



Nevada Site Specific Advisory Board (NSSAB)

Full Board Meeting Molasky Corporate Center Las Vegas, Nevada

4:00 p.m. – September 11, 2024

- Members Present:** Lisa Blandi, Joycelyn Austin-Mabe, John Cole, Gary Elgort, Anthony Graham (Chair), Mark Hilton (Vice-Chair), Bruce Jabbour, Dan Peterson, Janice Six, Kevin Trainor
- Members Absent:** Erik Anderson, Favil West, Eddie Williams
- Liaisons Present:** Christine Andres and Meghan Lyle (State of Nevada Division of Environmental Protection [NDEP], Andrew Bennett (Clark County), Frank Bonesteel (Nye County Emergency Management [NCEM]), Frank Carbone (Nye County Commission), John Klenke (Nye County Natural Resources and Federal Facilities Office [NRFFO])
- Liaisons Absent:** Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), Varlin Higbee (Lincoln County Commission), Bill Wolf (White Pine County Commission)
- U.S. Department of Energy (DOE):** **Environmental Management (EM) Nevada Program:** Robert Boehlecke (Deputy Designated Federal Officer [DDFO]), Tiffany Gamero, John Myers, Jackie Petrello
National Nuclear Security Administration/Nevada Field Office (NNSA/NFO): Dr. David Bowman, John Daniels, Kathryn Gladden
- Government Contractors:** **Navarro Research and Engineering, Inc. (Navarro):** Marilew Bartling, Irene Farnham, Grant Johnson, Kevin Knapp, Dona Murphy, Glenn Puit, Ken Rehfeldt, Barbara Ulmer
U.S. Geological Survey (USGS): Jeff Sanders
- Public Signed In:** Robert Blackstock (Pahrump, NV), Tammi Odegard (Pahrump, NV), Anntoinette Rivera (Las Vegas, NV), Candace Wells (Jacky Rosen's Office)

Open Meeting

Chair Anthony Graham welcomed members, liaisons, members of the public, incoming members, and staff to the meeting. He shared that it is his favorite meeting of the year that determines the activities the Board will review in the upcoming fiscal year (FY) 2025. Member Kevin Trainor moved to approve the draft agenda. The motion was seconded and passed unanimously.

Public Comment

There was no public comment:

Liaison Updates

Clark County (*Andrew Bennett*)

Liaison Andrew Bennett had nothing new to report.

Nye County Commission (*Frank Carbone*)

Liaison Frank Carbone had nothing new to report.

NCEM (*Frank Bonesteel*)

Liaison Frank Bonesteel sends Chief Scott Lewis' greetings as he cannot attend the meeting. He asked that everyone take a moment to remember what happened 23 years ago to individuals in New York City, Arlington, VA, and Shanksville, PA. NCEM received funding to procure a fire suppression agent and at this time awaiting delivery of F-500 totes. Liaison Bonesteel thanked the DOE for its interest and assistance with this endeavor. He encouraged the Board to read the article on this topic, *EM Nevada Enhances Emergency Response with Grant Funding*, can be accessed [here](#). The video on Nye County F-500 training can be accessed [here](#).

NRFFO (*John Klenke*)

Liaison John Klenke welcomed the incoming NSSAB members. He updated on the Tritium Sampling and Monitoring Program (TSaMP) that Nye County runs independently of the DOE to monitor tritium levels in groundwater downgradient of the Nevada National Security Site (NNSS) in the areas of Lathrop Wells, Amargosa Valley, and Beatty, NV. In its tenth year, the TSaMP is performed in the fourth quarter of every calendar year with sampling starting next month. In this program, Nye County takes 20 samples – ten core sample locations and ten unique sample locations offsite and downgradient of the NNSS each year. Liaison Klenke asked members to contact the NSSAB Office if they know of a well that could be considered for sampling this year, and he will coordinate the request.

NDEP (*Christine Andres*)

Liaison Christine Andres reported that NDEP observes EM activities under the Federal Facilities and Consent Order (FFACO) at the Engine Maintenance, Assembly, and Disassembly (EMAD) and Test Cell C Facilities about once a month. Since NDEP has new staff, they had the opportunity to accompany Navarro and EM Nevada Program staff while conducting post-closure inspections throughout the NNSS. At sites that the NDEP Bureau of Federal Facilities issues permits, two of the four solid waste permit sites have been inspected within the last couple weeks and the other two are scheduled for early October 2024. The Resource Conservation and Recovery Act (RCRA) inspection of the mixed low-level waste cell in Area 5 Radioactive Waste Management Complex (RWMC) will be conducted in early November 2024. Inspections for the

water pollution control permits were conducted within the last month. Liaison Andres concluded that the EM Nevada Program presented a briefing for NDEP staff last week on the wells and sampling at the Rainier Mesa corrective action site on the NNSS.

