



Nevada Site Specific Advisory Board (NSSAB)

Full Board Meeting Molasky Corporate Center Las Vegas, Nevada

4:00 p.m. – February 21, 2024

- Members Present:** Erik Anderson, Joycelyn Austin-Mabe, Lisa Blandi, John Cole, Gary Elgort, Anthony Graham (Chair), Mark Hilton (Vice-Chair), Bruce Jabbour, Dan Peterson, Janice Six, Kevin Trainor, Eddie Williams
- Members Absent:** William Dolan, Favi West
- Liaisons Present:** Andrew Bennett (Clark County), Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), Frank Carbone (Nye County Commission), Scott Lewis, Frank Bonesteel and Patrick Lazenby (Nye County Emergency Management [NCEM]), John Klenke (Nye County Natural Resources and Federal Facilities Office [NRFFO]), Christine Andres (State of Nevada Division of Environmental Protection [NDEP]), Bill Wolf (White Pine County Commission)
- Liaisons Absent:** Varlin Higbee (Lincoln County Commission)
- U.S. Department of Energy (DOE):** **Environmental Management (EM) Nevada Program:** Robert Boehlecke (Deputy Designated Federal Officer [DDFO]), Tiffany Gamero (Alternate DDFO), Jhon Carilli, John Myers, Jackie Petrello, Andrew Weber
National Nuclear Security Administration/Nevada Field Office (NNSA/NFO): Dr. David Bowman, John Daniels, Kathryn Gladden, Brian Wedl
- Government Contractors:** **Navarro Research and Engineering, Inc. (Navarro):** Grant Johnson, Kevin Knapp, Glenn Puit, Barbara Ulmer
U.S. Geological Survey (USGS): Jeff Sanders
- Members of the Public/Media:** Bob Summers and Patrick McAtee-MacRae (Las Vegas, NV), Doug Blackstock and Phil Miecynski (Pahrump, NV), and Wayne Barber (Exchange Monitor)

Open Meeting/Chair's Opening Remarks

Chair Anthony Graham welcomed and thanked everyone for attending the NSSAB meeting. He noted that it is an important meeting every year that includes the briefing and the development of the NSSAB recommendation for the fiscal year (FY) 2026 Prioritization work plan and discussion on the round robin topics for the upcoming EM Site-Specific Advisory Board (SSAB) National Spring Chairs' Meeting. Chair Graham encouraged everyone to participate and share opinions and bring ideas to the table. Member Dan Peterson moved to approve the draft agenda as presented. The motion was seconded and passed unanimously.

Public Comment

There was no public comment.

Liaison Updates

Clark County (*Andrew Bennett*)

Liaison Andrew Bennett, Director of the Clark County Office of Traffic Safety, thanked the EM Nevada Program for supporting blackout dates for the transportation of low-level waste (LLW) to the Nevada National Security Sites (NNSS) during special events, such as Formula 1 Race, New Year's Eve, and the Super Bowl. He appreciated the opportunity to educate the group on traffic safety at the last LLW Stakeholders Forum hosted by the EM Nevada Program. Liaison Bennett shared his appreciation to the EM Nevada Program for providing access to the NNSS Hazardous Materials Notification System (HAZTRAK) for the Clark County Fire Departments and soon to receive access for the Las Vegas Metropolitan Police Department.

CGTO (*Richard Arnold*)

Liaison Richard Arnold, CGTO Spokesperson, recently participated in a workshop on Tribal sacred sites held in Denver, CO with the State and Tribal Governments Working Group (STGWG). Other participants were from DOE EM HQs, along with Tribal representatives from Los Alamos National Laboratory, Hanford Site, Idaho National Laboratory, to share activities to manage identified Tribal sacred sites. During the meeting, DOE's federal preservation officer mentioned that he uses the NNSS Tribal Revegetation Project as a model of successful and progressive programming. Also, with the STGWG, he participated in a Waste Management Committee teleconference that focused on items discussed during the 2023 DOE Intergovernmental Meeting. STGWG is examining information and resources for a platform for the committee to provide future activities and educational sessions. Liaison Arnold will be participating in the Waste Management Symposia (WMS) in Phoenix, AZ in March 2024. The CGTO will host its annual Tribal Update meeting, including a tour of the NNSS, hosted by the NNSA/NFO on April 2-4, 2024, with the EM Nevada Program in attendance to share insights. Liaison Arnold concluded that the National Transportation Stakeholders Forum (NTSF) will be held in Denver, CO in June 2024 that focuses on topics for the transportation of DOE shipments.

