



Nevada Site Specific Advisory Board (NSSAB)

Full Board Meeting Valley Conference Center Pahrump, Nevada

4:00 p.m. – January 15, 2025

- Members Present:** Erik Anderson, Joycelyn Austin-Mabe, Robert Blackstock, Lisa Blandi, John Cole, Juan Diaz, Gary Elgort, Thomas Fisher, Mark Hilton (Chair), Tammi Odegard, Lori Olson-Arzaga, Anntoinette Rivera, Brandon Schmidt, Kevin Trainor (Vice-Chair), Eddie Williams
- Members Absent:** Pamela Handor
- Liaisons Present:** Andrew Bennett (Clark County), Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), Janine Woodworth (Lincoln County Commission), Bruce Jabbour (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]), Shantae Greene (State of Nevada Division of Environmental Protection [NDEP])
- 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): Cesar Alfaro, Kathryn Knapp
- Government Contractors:** **Navarro Research and Engineering, Inc. (Navarro):** Grant Johnson, Kevin Knapp, Pat Matthews, Dona Murphy, Glenn Puit, Ken Rehfeldt, Barbara Ulmer
Desert Research Institute (DRI): Chuck Russell
U.S. Geological Survey (USGS): Jeff Sanchez, Jeff Sanders
- Members of the Public:** David Attaway (Pahrump, NV)

Open Meeting

Chair Mark Hilton stated that it is his pleasure to welcome everyone to the first meeting of the new year. He recognized that many of the liaisons and the NSSAB members are present tonight both in person and online, and that it is important that the Board makes a collective effort to accomplish its mission this year. Member Lisa Blandi moved to approve the draft agenda. The motion was seconded and passed unanimously.

Public Comment

The following public comment was received in writing by Leo Emmanuel Lochard from Illinois and read into the record during the meeting:

I am Leo Emmanuel Lochard. I hold a BA and MA in Political Science/Political Economy. I am also an Illinois retired licensed professional educator, or Illinois Certified Teacher.

In accordance with the following request: "Please contact the NSSAB Office no later than two days prior to the meeting for information on how to provide public comment," I would like, to submit the following analytical commentary on the problems of pollution as they relate to the safety, security, and preservation of optimal bodily health for, all people in our great nation.

1. We have to keep every "proven-known polluter," whether government, business, NGO, or private party, RESPONSIBLY ACCOUNTABLE for the destructive or deleterious environmental consequences ensuing from their "polluting activities." Thus: "Preaching" about "responsibility and accountability" to everyone else, while the "preacher" himself or herself, deliberately ignores or mocks his or her own "prescriptive recommendations," is nothing else but "cunning hypocrisy" that allows "the preacher" to "get away" with violating his or her own recommendations that conform with congressionally ratified environmental laws, as well as, with Human decency, common sense, spiritual logic and scientific reasoning. In other words, "YOU pollute, YOU clean-up YOUR mess!" That was the original purposive intent for establishing the United States Department of Environmental Protection: To protect, prevent, preserve, and care for, both Human Beings and the Earth's Ecology, when directly addressing, either through "punitive financial liability," or through other Forms of restorative measures that amend, correct, and redress proven "environmental problems" that negatively impact or destructively damage the bodily health of Human Beings as well as the natural life-support systems of our Terrestrial Ecology upon which ALL Human Beings depend for our prosperous perpetuity on this Planet.

2. An aberration that must be eliminated, legislatively, from the organizational structure of our representative Form of democratically elected free republican self-government, which, is fundamentally erected upon this essential foundational principle: "JUST POWERS DERIVED FROM THE CONSENT OF THE GOVERNED," --- by which all levels of governmental administration must abide, even, ever since the very original constitutional establishment of our great nation, --- is the manner in which HUMAN corporate office-holders are treated while PHYSICALLY ACTING for the said Corporation that is judicially recognized as a Person by the Supreme Court and other branches of our government, such "dissociated impersonal treatment" being TOTALLY contradictory to their respective "Person-Status" as HUMAN CORPORATE OFFICE-HOLDERS AND DECISION-MAKING AGENTS as PERSONAL

EMBODIMENTS representing said Corporation. It is also instructive to note that the word "Corporation" comes from the Latin word CORPUS that ONLY means "BODY!"