NNSA/NFO Update (*Dr. David Bowman, Manager; John Daniels, Federal Public Affairs Director; and Kathryn Gladden, EM Program Liaison for NNSA/NFO*)

Dr. David Bowman announced that Betty Huck has been named the NNSS Deputy Manager and will be attending future NSSAB meetings. He shared that he will be retiring effective in mid-October 2024 and is working with NNSA Headquarters for his replacement. The NNSA/NFO looks forward to a continued good relationship with the EM Nevada Program and the NSSAB.

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

DDFO Robert Boehlecke reported on the following DOE EM Nevada Program updates:

- **Industrial Sites Activity:** The access window to Test Cell C closed this past week. Teams spent time late last week temporarily closing down operations at the facility and securing heavy equipment. Work will resume in October 2024 with the removal of piping around Dewars 4 and 5 and later piping around Dewars 1 and 2, followed by size reduction of the Dewars. At EMAD, removal of the stack and miscellaneous HEPA filters continues that will be followed by ongoing work to demolish the train shed.
- **Strategic Communications:** The team published an article in the EM Update regarding grant funding distributed under the Emergency Preparedness Working Group grants that has been wisely and efficiently spent in Nye and Esmeralda counties. Chief Scott Lewis from Nye County has mentioned previously the P-500 encapsulator and related equipment, and Esmeralda has used the money on an ambulance and fire truck. Thank you to both counties for participating in the article. For links to the article and video, see previous NCEM liaison update.
- **Defense Nuclear Facilities Safety Board (DNFSB):** The EM Nevada Program hosted a meeting between the NSSAB leadership with the DNFSB vice-chair and his staff earlier this month.
- **NDEP Visit:** The EM Nevada Program hosted a visit for NDEP staff of the Rainier Mesa corrective action unit earlier this month.
- **2024 National Cleanup Workshop (NCW):** EM Nevada Program staff and Vice-Chair Mark Hilton will be attending the NCW in Arlington, VA, next week. US Energy Secretary Jennifer Granholm will be providing the keynote address.
- **EM Site-Specific Advisory Board (SSAB) National Chairs' Meeting:** EM Nevada Program staff will be joining Vice-Chair Hilton and Member Trainor in Oak Ridge, TN for the EM SSAB National Chairs' Meeting from September 24-26, 2024.

During the last NSSAB meeting in July 2024, DDFO Boehlecke mentioned that the Underground Testing (UGTA) Team was lining up a new driller and was working on well design changes for Wells ER-20-1 and ER-20-13. As a result, the board had some follow up questions. DDFO Boehlecke arranged for John Myers, EM Nevada Program's UGTA Activity Lead, to provide the following presentation on UGTA Updates. Ken Rehfeldt, Navarro UGTA Manager, was available during the meeting for Board questions.

UGTA Updates for NSSAB (John Myers, DOE)

- **Short Version**
 - Well Design Changes
 - Shallower - ~3,000 feet instead of 4,000 feet
 - Greater number of completions with electric submersible pumps
 - Additional Surface Geophysics
 - Replanned to include expanded geophysical data collection
 - Addition of 3-D interpretation
 - Benefits
 - Simpler well design – less complicated completion
 - Additional data to be collected for Model Evaluation in the shallower aquifers that are known to be the primary pathways for radionuclide migration
 - Wells will be less costly than the original design
 - Geophysical data will provide data for a larger area and depth
 - What was given up
 - No new data in the deepest aquifer (Calico Hills Lava Flow Units – CHLFA)
 - Existing data is sufficient for model evaluation
 - Already know there is contamination in CHLFA based on measurements at ER-20-5-3
 - Will continue to model the CHLFA as a radionuclide pathway
 - Based on current data and modeling, the CHLFA is not the primary pathway for radionuclide migration
- **Well ER-20-1**
 - Original Well Design
 - Deepen the existing well from 2,065 feet to 4,000 feet
 - Piezometer in Tiva Canyon Aquifer (possible migration pathway from TYBO or BENHAM tests)
 - Piezometer in Topopah Spring Aquifer (known migration pathway from TYBO or BENHAM tests)
 - Pumped well completion in the Calico Hills Lava Flow Aquifer 5 (known deep and slower migration pathway from TYBO or BENHAM tests)
 - Revised Well Design
 - Deepen the existing well from 2,065 feet and one 2,900 feet
 - Piezometer in Tiva Canyon Aquifer (possible fast migration pathway from TYBO or BENHAM tests) – can be sampled using a rod pump
 - Pumped well completion in Topopah Spring Aquifer (known fast migration pathway from TYBO or BENHAM tests) – sampled while pumping and includes aquifer property measurements from aquifer testing
 - No completion in the Calico Hills Lava Flow Aquifer 5 (known deep and slower migration pathway from TYBO or BENHAM tests based on data from ER-20-5-3)
 - Pumped completion moved to the Topopah Spring Aquifer – the unit with the greatest downgradient migration in this part of the flow system – most important for Model Evaluation
- **Well ER-20-13**
 - Original Well Design
 - Drill a new well to 4,000 feet
 - Piezometer in Tiva Canyon Aquifer (possible migration pathway from FONTINA test)

