPR was tasked with reviewing the modeling work from this standpoint. The RM EPR provided recommendations as expected. The UGTA team continues to work with NDEP on addressing the EPR comments and a path forward. Supplemental analysis work is being conducted for modeling and documentation activities. RM is scheduled for closure in FY 2019.

The EPR is an iterative process that has impacts on other UGTA CAUs. Lessons learned from Yucca Flat, Frenchman Flat, and the RM EPRs will be applied to Pahute Mesa. Next steps include working the strategies for the other CAUs. The UGTA team is researching an AMS for Pahute Mesa, but no decisions have been made at this time. For more than 20 years, the UGTA team has worked on characterization (the longest step), EPR, model evaluation, and closure of the CAUs. The end state is long-term monitoring that requires a level of confidence to apply a long-term strategy, which is the ultimate goal.

FY 2019 Chair/Vice-Chair Election

The nominee for the Chair position was Frank Bonesteel and for the Vice-Chair position was Pennie Edmond and Steve Rosenbaum. Additional nominations were requested from the floor. Receiving none, a ballot vote was taken with the results to be announced later in the agenda.

Long-Term Monitoring FY 2018 Wrap Up and FY 2019 Planned Activities (*Tiffany Gamero, DOE*)

- **Background**
 - 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 UGTA Sites (Frenchman Flat)
- **Long-Term Monitoring FY 2018 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 May 2018
 - TTR Post-Closure Report - submitted May 2018

- Non-RCRA Post-Closure Report - submitted May 2018
 - No significant items were identified
- Planned: Continue to address revegetation efforts at CAU 111
 - Status: CGTO subgroup planted and evaluated test plots on CAU 111 cover
 - At CAU 111, test plots, native and invasive species are present
- Planned: Review existing post-closure monitoring/inspection requirements for potential changes
 - Status: Review is ongoing; changes will be recommended to NDEP when appropriate
- Planned: Conduct annual Frenchman Flat closure groundwater sampling by March 2018
 - Status: Completed by February 2018
 - Results consistent with modeling; no concerns identified
- Planned: Complete Frenchman Flat Post-Closure Monitoring Report by June 2018
 - Status: Completed June 2018
 - Monitoring did not identify any concerns
- **FY 2018 NSSAB Work Plan Item**
 - Provide a recommendation regarding the preferred path forward for the Environmental Restoration Sites at the TTR
 - NSSAB Recommendation – January 2018
 - EM Nevada Program Response – March 2018
 - Status: The potential transfer of sites to DOE's OLM progressing
- **Long-Term Monitoring FY 2019 Planned Activities**
 - Conduct quarterly, bi-annual, and annual monitoring at closed sites
 - Submit Post-Closure Reports to NDEP
 - RCRA Post-Closure Report
 - TTR Post-Closure Report
 - No-RCRA Post-Closure Report
 - Frenchman Flat
 - Conduct annual closure sampling
 - Complete monitoring report
 - Continue tribal evaluation of CAU 111 revegetation test plots through end of FY 2019, when DOE and NDEP will discuss path forward

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

- The revegetation test plots project may continue into FY 2020 and beyond dependent on whether the results are successful and valuable information is obtained regarding revegetation of the entire 92-Acre Area, which is the ultimate goal. DOE and NDEP will review results and determine the path forward for CAU 111.

Soils FY 2018 Wrap Up and FY 2019 Planned Activities (*Tiffany Gamero, DOE*)

- **Soils Background**
 - Atmospheric nuclear weapons tests, nuclear safety experiments, and evaluation tests for peaceful uses of nuclear explosives conducted at the NNSS and the Nevada Test and Training Range resulted in radioactive contamination of surface and near surface soils
 - Fenced and/or posted radiation/contamination area of the NNSS is less than one percent