Therefore, a "Corporate Person" is NOT an abstract concept DEVOID of any "physical embodiment" and can exist as such only as PHYSICALLY CONSTITUTED by the real HUMAN BEINGS acting on behalf of said "abstract word" or "Corporation."

For: Though the Supreme Court judicially declared that "Corporations" be treated or recognized as "Persons," no individual HUMAN PERSON belonging to the said Corporation is ever held responsibly accountable for the destructive activities of said Corporation. People, individually or collectively, Human Beings, make decisions having destructive consequences, and, NOT an abstract concept or disconnected word called "a Corporation." An abstract concept has NO mental activities or bodily activities in and of itself, that can render it or that can make it "morally responsible: Only Human Beings can be MORALLY responsible, and hence, held accountable, and, NOT words. The term "Corporation" is but a symbolic representation of something physically and objectively concrete - the PHYSICAL ASSEMBLY OF HUMAN DECISION-MAKERS OFFICIALLY BELONGING TO SAID "CORPORATION!" For, the term or word "Corporation" is absolutely MEANINGLESS without accounting for the decisive activities of the REAL PERSONS who duly constitute the SUBSTANCE of said Corporation as "a PERSONAL AGENT" who can be held "responsibly accountable" for their destructive actions.

As a result, only a mere "financial fine" is always the "official penalty" meted out as "redressive punishment" to proven corporate polluters whose balance-sheet is drowning in billions and billions of dollars. And after such a "financial fine" is PAID to our government, said Corporation that ACTED AS A DULY RECOGNIZED PERSON is judicially absolved of all blame or guilt., civil and criminal, when the self-evident FACTS prove that the HUMAN PERSONS constituting the PHYSICAL CORPUS of that said Corporation had indeed made and implemented the destructive decisions.

Thus, the Corporation "judicially allowed" a "PHYSICAL-CORPORAL ACTING DENOMINATION" as a PERSON by the Supreme Court of the United States and legally recognized as a PERSON also by the other respective branches of our government directly addressing the specific "environmental violation," receives as "redressive punishment," a simple "financial fine" while the HUMAN PERSONS in decision-making positions, i.e., Chief Executive Officers, Presidents, or Chairpersons, within said Corporation that is recognized as a Person, are generally NOT held responsibly accountable for the personal damage and environmental destruction that their "polluting activities" have been proven to have caused. {One exception was the ENRON case in California when HUMAN PERSONS were themselves held "responsibly accountable," however, that is NOT the normal modus operandi of the public officials in our courts of law.}

As a gross injustice, results are that, HARD-WORKING AMERICAN TAXPAYING PERSONS, who have ALREADY paid for the operational costs of our government, ARE SHACKLED WITH ALL THE EXPENSES REQUIRED TO CLEAN-UP THE CORPORATION'S OWN MESS!

We believe that such a gross unconstitutional and contradictory anomaly MUST be properly corrected, redressed and amended in order to give due credit to our law-abiding taxpayers

who are being "hit" twice for a CORPORATE PERSON'S proven self-evident and factually true destructive actions.

Thank you very much for your consideration and patience.

Sincerely,

Leo Emmanuel Lochard
American residing in the State of Illinois
United States of America. ***

Liaison Updates

Clark County (*Andrew Bennett*)

Liaison Andrew Bennett welcomed the new NSSAB members and introduced himself as the Director for the Clark County Office of Traffic Safety that includes responsibility for the county's nuclear policy priorities. He noted that southern Nevada hosted a record number of U.S. Department of Homeland Security Level Tier 1 and Tier 2 events, such as the Formula 1 race and New Year's Eve, which would not be possible without the support of every level of government. Liaison Bennett thanked all the federal partners at the DOE and the Nevada National Security Site (NNSS) for its role and support. He concluded that Clark County Commissioner Ross Miller did not seek re-election and was replaced by April Becker who will also serve as the designated commissioner overseeing nuclear activities in Clark County.