- No piezometer in Topopah Spring Aquifer (unit assumed to not be present at this location when originally designed)
 - Pumped well completion in the Calico Hills Lava Flow Aquifer 5 (possible deep and slower migration pathway from FONTINA test)
 - Revised Well Design
 - Drill 2 wells at this site one to 2,620 feet and one 2,960 feet
 - Pumped well completion in Tiva Canyon Aquifer (possible migration pathway from FONTINA test)
 - Pumped well completion in Topopah Spring Aquifer (unit assumed to be present at this location and a possible migration pathway)
 - No completion in the Calico Hills Lava Flow Aquifer 5 (possible deep and slower migration pathway from FONTINA test)
 - Advantages of the revised design
 - Pumped well completions use an electric submersible pump in both the TCA and TSA, sample a larger area, and can be used to measure hydraulic connections
 - Shallow aquifers to be pumped are also the most likely migration pathways – new designs provided stronger Model Evaluation data with regard to maximum migration distances
- **What is not obtained**
 - Do not complete in or sample the Calico Hills Lava Flow Aquifers
 - These deeper units have been identified as discontinuous in a matrix of bedded tuff confining units
 - Observations show that migration is slower than in shallower aquifers and less critical to Model Evaluation
 - Data from shallower aquifers strengthens the Model Evaluation
- **Other Advantages**
 - Shallower wells can be drilled using smaller, safer, and less expensive drill rigs than the original designs
 - Obtain additional Model Evaluation data and reduce the cost of drilling at the same time
 - Used some of the savings to enhance the surface geophysical data collection – also strengthening the Model Evaluation data collection

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

- The two wells on the Well ER-20-13 drill pad will be about 75–100 feet apart.
- The closest sampling location downgradient from the Calico Hills Lava Flow Aquifer is Well ER-20-5#3. There is no other sampling location downgradient of the Calico Hills Lava Flow Aquifer as this aquifer is fractured and not well connected. This is different from the shallower aquifers that are continuous over much larger regions allowing for movement of radionuclides.
- Well ER-20-5#3 is downgradient of the BENHAM test that was one of the largest conducted in Pahute Mesa in the late 1960s and relatively close to the boundary. In the shallower aquifers, contaminant migration has moved about four kilometers in about 60 years. In the deeper Calico Hills Lava Flow Aquifer, the contaminant migration is demonstrably slower by a factor of four and maybe higher.
- After the wells are constructed, UGTA will conduct a full characterization suite on samples that includes looking at the different isotopic concentrations for radionuclides of concern.

Follow-up to Low-Level Waste (LLW) Waste Visual Verifications (Work Plan Item #2)
(Marilew Bartling, Navarro)

During the January 17th NSSAB meeting, Marilew Bartling, Navarro Radioactive Waste Acceptance Program (RWAP) Manager, briefed on work plan item #2. The NSSAB was asked to provide a recommendation, from a community perspective, on ways that the EM Nevada Program could enhance visual verifications.

In March 2024, Member Gary Elgort accompanied Ms. Bartling to a processing facility in Oak Ridge, TN, and observed first-hand visual verification activities conducted by RWAP. During the July 17th NSSAB Meeting, Member Elgort provided a detailed oral report on his observations during the visit of the visual verification process.

In August 2024, Member Kevin Trainor accompanied Jhon Carilli, DOE LLW Activity Lead, Marilew Bartling, Navarro RWAP Manager, and the RWAP Team to observe visual verification activities at the Test Cell C Facility. Member Trainor provided an oral report on his observations during the visual verification. He explained that he observed the crew cutting up sections of structural metal in preparation for disposal in a waste container and the required documentation. Member Trainor noted that the crew was very diligent about everyone's safety on the site and the visual verification went smoothly.

Prior to the meeting, the NSSAB was provided the presentation slides and Q&A from the minutes and a recording of Member Elgort's report to refamiliarize themselves with the topic to come prepared to have meaningful discussion with Chair Graham on this work plan item.

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

- The waste from Test Cell C will be disposed onsite at the NNSS and is required to adhere to the NNSS Waste Acceptance Criteria. The transportation of this waste does not leave the NNSS, although must follow all the requirements of the U.S. Department of Transportation (DOT).
- The structural waste from Test Cell C does not have a specific swipeable contamination. It is most efficient to handle and transport as LLW due to the background in the area is higher than the fixed contamination of the pad.