Nye County Commission (*Frank Carbone*)

Liaison Frank Carbone shared information regarding the Radiation Exposure Compensation Act (RECA). Additional information on RECA can be accessed [here](#).

NCEM (Patrick Lazenby)

Liaison Patrick Lazenby, Nye County Office of Emergency Management, had nothing new to report.

NRFFO (John Klenke)

Liaison John Klenke provided an update on the Nye County Tritium Sampling and Monitoring Program (TSaMP). His office is currently working on the quality assurance (QA) on the TSaMP samples that were collected in the last quarter of calendar year 2023, and his office plans to release the results next month. Liaison Klenke noted that he would be sharing this information at the next Groundwater Open House hosted by the EM Nevada Program.

NDEP (Christine Andres)

Liaison Christine Andres, Bureau of Federal Facilities Chief, reported that she issued the letter last week to close out the Settlement Agreement that resulted from mischaracterized waste received by the NNSS from a waste generator. During WMS, Liaison Andres will be participating on a panel sharing NDEP's regulatory role for the NNSS Area 5 Radioactive Waste Management Complex (RWMC). Liaison Andres has been involved with updates and revisions to the Federal Facility Agreement and Consent Order (FFACO). She is also involved with the FFACO Closure Affirmation Project to develop a database to document the closure process for each NNSS corrective action unit (CAU) and the location that the documentation can be accessed in the future. Liaison Andres concluded that she is the co-chair for the STGWG's Waste Management Committee to support the member's needs for education by sharing lessons learned during her career.

White Pine County Commission (Bill Wolf)

Liaison Bill Wolf had nothing new to report.

NNSA/NFO Update (John Daniels, NNSA/NFO)

Mr. John Daniels, Federal Public Affairs Officer, updated on an initiative to promote clean energy by opening land on the NNSS for private developers to develop solar energy. Last week, NNSA/NFO hosted an information day to provide briefings and an opportunity to tour proposed NNSS land to potential industry bidders. The meeting was very well attended by both members of industry as well as community stakeholders. Mr. Daniels noted that an NNSS tour was hosted yesterday for Nevada's congressional delegation. Staff members from all Nevada's senators and congressional districts were provided with a mission update on NNSA/NFO activities. He thanked the EM Nevada Program for being available to provide a briefing and tour of the Area 5 RWMC for Nevada's congressional delegation. Mr. Daniels concluded that the NNSA Administrator Jill Hruby is meeting with members of the city of Las Vegas regarding a potential move of the NNSA/NFO offices from the North Las Vegas complex to northwest Las Vegas. He added that there is a lot of planning and physical considerations in this decision.

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

DDFO Robert Boehlecke provided updates on the following topics:

- Underground Test Area (UGTA): There has been a delay in planned groundwater well drilling in the summer 2024 for Pahute Mesa. The EM Nevada Program had been planning to drill two wells in summer 2024 on Pahute Mesa, specifically Well ER-20-13 and also deepening Well ER-20-1. This activity required procuring the necessary materials and

preparing the ER-20-13 site for drilling (e.g., pad and sump construction). However, recently, the driller being pursued for these activities notified the Program that it cannot perform in the summer of 2024. The EM Nevada Program is currently evaluating options for future drilling and the work already done will still be of value when the necessary drilling does take place.

- Industrial Sites: The EM Nevada Program is continuing deactivation and demolition activities at Test Cell C and the Engine Maintenance, Assembly, and Disassembly (EMAD) facilities.
- LLW Stakeholders Forum: The EM Nevada Program successfully held a LLW Stakeholders Forum meeting in early February 2024. Andrew Bennett, Director of the Clark County Office of Traffic Safety and NSSAB liaison, provided a presentation regarding the work his office does to protect southern Nevada residents on the roadway. It was a well-received presentation, and his participation was appreciated.
- LLW Transportation: The EM Nevada Program followed through on its commitment with Liaison Bennett's office and Clark County for its request to not accept waste shipments during Super Bowl weekend due to the large crowds in southern Nevada.