CGTO (*Richard Arnold*)

Liaison Richard Arnold introduced himself as the CGTO spokesperson that represents 16 Tribes that have cultural and historical ties to the NNSS. He reported that the CGTO received a letter from DOE Secretary Jennifer Granholm that enumerated activities that occurred during her tenure including Tribal involvement within the Department. In September 2024, Liaison Arnold participated in the DOE EM National Cleanup Workshop (NCW) that is an opportunity, not only to interface, but receive updates regarding EM cleanup activities across the DOE Complex. During the NCW, Secretary Granholm shared goals and appreciation for the progress that the Department and stakeholders have accomplished together. In December 2024, he participated in meetings of the State and Tribal Governmental Working Group (STGWG) and DOE HQs Intergovernmental Meeting. During these meetings, Tribes and States that have ties to the various DOE sites and cleanup missions come together and work together on cross-cutting issues. There are plans to host another STGWG meeting in the future in Denver, CO.

Liaison Arnold noted that he participated in an NNSS tour for Tribal people from other locations to visit and discuss topics related to cultural resources sites. He is involved with the Tribal Radioactive Materials and Transportation Committee (TRMTC) for the planning of a meeting at the end of this month in Knoxville, TN. During this meeting, attendees will tour the Oak Ridge National Laboratory and discuss EM activities and review briefings planned for the National Transportation Stakeholders Forum (NTSF). In April 2025, NNSA/NFO will host a Tribal Update Meeting that the EM Nevada Program will be providing updates, including a scaled-down version of the Groundwater Open House as an opportunity to educate and inform the private sector. Liaison Arnold concluded that he will be participating in the NTSF in May 2025 in Las Vegas, NV, that will include a tour of the NNSS and updates on radioactive waste

shipments throughout the DOE Complex, and attend the RadWaste Summit that will be held in June 2025 in Savannah, GA.

Lincoln County Commission (*Janine Woodworth*)

Liaison Janine Woodworth had nothing new to report.

Nye County Commission (*Bruce Jabbour*)

Liaison Bruce Jabbour announced that yesterday the U.S. Department of the Interior Secretary, through the Bureau of Land Management (BLM), proposed withdrawal of almost 309,000 acres of federal lands within Nye County that borders the Ash Meadows National Wildlife Refuge. This proposal will protect the cultural, recreational, and biological resources of these lands, and specifically the water resources. He spoke to U.S. Senator Catherine Cortez Masto who supported these efforts with the communities in areas of Beatty, Amargosa, the Timbisha Shoshone Tribe, and Crystal, NV. The water in this basin flows into the Pahrump basin. This action will serve as a two-year pause once finalized. Upon an NSSAB member request, Liaison Jabbour continued that the county is monitoring a junior mining company from Canada that is interested in exploring drilling near Ash Meadows, an area where pupfish and nearly 25 endangered species of plant life are protected. The BLM will host a public meeting regarding these topics at the Amargosa Community Center on Thursday, February 27, 2025, at 5:30 p.m.

NCEM (*Scott Lewis*)

Liaison Scott Lewis greeted Chair Hilton and welcomed the new NSSAB members. He thanked the EM Nevada Program for keeping NCEM well informed regarding a motor vehicle incident that occurred close to Tonopah, NV, that DDFO Robert Boehlecke will update later during tonight's meeting. There were no serious or critical injuries sustained. On another item, he requested assistance for finding an airplane missing since January 2, 2025. The flight pattern was east of Amargosa, east of Beatty, across Goldfield, and toward the Tonopah Airport about 8.7 nautical miles southwest. Liaison Lewis noted that one of the concerns is the close proximity to the Tonopah Test Range (TTR). There is very little forensic or physical evidence to support the investigation in the search of this plane. NCEM has had numerous air and ground resources, including drones, from as far away as Idaho, California, Washington state assisting with the search, along with the Civil Air Patrol, National Guard, numerous volunteer groups, including K9 units. There is multiple jurisdictions involved, including North Las Vegas, City of Las Vegas, Nye County, and Esmeralda County. Liaison Lewis has asked anyone with truck routes or operations on the TTR to keep watch for this aircraft or anything that is out of the ordinary.