- 140 Soils sites have been closed in accordance with the FFAO
- Eight Soils sites remain
- **Soils FY 2018 Wrap Up**
 - Clean Slate II Plutonium Dispersion (CAU 413)
 - Planned: Contaminated soils removal; amount estimated was 135,000 cubic feet (ft³)
 - Status: Completed in July 2018 with a final total of 100,575 ft³ removed
 - Planned: Waste shipments from TTR to NNSS; amount estimated was 300 shipments
 - Status: completed in July 2018 with a final total of 211 shipments
 - Planned: Submit the final Closure Report to NDEP
 - Status: Closure Report due date moved to FY 2019
 - Clean Slate III Plutonium Dispersion (CAU 414)
 - Planned: Submit the final Corrective Action Decision Document/Corrective Action Plan (CADD/CAP) to NDEP
 - Status: CADD/CAP submitted in November 2017 and approved by NDEP in January 2018
 - Planned: Contaminated soil removal
 - Status: Began excavation activities in September 2018
 - Miscellaneous Radiological Sites and Debris (CAU 576)
 - Planned: Submit the final CADD/CAP or CADD/Closure Report (CADD/CR) to NDEP
 - Status: Final CADD/CR due date changed to December 2018
- **Soils FY 2019 Planned Activities**
 - Clean Slate III Plutonium Dispersion (CAU 414)
 - Planned: Complete soil removal; estimate 189,000 ft³
 - Planned: Complete waste shipments from TTR to NNSS; estimate 450 shipments
 - Planned: Submit the final CR to NDEP
 - Miscellaneous Radiological Sites and Debris (CAU 576)
 - Planned: Submit the final CADD/CR to NDEP

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

- At Clean Slate II, it was originally estimated that a foot or more contaminated soil would be removed from the surface of the majority of the site. The equipment operator was able to excavate the top soil to a depth of six inches. Radiological testing of the soil at that depth showed no radioactivity; so no further soil was excavated. This was the reason there was a large difference between the estimate and the actual soil bagged at Clean Slate II.
- Before moving to Clean Slate III, equipment used at Clean Slate II was decontaminated while monitored by radiation protection specialists. The equipment was decontaminated to a level that was safe for transport. Rented equipment is not used within the exclusion zone. DOE-owned equipment used in the exclusion zone will not be released for public purchase. This equipment will be made available to other DOE sites that are conducting similar activities, potentially used at the Area 5 RWMC, or disposed if another mission is not found. All equipment is reviewed under a survey plan before it can be removed from Clean Slate II/III.
- For Clean Slate III, the estimate was calculated that a foot or more contaminated soil would be removed from the surface of the majority of the site. It is too early to determine whether there will be similar conditions as Clean Slate II in less soil being removed. Unknowns may

arise, such as contaminated debris, equipment breakdowns, or weather delays that may require additional resources. Any underruns or efficiencies will be put back into the program and toward other EM activities.

Underground Test Area (UGTA) FY 2018 Wrap Up and FY 2019 Planned Activities (Bill Wilborn, DOE)

- **UGTA CAUs**

- There are five CAUs that make up the UGTA activity on the NNSS:
 - Frenchman Flat (CAU 98) – COMPLETE (in closure/long-term monitoring)
 - 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 are managed as one entity

- **UGTA FY 2018 Wrap Up**

- Yucca Flat/Climax Mine (YF/CM) -
 - Planned: Analyze new field data and compare to conceptual model and simulation results
 - Status: To be completed in October 2018
- Rainier Mesa/Shoshone Mountain (RM/SM)
 - Planned: Conduct External Peer Review (EPR)
 - Status: Completed in June 2018; EPR panel provided comments to EM Nevada Program; EM is currently conducting supplemental activities in response
- Pahute Mesa
 - Planned: Complete Corrective Action Investigation Plan (CAIP) Revision
 - Status: CAIP on hold pending additional discussions between EM Nevada Program and NDEP
 - Planned: Conduct Internal Peer Reviews – analysis and evaluation of geology and hydrology
 - Status: Delayed until FY 2019 due to Rainier Mesa activities and pending CAIP discussions

- **UGTA FY 2018 Additional Activities**

- Collected groundwater samples from 31 zones in 24 wells on the NNSS and NTTR
- Continued funding and support for Nye County Tritium Sampling and Monitoring Program (TSaMP) and internal peer review membership
 - Complete NNSS News article available at <http://www.nnss.gov/pages/News/news.html#SocMedia76>

- **FY 2018 NSSAB Work Plan Item**

- Provide a recommendation regarding a preferred path forward for the Core Library
 - NSSAB Recommendation – November 2017
 - EM Nevada Program Response – March 2018
 - EM Nevada Program is currently addressing changes the Management & Operating contractor has instituted regarding facility costs
 - EM Nevada Program is pursuing the donation of surplus samples to the Nevada Bureau of Mines and Geology at the University of Nevada, Reno
- Provide a recommendation as to how the internal peer review process could be enhanced