Chair Graham led Board discussion on work plan item #2 with potential recommendations provided by members during the meeting on how to enhance RWAP's visual verifications.

After Board discussion, the NSSAB proposed the following recommendations:

- Visual verifications continue to be conducted by the RWAP Team and maintain its current high standards.
- If a prohibited item is found by the RWAP Team during real time radiography (RTR), the generator be subjected to increased visual verifications.

Member Gary Elgort made a motion that the potential recommendations above be approved and submitted to the EM Nevada Program for its consideration. The motion was seconded. After Board discussion, the motion passed unanimously.

Chair Graham thanked Members Elgort and Trainor for their commitment to travel to observe a visual verification and for providing their reports. Ms. Bartling noted that visual verifications provide the RWAP Team the opportunity to discuss the process face-to-face with the generator's staff while observing them place waste into containers destined for the NNSS. The NSSAB Office will draft the NSSAB recommendation letter and submit it to the EM Nevada Program for its consideration and response.

FY 2025 Chair/Vice-Chair

Chair Graham announced that Vice-Chair Mark Hilton expressed interest in serving as Chair and Member Kevin Trainor expressed interest in serving as Vice-Chair for FY 2025. There was no other interest from NSSAB members. Member John Cole moved to approve that Mark Hilton serve as Chair and Kevin Trainor serve as Vice-Chair of the NSSAB for FY 2025. The motion was seconded and passed unanimously. The Board and staff thanked Chair Graham and Vice-Chair Hilton for their leadership this past fiscal year and to Vice-Chair Hilton and Member Trainor for their leadership in the upcoming fiscal year.

Recognition of Outgoing Members

DDFO Boehlecke and Tiffany Gamero recognized and thanked outgoing members Anthony Graham, Bruce Jabbour, Dan Peterson, Janice Six, and Favil West for their service and commitment to the NSSAB. The Board celebrated the outgoing member's dedication to the Program with a cake during the break.

Other NSSAB Business *(Anthony Graham, Chair)*

NSSAB Update on LLW Stakeholders Forum

Member Trainor shared items of interest from his attendance at the LLW Stakeholders Forum held on August 15, 2024, in Las Vegas. Chair Graham thanked him for attending the meeting and providing his report.

Select LLW Stakeholders Forum NSSAB Representative(s) for FY 2025

Chair Graham stated that there is an opening for an NSSAB representative on the LLW Stakeholders Forum for FY 2025. This forum provides an opportunity to share and discuss information related to the shipment and disposal of waste primarily at the NNSS. Chair Graham added that these hybrid meetings are held quarterly and rotate locations between Las Vegas and Pahrump, NV, and the next meeting is scheduled for November 13, 2024, in Pahrump, NV. The NSSAB representative is tasked with attending the meeting on behalf of the Board and providing a written report and an oral report during the following NSSAB meeting that highlights the main points from the meeting. For in-person meetings, DOE reimbursement available for one NSSAB member to attend each meeting. Member Lisa Blandi volunteered to represent the NSSAB at these meetings. The NSSAB Office will provide the final meeting details when available.

FY 2024 Wrap Up and FY 2025 Planned Activities Briefings (DOE Activity Leads)

Long-Term Monitoring FY 2024 Wrap Up and FY 2025 Planned Activities (Jackie Petrello, 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, monitoring, or inspections
 - Closed Soils Sites
 - Closed Industrial Sites
 - Closed Underground Test Area (UGTA) Sites
- **Long-Term Monitoring FY 2024 Wrap Up**
 - Planned: Submit Resource Conservation Recovery Act (RCRA) and Non-RCRA Post-Closure Reports, and UGTA Calendar Year (CY) 2023 Post-Closure Monitoring Letter Report to NDEP
 - Status: No significant concerns identified during post-closure inspections
 - RCRA Post-Closure Report – submitted May 2024
 - Non-RCRA Post-Closure Report – submitted May 2024
 - UGTA CY 2023 Post-Closure Monitoring Letter Report – submitted May 2024
 - Planned: Conduct quarterly, biannual, and annual monitoring at closed sites
 - Status: All required monitoring was conducted in FY 2024
 - Planned: Continue path forward for Corrective Action Units (CAU) 111 and 577 revegetation
 - Status: Activities are ongoing
 - Planned: Conduct UGTA annual water level monitoring
 - Status: Completed; results consistent with modeling; no concerns identified
 - Planned: Conduct post-closure monitoring well inspections on wells in the sampling and groundwater level network
 - Status: Completed
- **Long-Term Monitoring FY 2024 Additional Activities**
 - UGTA
 - Monitored current and planned groundwater usage on and surrounding the NNSS
 - Completed annual sampling of Well WW-C-1 as required under Yucca Flat Post-Closure
 - Installed a pilot remote water level data transmission capability at one location in Frenchman Flat and three locations in Yucca Flat
 - Able to log in and see daily water level and barometric data from the four pilot locations
 - Deploying new stations in fall 2024 at one location in Yucca Flat, four locations in Rainier Mesa, and seven locations in Pahute Mesa
- **Long-Term Monitoring FY 2025 Planned Activities**
 - Submit Non-RCRA Post-Closure Report and UGTA CY 2024 Post-Closure Monitoring Letter Reports to NDEP
 - Conduct quarterly, biannual, and annual monitoring at closed sites
 - Continue path forward for CAU 111 and 577 revegetation
 - Conduct UGTA annual water level monitoring
 - Sample well WW-C-1