In February 2024, a shipper took an unauthorized route to the NNSS while transporting a LLW shipment. The shipment traveled along I-15 from Baker, CA, passed State Route 160, continued west on Clark County 215, and then north on US-95 to the NNSS. The EM Nevada Program reviewed documentation and the incident involved a new driver who had been appropriately briefed and given adequate instructions. The Radioactive Waste Acceptance Program (RWAP) issued the generator a Finding. The generator will be required to conduct a cause analysis and submit a corrective action plan to the EM Nevada Program for approval to ensure there is not a recurrence.

- WMS: In March 2024, the EM Nevada Program will be represented at the WMS. The Program will be unveiling a revamped booth display. Glenn Puit, Navarro's Strategic Communications Manager, will present a white paper on communications in rural Nevada with an anchor of the presentation on the Groundwater Open House. DDFO Boehlecke will be participating on a panel regarding support by the EM Consolidated Business Center to the EM Nevada Program and other small EM sites. Ken Rehfeldt, Navarro's UGTA Manager, will be appearing on a panel regarding monitoring challenges at DOE Sites.
- Settlement Agreement: The EM Nevada Program received the closeout letter for the Settlement Agreement from NDEP.
- FFACO: The EM Nevada Program is working to update the FFACO, DOE's regulatory agreement with NDEP. A new appendix was written to provide a post-closure strategy for closed CAUs that includes the process for transitioning responsibility of FFACO sites to long-term stewardship and update on an appendix that identifies methods for communications to the public. The process is nearing completion as the final revisions were recently transmitted to signatories for approval and signatures.
- FFACO Closure Affirmation Project: The EM Nevada Program is leading a project to ensure that each FFACO closure has the proper and sufficient documentation in the administrative record for anyone needing information on a specific CAU after the EM mission in Nevada is complete.

- Devils Hole Workshop & Beyond 2024: The workshop is scheduled for April 25 – 27, 2024 in Amargosa Valley, NV. The EM Nevada Program will present updates on activities on Pahute Mesa.
- Nevada Congressional Delegation Staffers: DDFO Boehlecke had the opportunity to brief on the EM disposal mission in Nevada during a tour of the Area 5 RWMC for Nevada congressional delegation staffers.

Other NSSAB Business (*Anthony Graham, Chair*)

EM SSAB Spring National Chairs' Meeting

The EM SSAB Spring National Chairs' Meeting will be held on April 30 – May 2, 2024, hosted by Portsmouth SSAB in Chillicothe, OH. A tour of the Portsmouth Site will be conducted on the first day. The meeting on the next day will include update briefings and the round robins from each of the eight EM advisory boards presenting topics to EM Headquarters Senior Management that highlight the boards' top interest/concerns and accomplishments. On the last day, the meeting will be held in the morning followed by a tour of the Fernald Site in the afternoon. Representing the NSSAB, Chair Graham and Vice-Chair Mark Hilton will participate with the other chairs and vice-chairs.

Chair Graham began Board discussion with the round robin topics that were to be presented during the cancelled EM SSAB Fall National Chairs' Meeting:

Board Accomplishments:

- Association with revegetation effort at the NNSS and its success
- In addition to attendance at Full Board meetings, exceptional Board interest and participation in volunteer activities (national conferences, workshops, educational sessions, facility evaluations of waste generators, Low-Level Waste Stakeholders Forum, Groundwater Open House, etc.)

Board Concerns:

- Continued community participation and input after the NSSAB is no longer active
- Impact of climate change on previously closed locations on the NNSS (risk to public and the environment)

Member Erik Anderson suggested adding the following topic to **Board Accomplishments**:

- Active participation of liaisons engages the Board

Chair Graham suggested adding the following topic to **Board Concerns**:

- Scheduling and cancellation of EM SSAB Fall National Chairs' Meeting

Member Gary Elgort made a motion to adopt the slate of round topics listed above. The motion was seconded and passed unanimously. Chair Graham will work with members that suggested the round robin topics to develop a narrative to use for the presentation.