- Internal Peer Reviews for Pahute Mesa have been delayed until FY 2019
- **UGTA FY 2019 Planned Activities**
 - YF/CM – CAU is in Model Evaluation phase with planned closure in FY 2020; FY 2019 activities will be:
 - Conduct final Internal Peer Reviews
 - Complete any needed flow and transport simulations
 - Complete Model Evaluation report
 - RM/SM – CAU is in completion stage for the EPR process to assist in determining whether the CAU is ready to move to the next step of the closure process; FY 2019 activities will be:
 - Document supplemental analysis based on the EPR report
 - Complete the Closure Report
 - Pahute Mesa – CAU is in Phase II data analysis and evaluation (characterize site and develop groundwater and contaminant transport models); FY 2019 activities will be:
 - Document considerations to a more pragmatic closure approach and present to NDEP
 - Select potential drilling locations
- **Proposed FY 2019 NSSAB Work Plan Items**
 - Pahute Mesa Groundwater Sampling Well Prioritization
 - Changes to Approach for Pahute Mesa Completion

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

- The USGS Death Valley Regional Groundwater Flow Model is one of the models that UGTA utilizes for additional information.

Waste Management FY 2018 Wrap Up and FY 2019 Planned Activities (*Bill Wilborn, DOE*)

- **Waste Management FY 2018 Wrap Up**
 - Planned: Safely dispose ~ 1.9 million cubic feet (ft³) of forecasted LLW, MLLW, and classified waste at the NNSS
 - Status: As of June 30, 2018, the NNSS safely disposed of over 973K ft³ of waste
 - As of September 2, 2018, the FY 2018 total volume revised projections are ~ 1.1 million ft³ of waste
 - Planned: Submit annual Performance Assessment Summary Report to the LLW Federal Review Group
 - Status: Submitted in April 2018
 - Planned: Submit annual NNSS Groundwater Monitoring Program Area 5 Radioactive Waste Management Site Data Report to NDEP
 - Status: Submitted in May 2018; no significant changes from past trends
 - Planned: Construct new MLLW cell
 - Status: Approved by NDEP in May 2018
 - Status: First waste container emplaced in August 2018
 - Planned: Conduct Radioactive Waste Acceptance Program (RWAP) facility evaluations
 - Status: RWAP conducted 27 facility evaluations
 - NDEP participated in 13 of these facility evaluations

- **Waste Management FY 2018 Additional Activities**
 - Provided over \$15.5 million in funding for the Emergency Preparedness Working Grant (EPWG) to Clark, Elko, Esmeralda, Lincoln, Nye, and White Pine counties since FY 2000
- **FY 2018 NSSAB Work Plan Items**
 - Provide a recommendation for ways to improve the RWAP assessment process
 - NSSAB members attended RWAP surveillance in Paducah, KY – April 2018
 - NSSAB members updated the Full Board summarizing their observations of the surveillance – May 2018
 - NSSAB Recommendation – May 2018
 - EM Nevada Program Response – June 2018
 - Provide a recommendation regarding location of new monitoring well at the Area 5 RWMC
 - NSSAB Recommendation – May 2018
 - EM Nevada Program Response – June 2018
 - EM Nevada Program will determine location of new monitoring well in FY 2019
- **Waste Management FY 2019 Planned Activities**
 - Safely dispose over 1.4 million ft³ of forecasted waste at the NNSS
 - Submit annual Performance Assessment Summary Report to the LLW Federal Review Group
 - Prepare for new cell construction on western section of Area 5 RWMC at the NNSS
 - Resume Area 3 Radioactive Waste Management Site operations to make use of existing capacity for Clean Slate III waste disposal
 - Conduct RWAP facility evaluations
 - Review potential enhancements to waste verification strategy
 - Complete corrective actions related to Finding of Alleged Violation
 - Conduct visual and real-time radiography verifications
 - Continue funding and support for the EPWG grant
- **Proposed FY 2019 NSSAB Work Plan Items**
 - Waste Verification Strategy
 - LLW Visual Verification
 - Evaluation of the Audit Determination Process

There were no Board questions in regard to the Waste Management FY 2018 Wrap Up and FY 2019 Planned Activities briefing.