- Conduct post-closure monitoring well inspections on wells in the sampling and groundwater level network

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

- There are 135 closed Industrial Sites and Soils sites currently inspected by the EM Nevada Program under the FFACO. Long-term monitoring is conducted on most of these sites on an annual basis, although some of these sites are required to have quarterly monitoring and some sites every five years. For UGTA closed sites in Frenchman Flat, Yucca Flat, and Rainier Mesa/Shoshone Mountain, all of the well sites in the network are monitored annually and well WWC-1 is sampled annually.
- U.S. Geological Survey (USGS) staff conducts physical measurements of water levels of wells on the NNSS. There are additional wells that UGTA monitors continuous water level measurements with a remote transmission process using a transducer. The decision to use a transducer or not has evolved historically. All water level measurements, whether manual or remote, are of equal importance to UGTA.
- There are long-term variations in some of the water levels, but not in response to agricultural pumping in and around the region. Especially for the Pahute Mesa corrective action area, there is a response to variations in annual recharge. For example, in a wet winter with a snow melt that is more than normal, there may be a rise in the groundwater level the next spring or summer. Conversely, after a dry winter the water levels may decline slightly.
- The water level data for the NNSS is published by the USGS and is publicly available. The radiological monitoring of NNSS groundwater is also available to the public in the NNSS Environmental Report accessed [here](#).

Industrial Sites FY 2024 Wrap Up and FY 2025 Planned Activities *(Jackie Petrello, DOE)*

- **Background**
 - Portions of the facilities and land at the NNSS and Nevada Test and Training Range were used in direct support of nuclear testing
 - Facilities included such things as gas stations, motor pools, maintenance shops, and research buildings
 - Activities resulted in releases of contaminants to the environment
 - EM Nevada Program established the Industrial Sites activity to remediate identified contaminated sites
 - Industrial Sites have included facilities, leach fields, sumps, disposal wells, tanks, contaminated waste piles, ordnance sites, etc.
 - Contaminants of concern may include hazardous chemicals, unexploded ordnance, and radionuclides
 - Closure completed at 99% of FFACO Industrial Site Corrective Action Sites; 1967 of 1975 total Industrial Sites have been completed
- **Industrial Sites FY 2024 Wrap Up**
 - Planned: Complete and submit Closure Report (CR) for Corrective Action Unit (CAU) 578 Miscellaneous Inactive Sites to NDEP – February 2024
 - Status:
 - The final CR submitted to NDEP on February 1, 2024
 - The final CR approved by NDEP on February 26, 2024

- Planned: Continue cultural resource activities in conjunction with Nevada State Historic Preservation Office (SHPO)
 - Status: Activities continued throughout FY 2024
- Planned: Continue FFACO closure activities at EMAD and TCC
 - Demolition of the TCC spherical water tank, water tower, and Dewars 4 and 5
 - Status: Demolition of the TCC spherical water tank and water tower was completed and demolition of the Dewars are planned to begin in November 2024
 - Demolition of the EMAD water tower
 - Status: Complete
 - Demolition of the Trainshed and completion of EMAD roof-top asbestos abatement
 - Status: EMAD roof-top asbestos abatement – Complete; Trainshed demolition is scheduled for October 2024
- **Industrial Sites FY 2024 Additional Activities**
 - EMAD – Removed degraded roof-top chiller unit resolving safety issues and started demolition of the two stacks and external exhaust system
 - TCC – Demolished balance of plant systems and Dewar super structure
- **Industrial Sites FY 2025 Planned Activities**
 - Continue cultural resource activities in conjunction with SHPO
 - Continue FFACO closure activities at EMAD and TCC

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

- By weight and volume, approximately 99% of the waste from the demolition of the EMAD and Test Cell C Facilities will be disposed onsite at the NNSS.
- For every FFACO closed site, the EM Nevada Program investigated and presented the results to NDEP and collaboratively developed a closure plan that resulted in long-term monitoring requirements. For EMAD and Test Cell C Facilities, previous work was conducted over the last 25 years on the septic systems, landfills, and storm water areas and are closed in place.
- Closure has been completed at FFACO Industrial Site corrective action sites at 1,967 of the 1,975 total Industrial Sites. There was no specific PFAS contamination detected at sites where the fire department conducted training activities on the NNSS.
- The hydro-cutting method used on the spherical water tower was effective, although slower than the torch-cutting method, and required significant additional resources and time.
- The EM Nevada Program has completed mitigation activities agreed upon by the SHPO for the EMAD and Test Cell C Facilities. The Program continues overseeing the progress of the rolling stock at the EMAD Facility.