Devils Hole & Beyond Workshop 2024

Chair Graham noted that the Devils Hole Workshop & Beyond 2024 will be held at the Longstreet Inn, Amargosa Valley, NV on April 25-27, 2024. It has been approved for up to four NSSAB

members to attend as an educational opportunity. This workshop is groundwater-focused and of a technical nature. The final agenda is forthcoming. Responsibilities include attending the sessions and the field trip, taking notes, and providing a written report on items of interest for the rest of the NSSAB. Members Gary Elgort, Mark Hilton, Joycelyn Austin-Mabe, and John Cole volunteered to attend this year's workshop. The NSSAB Office will assist with the travel arrangements.

NSSAB Update on LLW Stakeholders Forum

Member Lisa Blandi shared items of interest from her attendance at the LLW Stakeholders Forum held on February 7, 2024, in Pahrump, NV. Chair Graham thanked her for attending the meeting and providing a report.

NSSAB Student Intern

Chair Graham gauged the Board for its interest in having a student intern from a local university/college. He will provide additional information in the future.

FY 2026 Prioritization ~ Work Plan Item #1

- **Tonight's Path Forward**
 - Overview
 - Ranking process explanation
 - Briefing of each task (five [5] tasks total)
 - Waste management disposal
 - Post-closure monitoring
 - Industrial Sites
 - Stakeholder support
 - Groundwater characterization
 - Group discussion
 - Individual rankings
 - Prioritization tallying
 - Vote on final recommendation

Overview, Andrew Weber, Lead Project Controls Specialist, EM Nevada Program

- **EM Nevada Program Baseline**

Utilized by EM Nevada Program to support life cycle planning to execute its mission

 - Three (3) major components make up the baseline
 - **Scope of Work:** Description of all work elements that need to be accomplished
 - **Budget:** Estimated cost to accomplish the scope of work
 - **Schedule:** Timeline and prioritization of the scope of work

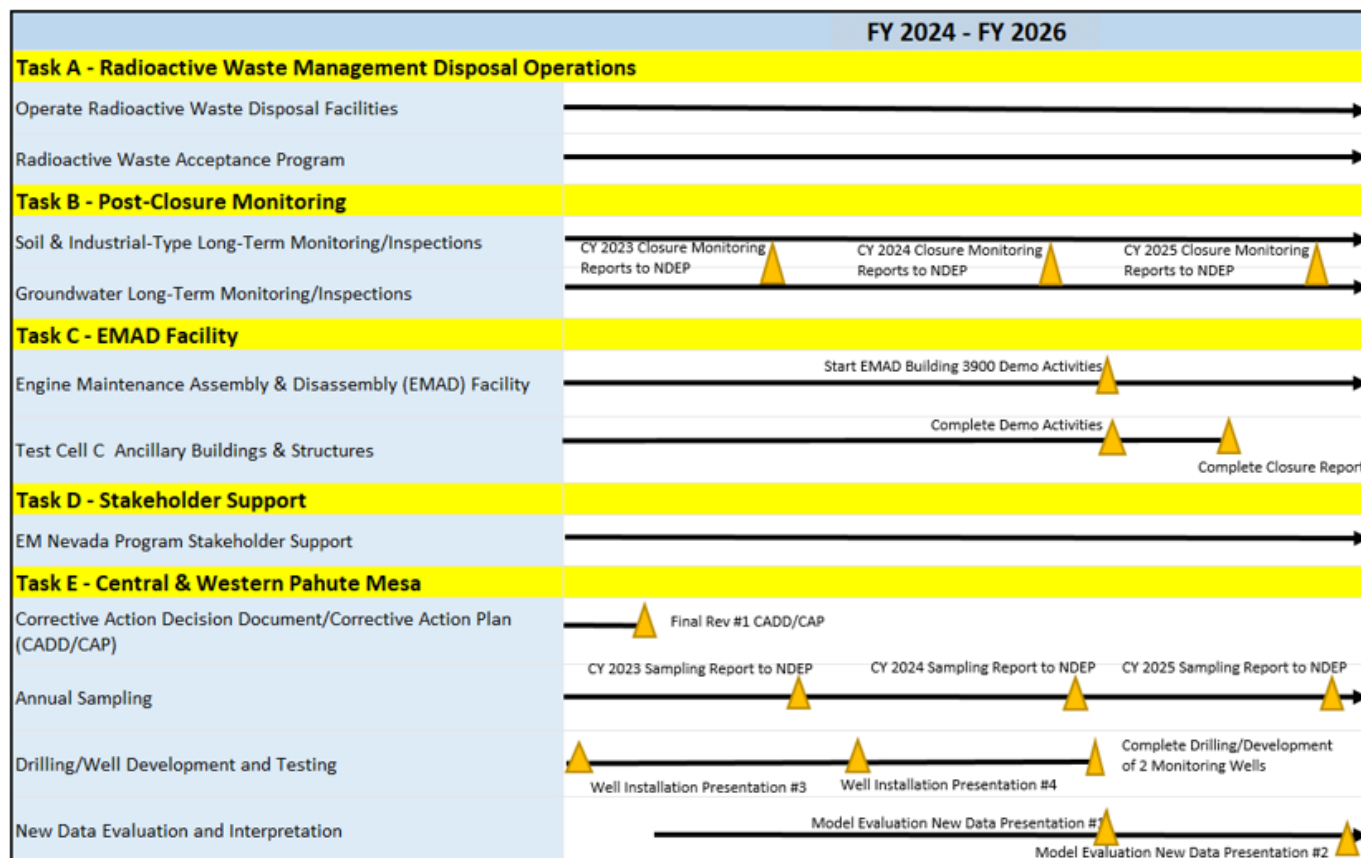
Elements identified in the EM Nevada Program baseline are fully integrated
- **EM Nevada Program Baseline Planning Considerations**
 - Annual fundings
 - Scope is prioritized to maximize amount of work that can be accomplished
 - Scope uncertainties
 - Risk analysis performed to account for cost and schedule impacts associated with unknowns, such as: extreme weather, subsurface conditions, extent of contamination, etc.
- **EM Nevada Program Baseline Maintenance**
 - Performance against the baseline