EM FY 2018 Wrap Up and FY 2019 Planned Activities (*Rob Boehlecke, DOE*)

- **FY 2018 NSSAB Work Plan Items**
 - Review FY 2020 baseline funding needs and provide a recommendation to the DOE prioritizing the work by activity
 - NSSAB Recommendation – March 2018
 - EM Nevada Program Response to NSSAB – March 2018
 - EM Nevada Program Presented Draft Budget Briefing to EM HQ – June 2018
 - Final DOE Budget to Office of Management and Budget– TBD ~ September 2018
 - President’s Budget to Congress – TBD ~ February 2019

- Provide recommendation on ways that DOE can shape its outreach based on the results of community feedback
 - NSSAB Recommendation – July 2018
 - EM Nevada Program Response – September 2018
 - EM Site-Specific Advisory Board drafted a complex-wide recommendation using NSSAB's as a model
- **Proposed FY 2019 NSSAB Work Plan Items**
 - Offsite Groundwater Contamination Communication Plan
 - FY 2021 Baseline Prioritization

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

- Regarding FY 2021 baseline prioritization, the planning cycle to include the NSSAB begins in March 2019 or two years prior to the actual budget.

Update on Liaison Status (Full vs Limited) for FY 2019 (Kelly Snyder, DDFO)

DDFO Snyder provided a status update on the liaisons for FY 2019. As there are several liaisons that travel considerable distances and there are many competing priorities, there are two ways for liaison organizations to participate on the NSSAB. A “full” liaison allows for liaison organizations to have a seat on the NSSAB, participate in Board discussions, and provide input into recommendations. A “limited” liaison does not include a formal seat on the NSSAB, although they can participate by receiving NSSAB communications. In response to a recent annual confirmation letter, all current liaisons chose to continue as full liaisons except for White Pine County Commission opted to participate as a limited liaison. In another effort to keep liaisons apprised of transportation items, DDFO Snyder noted that the EM Nevada Program is hosting a quarterly LLW Stakeholder Forum, and an increasing number of county officials are participating in these meetings.

FY 2019 Work Plan Development

The EM Nevada Program proposed seven work plan items related to EM activities planned for FY 2019 for the NSSAB's consideration. DOE staff explained and answered Board questions for each of the proposed work plan items and the recommendation associated with each task.

Other NSSAB Task Input

Member Jack Sypolt initiated discussion on a possible transportation work plan item, although he did not have a specific outcome to propose and asked for ideas from the Board. Chair Rosenbaum added that he has been collaborating with other SSABs to develop a cross-cutting recommendation on transportation infrastructure and safety to bring forward at the next EM SSAB Chairs' meeting. Vice-Chair Bonesteel reminded the Board that an extensive Community Analysis recommendation was recently provided to the EM Nevada Program that included community concerns and interest in EM activities, including transportation. Chair Rosenbaum suggested that this work plan idea be put on hold until a national recommendation is considered to determine if there is anything different that can be worked on at a local level.

Member Richard Twiddy stated that a potential work plan item could be to provide a recommendation on specific funding to assist outlying county representatives to fully participate in various EM Nevada Program functions. Initially, the Board could question county representatives

to determine what their needs are in the process. The objective would be to provide the liaisons with sufficient knowledge of EM activities in order for them to communicate the information to their constituents.

In response to a Board question, DDFO Snyder responded that it is within the purview of the NSSAB to provide a recommendation that DOE extend an invitation to additional organization(s) to offer a liaison seat on the Board. It is the organization's responsibility to determine who represents them on the NSSAB. About four years ago, the NSSAB requested that DOE send out a letter annually to confirm an organization's interest to continue having a liaison seat on the Board and the name of the person in that position for the upcoming year. The NSSAB bylaws do not include attendance requirements for liaisons.

Vice-Chair Bonesteel questioned whether DOE funding can be used for liaisons. Rather than making it a work plan item, Mr. Boehlecke added that the NSSAB may provide a recommendation that DOE research whether DOE appropriations can legally be used for providing funding for liaisons for travel. Mr. Boehlecke clarified that any funding used under this scenario would be taken from other EM work scheduled in the baseline.

Member Cecilia Flores Snyder suggested that a potential work plan item could be for the Board to survey current liaisons for ideas to increase liaison participation, WebEx, Skype, etc. The NSSAB could then make recommendations to DOE on ways to improve liaison participation.