Underground Test Area (Groundwater) FY 2024 Wrap Up and FY 2025 Planned Activities

(John Myers, DOE)

- **Background**
 - 828 underground nuclear tests conducted at the NNSS from 1951 to 1992
 - Underground tests conducted at depths ranging from approximately 90 to 4,800 feet below the ground surface
 - One-third of these tests occurred near or below the water table
 - Radioactive contamination from testing not detected above the Safe Drinking Water Act maximum contaminant level in groundwater beyond federally controlled land

- **UGTA CAUs**
 - There are five CAUs determined by location and geologic conditions that make up the UGTA Activity on the NNSS:
 - Frenchman Flat – 10 sites (CAU 98) – **COMPLETE** (in closure/long-term monitoring)
 - Rainier Mesa/Shoshone Mountain – 66 sites (CAU 99) – **COMPLETE** (in closure/long-term monitoring)
 - Yucca Flat/Climax Mine – 720 sites (CAU 97) – **COMPLETE** (in closure/long-term monitoring)
 - Central and Western Pahute Mesa – 82 sites (CAU 101/102) (in Corrective Action Decision Document/Corrective Action Plan (CADD/CAP) stage)
- **UGTA FY 2024 Wrap Up**
 - Pahute Mesa
 - Planned: CADD/CAP to NDEP – October 2023
 - Status: Submitted on October 19, 2023, and approved by NDEP on January 16, 2024
 - Planned: Drill groundwater well ER-20-13 – September 2024
 - Status: Delayed to FY 2025
 - Planned: Drill (deepen) groundwater well ER-20-1 – September 2024
 - Status: Delayed to FY 2025
 - Planned: Submit CY 2023 Annual Sampling Letter Report to NDEP
 - Status: Submitted July 10, 2024
 - Planned: Continue funding and support for Nye County Tritium Sampling and Monitoring Program (TSaMP) and internal peer review membership
 - Status: No detectable tritium in TSaMP samples to date
- **UGTA FY 2024 Additional Activities**
 - Completed groundwater sampling from 11 zones in Pahute Mesa by September 2024
 - Began geophysical survey on Pahute Mesa in August 2024
 - Began model evaluation modeling activities identified in the CADD/CAP in spring 2024
- **FY 2024 NSSAB Work Plan Item**
 - **Annual Update Presentation for Pahute Mesa Groundwater CAUs** – from a community perspective, provide a recommendation on improvement and/or refinement for the annual update presentation for the Pahute Mesa CAUs prior to presenting to NDEP
 - Status:
 - NSSAB Recommendation – November 2023
 - EM Nevada Program Response – November 2023
 - Update: NSSAB recommendations incorporated into December 2023 presentation to NDEP
- **UGTA FY 2025 Planned Activities**
 - Pahute Mesa
 - Complete geophysical survey (12/30/2024)
 - Drill groundwater well ER-20-13 (9/30/2025)
 - Drill (deepen) groundwater well ER-20-1 (9/30/2025)
 - Continue model evaluation modeling activities identified in the CADD/CAP
 - Submit CY 2024 Annual Sampling Letter Report to NDEP (8/29/2025)
 - Continue funding and support for Nye County TSaMP and internal peer review membership

There were no Board questions on the UGTA FY 2024 Wrap Up and FY 2025 Planned Activities briefing.

Waste Management FY 2024 Wrap Up and FY 2025 Planned Activities (Tiffany Gamero, DOE)

- **Background**

- Cold War-related activities and nuclear research generated waste necessitating a safe disposal option
- DOE is responsible for consolidating and disposing waste generated by clean-up activities and ongoing national security and science missions
- DOE Office of EM Nevada Program oversees acceptance of waste for safe and secure disposal at the NNSS
 - The NNSS was chosen due to its isolated location, security, and arid climate
 - Waste disposal ongoing since 1961
 - Independent oversight conducted, in part, by State of Nevada regulators