- Contractors report monthly performance status to EM Nevada Program, where it is integrated and analyzed, then compared against baseline plan
- Baseline changes
 - Changes to baseline are required periodically to account for addition or deletion of scope, scientific strategy changes, or contract modifications
- **Federal Budget Process**



Example of DOE budget planning timeline

- **EM Nevada Baseline Schedule**



Ranking Process, Barbara Ulmer, Facilitator

- **The Ranking Process**
 - Presentation of each of the five (5) tasks (designated by letters)
 - Group discussion with members and liaisons
 - Each member will rank the tasks with 1-5 points using their worksheet
 - NSSAB Office will tally the rankings and present the results to the Full Board tonight
 - Further discussion, if necessary
 - NSSAB will vote on final ranking recommendation

Waste Management Disposal Task, Jhon Carilli, LLW Activity Lead

- **Task A –Radioactive Waste Management Disposal Operations**
 - Maintain capability to safely receive and dispose approximately 750,000 million cubic feet per year of LLW, MLLW, and classified waste from on-site and off-site generators
 - Continue environmental monitoring activities
 - Construct and close waste cells in Area 5 RWMC, as necessary
 - Cells 29 and 30 are ready for LLW
 - Seeding of cells to begin in February 2024
 - Maintain safe and compliant waste disposal in accordance with applicable regulations
 - Continue generator facility evaluations and waste verifications conducted by Radioactive Waste Acceptance Program (RWAP) per the NNSW Waste Acceptance Criteria
 - Risk/consequences of delay:
 - People and environment
 - NNSW-specific: Potential for inability to dispose of NNSW wastes resulting in additional costs for off-site disposal
 - Waste stored at other DOE sites may not have a safe and secure disposal path, potentially impacting the public and environment
 - Project
 - DOE complex: additional costs; inability to dispose some wastes
 - Regulatory
 - DOE agreements and schedules with NDEP could be impacted
 - Milestone:
 - Could impact EM Nevada Program demolition and closure activities

Post-Closure Monitoring Task, Tiffany Gamero, Long-Term Monitoring Lead, EM Nevada Program