Incoming member Anthony Graham inquired whether there was a potential recommendation for a path forward for the EMAD facility. Mr. Boehlecke responded that work on the EMAD facility is scheduled in the baseline for FY 2024, although there may be some additional funding coming available in FY 2019. He said that he would keep the NSSAB apprised of any potential recommendations for the EMAD facility, and a work plan item could be added at a later date.

Member Dina Williamson-Erdag brought forward a potential work plan item to discuss the number of liaisons, possible increase in liaison organizations, and identifying organizations in the local communities that represent stakeholders that the NSSAB may want to recommend to DOE as a prospective liaison organization.

DDFO Snyder stated that it is not within the purview of the NSSAB to provide recommendations to DOE on how to increase liaison participation. It is the NSSAB's mission to provide recommendations to DOE on ways to accomplish its mission. She continued that all the ideas are good ones and will be provided to the NSSAB leadership for a path forward. At this time, it was concluded that it would be more appropriate to handle the preceding suggestions regarding liaisons as an internal process and address via an ad hoc committee(s) or a standing agenda item under "Other NSSAB Business" rather than a work plan item.

After all Board discussion regarding potential work plan items was completed, there were no additional work plan items proposed by the NSSAB.

DOE FY 2019 Proposed NSSAB Work Plan Tasks:

1. From a community perspective, the NSSAB will provide a recommendation that prioritizes the factors used by the EM Nevada Program to prioritize proposed well locations for Pahute Mesa.

2. From a community perspective, the NSSAB will provide a recommendation on if the more pragmatic approach for Pahute Mesa Completion is supported by the NSSAB and how it could be improved.
3. From a community perspective, the NSSAB will provide a recommendation if the NSSAB thinks further waste verification is needed and provide feedback on the potential verification strategies identified and/or how these strategies may be implemented.
4. From a community perspective, the NSSAB will develop a recommendation on if the existing audit determination selection process is supported and how it could be improved.
5. From a community perspective, the NSSAB will provide a recommendation for how RWAP's visual verifications could be enhanced
6. From a community perspective, the NSSAB will provide a recommendation on if the offsite groundwater contamination communication plan is supported by the NSSAB and/or how it could be improved.
7. From a community perspective, the NSSAB will provide a recommendation on ranking the planned FY 2021 activities.

Incoming NSSAB members were given the option of voting on the work plan items in order to provide current members additional information to consider, although their votes were not counted into the majority. Work plan item #7 is required by EM Headquarters; therefore, a vote was not taken on this item. After reviewing the tasks, members voted on each task separately and the remaining six tasks received a majority vote except for proposed work plan item #2.

After further Board dialogue, Member Sypolt made a motion to include proposed work plan item #2 in the FY 2019 Work Plan. The motion was seconded and passed with a majority. Member Raymond Elgin moved to approve the draft Work Plan Recommendation letter to DOE with the preceding work plan tasks. The motion was seconded and passed unanimously.

FY 2019 Chair/Vice-Chair Results

Before the election results were announced, DDFO Snyder thanked both Vice-Chair Bonesteel and Chair Rosenbaum for the countless hours that they have volunteered in their leadership roles the past fiscal year.

It was announced that Frank Bonesteel was elected as Chair and Steve Rosenbaum was elected Vice-Chair for FY 2019.

FY 2019 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 2019 Work Plan.

The Full Board meeting schedule for FY 2019 as follows:

- Wednesday, November 7, 2018 – Las Vegas, Nevada
- Wednesday, January 16, 2019 – Pahrump, Nevada
- Wednesday, March 20, 2019 – Amargosa Valley, Nevada

- Wednesday, April 24, 2019 – Las Vegas, Nevada
- Wednesday, July 17, 2019 – Las Vegas, Nevada
- Wednesday, September 19, 2019 – Las Vegas, Nevada

Meeting Wrap-Up and Adjournment

Upcoming calendar of events:

- NSSAB Orientation – October 10, 2018
- Community Conversations at Amargosa Valley and Beatty, Nevada – October 16, 2018
- NSSAB Work Plan Tour of the NNSS – October 24, 2018
- LLW Stakeholder Forum in Las Vegas – November 7, 2018 from 1-3 p.m.
- NSSAB Full Board Meeting in Las Vegas – November 7, 2018 starting at 4 p.m.

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

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

Meeting adjourned at 8:12 p.m.