- **Waste Management FY 2024 Wrap Up**

- Planned: Safely dispose up to 750,000 cubic feet (ft³) of waste at the NNSS in FY 2024
 - Status: As of June 30, 2024, the NNSS safely disposed 456,985 ft³ of waste and the total volume projections are 766,763 ft³ of waste by the end of FY 2024
- Planned: Submit Annual Performance Assessment Summary Report to the LLW Federal Review Group
 - Status: Submitted in March 2024; continues to meet Performance Objectives included in DOE Order 435.1 *Radioactive Waste Management*
- Planned: RWAP facility evaluations
 - Status: Conducted 44 facility evaluations
 - NDEP participated in 16 of these facility evaluations
 - Status: Conducted the following Verifications
 - 16 mixed LLW
 - 2 onsite LLW
 - 24 LLW real time radiography (RTR)
 - 2 waste profiles
- Planned: Continue funding and support for the Emergency Preparedness Working Group (EPWG) grant
 - Status: Provided over \$16.3 million in funding through the State of Nevada Division of Emergency Management to Clark, Elko, Esmeralda, Lincoln, Nye, and White Pine counties since FY 2000
 - EM Nevada Program funds the grant based on \$.50 per cubic foot of classified, LLW and mixed LLW disposed at the NNSS
 - Funding provided in accordance with approved grant application and oversight of funding use
 - Priorities for grant funding include consideration for the needs of a county and the resource base available in that county
- Planned: Operationally close and construct disposal cells, as needed
 - Status: Cells 29 and 30 construction complete
- Planned: Install the new RTR portal unit
 - Status: Expected to be operational in FY 2025

- **FY 2024 Work Plan Status**
 - **Low-Level Waste (LLW) Visual Verification** – from a community perspective, provide a recommendation for how RWAP’s visual verifications could be enhanced
 - Status:
 - NSSAB Recommendation – Due tonight
 - EM Nevada Program Response – Pending upon receiving NSSAB recommendation
 - **LLW Facility Evaluations** – from a community perspective, provide a recommendation for how RWAP’s facility evaluations could be enhanced
 - Status:
 - NSSAB Recommendation – August 2024
 - EM Nevada Program Response – August 2024
 - Status update: EM Nevada Program included a proposed work plan item for FY 2025
 - **RTR Operations at the Area 5 Radioactive Waste Management Complex (RWMC)** at the NNS – from a community perspective, provide a recommendation for how RWAP’s RTR operations could be enhanced
 - Status:
 - NSSB Recommendation – August 2024
 - EM Nevada Program Response – Pending (NOTE: response emailed to NSSAB on 9/11/24)
- **Waste Management FY 2025 Planned Activities**
 - Safely disposal up to 750,000 ft³ of waste at the NNS
 - Submit Annual Performance Assessment Summary Report to the LLW Federal Review Group
 - Conduct RWAP facility evaluations
 - Continue funding and support for the EPWG grant
 - Operationally close and construct disposal cells, as needed
 - Implement the new RTR portal unit

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

- For FY 2024, the rate for disposal was \$53.62 at the NNS. The disposal rate varies from year to year depending on the volume of waste disposed at the NNS. The NNS waste management does not operate to make money, rather to fully fund the operation, including the RWAP. In most cases, the individual sites do not pay the disposal rate, rather the generator’s landlord (NNSA, EM, Office of Science) pay a percentage at the Program level.

FY 2024 Work Plan Status (Tiffany Gamero, DOE)

- **FY 2024 Work Plan Items Status - Other**
 - **FY 2026 Prioritization** – from a community perspective, provide a recommendation ranking planned activities to inform the EM Nevada budget submission.
 - Status
 - NSSAB Recommendation – February 2024
 - EM Nevada Program Response – February 2024
 - Status update: NSSAB recommendation used to inform EM HQ of NSSAB priorities.

- **Enhancements to Public Outreach and Media Communications Approach** – from a community perspective, provide a recommendation for ways to enhance the EM Nevada Program’s public outreach and media communications.
- Status:
 - NSSAB Recommendation – July 2024
 - EM Nevada Program Response – August 2024
 - Status update: Continue to look for opportunities to attend and provide educational presentations at new conferences that are compatible with the Program’s overall communications goals and for interactive elements for public outreach events
- **Updates to the FFACO** – from a community perspective, provide a recommendation on improvements or enhancements to Appendix V. *Public Involvement* and the new Appendix VII. *Post-Closure Strategy of the FFACO*.
- Status:
 - NSSAB Recommendation – November 2023
 - EM Nevada Program Response – November 2023
 - Status update: Appendices V and VII were finalized as written, as recommended by Board and are in signature review
- **Transfer Process of EM Site on the NNSS to Long-Term Stewardship** – from a community perspective, provide a recommendation on specific topics to be included in the final Site Transition Plan and how and to whom it should be communicated.
- Status:
 - NSSAB Recommendation – April 2024
 - EM Nevada Program Response – June 2024
 - Status update: No update; the Board’s recommendation will be passed along to the eventual long-term steward at the time of site transfer

There were no Board questions on the FY 2024 Work Plan Status briefing.