- **Task B – Post-Closure Monitoring**
 - Description:
 - Conduct post-closure monitoring on the NNSW
 - Post-closure inspections and maintenance
 - Groundwater sampling and analysis
 - Water level monitoring
 - Groundwater monitoring network maintenance
 - Reporting
 - Risk/consequences of delay:
 - People and environment
 - Potential delay in identification of changes to implemented controls at closed sites
 - Increased risk that potential contaminant movement and/or potential exposure pathways may not be immediately recognized
 - Project
 - Delayed ability to monitor radionuclide migration
 - Regulatory
 - DOE agreements and schedules with NDEP could be impacted
 - Milestone:
 - Submit annual closure monitoring reports to NDEP

Industrial Sites Task, Jackie Petrello, Industrial Sites Activity Lead, EM Nevada Program

- **Task C – EMAD Facility**
 - Description:

- Start demolition of Building 3900 EMAD (cold portion)
- Risk/consequences of delay:
 - People and environment
 - Any corrective actions would be delayed
 - Project
 - Delayed completion of Environmental Restoration mission
 - Regulatory
 - DOE agreements and schedules with NDEP could be impacted
- Milestones:
 - Any FFACO milestones (TBD) could be impacted

Stakeholder Support Task, Glenn Puit, Strategic Communications Manager, Navarro

• **Task D – Stakeholder Support**

- Descriptions:
 - Develop and disseminate information on EM Nevada Program activities to diverse stakeholder groups
 - General public; NSSAB; intergovernmental liaisons; other local and regional government leaders; waste generator community; technical peers; and DOE headquarters
 - Outreach and related products planned and prepared in coordination with technical projects, such as: Underground Test Area (UGTA), RWAP, etc.
 - NSSAB, LLW Stakeholders Forum, and other intergovernmental meetings (local and national)
 - Community and educational outreach events
 - Website content, presentations, fact sheets, articles, videos, and social media posts

Groundwater Characterization Task, John Myers, Underground Test Area (UGTA) Activity Lead, EM Nevada Program

• **Task E – Central and Western Pahute Mesa**

- Descriptions:
 - Model Evaluation
 - Annual Sampling
 - ❖ Groundwater sampling
 - ❖ Water level measurements
 - ❖ Develop Annual Sampling Report
 - Continue New Data Evaluation and Interpretation
- Risk/consequences of delay:
 - People and environment
 - Low risk that potential contaminant movement and/or exposure pathways may not be immediately recognized
 - Project
 - Delayed completion of Environmental Restoration mission
 - Regulatory
 - DOE agreements and schedules with NDEP could be impacted
- Milestones:
 - Submit CY 2025 Annual Sampling Report to NDEP
 - Complete Status Presentation to NDEP
- Tonight's Path Forward
 - Overview
 - Ranking process explanation

- Description of each task (five [5] tasks total)
- [Group discussion](#)
- [Individual rankings](#)
- [Prioritization tallying](#)
- [Vote on final recommendation](#)