The Board thanked the presenters for the briefings and being available for questions.

FY 2025 Work Plan Development

DOE FY 2025 Proposed NSSAB Work Plan Tasks:

The EM Nevada Program proposed the following five work plan items related to EM activities planned for FY 2025 for the NSSAB’s consideration. EM Nevada Program staff explained and answered Board questions for each of the proposed work plan items and the recommendation associated with each task.

1. From a community perspective, the NSSAB will provide a recommendation ranking the planned activities for FY 2027 to inform the EM Nevada Program’s budget submission.
2. From a community perspective, the NSSAB will provide recommendations for ways that Chapter 11 of the NNSS Environmental Report could be enhanced (i.e., readability, presentation of information, etc.).

3. From a community perspective, the NSSAB will provide a recommendation on specific topics to be included in the final Communication Plan for site transition and how and to whom it should be communicated.
4. From a community perspective, the NSSAB will provide recommendations on how RWAP's facility evaluations could be enhanced.
5. From a community perspective, the NSSAB will provide a recommendation for how RWAP's real-time radiography (RTR) operations could be enhanced.

Other NSSAB Task Input

Chair Graham began discussion regarding a potential work plan item for the NSSAB to consider the topic of long-term monitoring. DDFO Boehlecke noted that this work plan item could include separate recommendations for groundwater sites and Industrial Sites/Soils sites. Chair Graham suggested the following language for a potential work plan item:

6. From a community perspective, the NSSAB will provide a recommendation on ways the standard post-closure inspection process for groundwater sites could be improved or enhanced.
7. From a community perspective, the NSSAB will provide a recommendation on ways the standard post-closure inspection process for Industrial Sites and Soils sites could be improved or enhanced.

Work plan item #1 is required by EM Headquarters; therefore, a vote was not taken on this item. Using task posters, members voted on each work plan item separately and the remaining six tasks received a majority vote.

After further Board discussion led by Chair Graham, Member Cole made a motion to approve the proposed FY 2025 work plan including the preceding seven work plan tasks. The motion was seconded and passed with a majority. The NSSAB Office will submit the proposed FY 2025 Work Plan to the EM Nevada Program for its review and approval.

FY 2025 Meetings Schedule

Approval of Proposed Schedule

A proposed schedule was provided based on the timing of briefings and due dates for recommendations included in the FY 2025 Work Plan.

The NSSAB schedule for FY 2025*:

- Wednesday, October 16, 2024 – annual NSSAB Work Plan Tour of the NNSS
- Thursday, November 14, 2024 – NSSAB Orientation from noon - 6 p.m. in Las Vegas, NV
- Wednesday, January 15, 2025 – Full Board meeting starting at 4 p.m. in Pahrump, NV
- Wednesday, February 19, 2025 – Full Board meeting starting at 4 p.m. in Las Vegas, NV

- Wednesday, April 16, 2025 – Full Board meeting starting at 4 p.m. in Beatty, NV
- Week of April 21, 2025 – EM SSAB National Chairs Meeting in Hanford, WA
- Wednesday, June 18, 2025 – Full Board meeting starting at 4 p.m. in Las Vegas, NV
- Wednesday, July 16, 2025 – Pahute Mesa Groundwater Tour at the NNSS
- Wednesday, September 10, 2025 – Full Board meeting starting at 4 p.m. in Las Vegas, NV

*Subject to Change

NSSAB Intergovernmental Meetings for NSSAB liaisons will be held prior to each Full Board meeting starting at 3 p.m. The meeting locations will be finalized by the NSSAB Office.

Meeting Wrap-Up and Adjournment

Upcoming calendar of events:

- EM National Cleanup Workshop – Arlington, VA – September 16-18, 2024
- EM SSAB National Chairs Meeting – Oak Ridge, TN – September 23-26, 2024
- NSSAB Annual Work Plan Tour of the NNSS – October 16, 2024 (full day)
- LLW Stakeholders Forum – Pahrump, NV – November 13, 2024 (invite only)
- NSSAB Orientation – Las Vegas, NV – November 14, 2024 (noon – 6 p.m.)

Both current and incoming NSSAB members and liaisons are encouraged to mark their calendars and attend the NSSAB Annual Work Plan Tour of the NNSS on October 16, 2024, and the NSSAB Orientation on November 14, 2024.

Chair Graham and Member Six shared heartfelt parting thoughts and thanked members, liaisons, and staff for their support.

Member Trainor made a motion to adjourn the meeting. The motion was seconded and passed with a majority. The meeting was adjourned at 8:07 p.m.