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

- Low-level radioactive waste and mixed low-level radioactive waste (regulated under an NDEP-issued permit) that is derived from material of DOE origin that meets the NNSS Waste Acceptance Criteria can be considered for disposal at the NNSS Area 5 RWMC. Commercially generated waste is not eligible for disposal on the NNSS.
- Under the Post-Closure Monitoring activity, the largest cost maintenance items are sign replacement and ensuring that fences and signs are posted and legible. There are post-closure monitoring sites that have inspection requirements to ensure the integrity of these sites after an inch of precipitation has fallen in a 24-hour period.
- There are approximately 150 Industrial Sites and Soils sites with post-closure monitoring to ensure the long-term protection of the environment, workers, and the public.
- The EM Nevada Program continuously monitors groundwater by sampling approximately 80 monitoring locations on and around the NNSS.
- The monitoring of air, groundwater, and animal/plant life, including calculations of the potential public's radiation dose from NNSS activities, are published annually in the NNSS Environmental Report and can be accessed [here](#).
- Desert Research Institute has conducted studies on potential contaminant migration by wind or water off the NNSS. Based on these studies, there is no indication that contaminants will migrate off the NNSS. The EM Nevada Program continues post-closure monitoring for any potential contaminant migration and the NNSS also conducts radiological monitoring.
- EM Nevada Program's environmental program services contractor, Navarro, has a dedicated team of staff that conducts physical inspections for sites that have post-closure monitoring requirements. The Resource Conservation Recovery Act (RCRA) sites have closure requirements for quarterly, semi-annual, or annual inspections. Closed UGTA sites have closure requirements for groundwater monitoring every six years and this fiscal year is a six-year sampling year.
- Educators in Nye County may request a subject matter expert to provide an educational session on EM topics for their classroom based on available staffing and resources.
- Under the FFACO process, it is assumed that the contaminants in the building materials, PCBs, asbestos, lead, chromium, etc., will eventually be released to the environment; therefore, the EM Nevada Program's mission is to demolish buildings, such as the EMAD facility. By not removing the facility, it could result in worker health and safety concerns while conducting post-closure monitoring activities.
- If activities at EMAD were delayed, there could be an impact on local labor employed by contractors and subcontractors. Delays also have impact on the cost of the project and additional risks and uncertainties if the institutional knowledge of the workers is lost once work is resumed. The EM Nevada Program balances these risks versus costs when developing and maintaining its baseline.
- Should conditions for closed FFACO sites change drastically, such as a heavy rainfall, the EM Nevada Program along with NDEP would review the closure in place to ensure that it is still protective of the environment, workers, and the public.

- The EM Nevada Program takes water-level measurements quarterly in Pahute Mesa and annually in closed UGTA sites to monitor whether there has been any earthquake impacts.
- Area 5 RWMC is not a revenue-generating operation, but rather a full-cost recovery operation that receives its funding from generators disposing waste at the NNSS. Since 2000, DOE has provided \$0.50 per cubic foot disposed for all waste disposed at the NNSS to fund the Emergency Preparedness Working Group (EPWG) grant, which is used to support rural county preparedness for the six counties surrounding the NNSS.
- The nearest waste disposal site to the NNSS is a commercial site in Beatty, NV. DOE sites that conduct large-scale EM cleanup have onsite disposal facilities, such as Oak Ridge, Idaho, Hanford, and Savannah River. DOE sites ship LLW waste to the NNSS for disposal for the some of the following reasons: site's disposal is limited to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or Superfund waste, the site's groundwater is close to the surface, and classified waste that requires protection for national security reasons.

Chair Graham led a Board discussion to address any further thoughts, concerns, comments, suggestions, or questions related to the work plan item #1 for FY 2026 Prioritization. A break was taken to tally the individual prioritizations into a group ranking. After announcement of the group ranking results, Chair Graham led a final group discussion with the Board, and liaisons were asked to provide any perspectives from their organizations.

After further Board deliberation, Member Erik Anderson moved to approve the prioritization rankings listed below as a formal recommendation for submission to the EM Nevada Program for consideration during its budget process. The motion was seconded and passed unanimously.

Rank	Task	Title
1	A	Radioactive Waste Management Disposal Operations
2	E	Central and Western Pahute Mesa
3	B	Post-Closure Monitoring
4	D	Stakeholder Support
5	C	EMAD Facility

Meeting Wrap-Up and Adjournment

Upcoming calendar of events:

- Waste Management Symposia – Phoenix, AZ – March 10 – 15, 2024 (NSSAB Member Joycelyn Austin-Mabe to attend)
- NSSAB Intergovernmental Liaisons meeting – Beatty Community Center - April 17, 2024, at 3 p.m. (NSSAB Chair Graham and Vice-Chair Hilton to attend)
- NSSAB Full Board meeting – Beatty Community Center - April 17, 2024, at 4 p.m.
- Devils Hole & Beyond Workshop 2024 – Amargosa Valley, NV – April 25 -27, 2024 (NSSAB Members Elgort, Cole, Hilton, and Austin-Mabe to attend)
- EM SSAB National Chairs' Meeting – Chillicothe, OH – April 29 – May 2, 2024 (NSSAB Chair Graham and Vice-Chair Hilton to attend)

Member Austin-Mabe made a motion to adjourn the meeting. The motion was seconded and passed with a majority. The meeting was adjourned at 8:10 p.m.