NRFFO (*John Klenke*)

Liaison John Klenke thanked the NSSAB for hosting meetings in rural locations, such as Pahrump, so citizens can attend that may not have the ability or the resources to attend meetings held in Las Vegas. As a reminder, he noted that the footprint of the NNSS is located entirely within Nye County.

NDEP (*Shantae Greene*)

Liaison Shantae Greene reported that NDEP continues to work with DOE to ensure the safe cleanup of the historic nuclear sites and the safe disposal of waste on the NNSS.

NNSA/NFO Update (Kathryn Knapp, Program Liaison for EM)

Ms. Kathryn Knapp noted that the NNSA/NFO is the landlord of the NNSS and partners with the EM Nevada Program in its environmental restoration and waste management missions. She updated that Dr. David Bowman recently retired, and that Betty Huck has assumed the leadership role as the NNSA/NFO Manager.

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

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

- **Industrial Sites Update:** The Industrial Sites team recently completed demolition of the two stacks and ventilation systems at the Engine Maintenance, Assembly and Disassembly (EMAD) Facility and continues both size reduction and packaging of the stacks along with HVAC waste. Work continues on the interior of EMAD, with characterization and final hazardous waste removal activities, preparing to start “Cold Side” demolition in 2025. The team continues to prepare the Building 3901 train shed interior for open air demolition this year. At Test Cell C, work has continued with removal of Dewar infrastructures and the demolition of Dewar 4 is largely complete. The demolition of Dewar 5’s work package has been finalized and will begin shortly, followed by work on the larger Dewars 1 and 2. Milestones were partially completed with Building 3901 train shed and still pending due to waste disposal issues/internal audit.
- **Internal Audit:** Navarro recently underwent an independent audit of its waste program as required. During that audit, there were some issues identified that amount to improper documentation, specifically its waste-related quality assurance compliance, documentation, and recordkeeping related to several recent shipments of waste to the Area 5 Radioactive Waste Management Complex (RWMC). All information points to no human health impacts, no permit violations, and no impact to landfill performance. There are no indications that any waste was shipped that should not have been, but records will need to be corrected to account for an overestimate of radionuclides. Navarro has brought in help to work on the situation and correct the issue that includes carrying out a root cause analysis and implementing a corrective action plan. This means that for now, at least, Navarro cannot dispose of low-level waste onsite until it takes corrective actions that are then verified by the EM Nevada Program. This, in turn, impacts Navarro’s ability to demolish and dispose of Building 3901 train shed. It is expected that Navarro will be recertified in the coming months.
- **Motor Vehicle Incident:** On January 9, 2025, at 7:30 p.m., a truck that left the NNSS enroute to the Idaho National Laboratory (INL) was involved in an accident with a recreational vehicle (RV) on U.S. Highway 95 northbound in Esmeralda County outside the Tonopah, NV. The truck was hauling an empty cask containing no waste. The cask and trailer stayed upright and appeared undamaged. The driver of the RV was life-flighted to Las Vegas with injuries. There is no contamination as a result of this incident. The truck was returning to Idaho from the NNSS after delivering a shipment of low-level waste that was approved for disposal through the normal approval process in compliance with the NNSS waste acceptance criteria. Another driver was dispatched to the accident scene to retrieve the cask and return it to INL. Nevada State Police witnessed the accident as troopers were involved in a traffic stop nearby that impacted the traffic flow and is believed to have contributed to the accident. These details are preliminary.

- **Underground Test Area (UGTA) Update:** The UGTA team has recently achieved key accomplishments including completion of the sampling of four wells in Area 20. This includes wells ER-20-12, ER-20-5-3, ER-20-7 and ER-20-4. The team has completed surface geophysical data collection and also the deployment of a remote data transmission network, the latter of which was featured in the EM Update last week that can be accessed [here](#). A focus area for UGTA is carrying out the projected drilling schedule in 2025.
- **Radioactive Waste Acceptance Program (RWAP):** Marilew Bartling, Navarro's RWAP manager, has been an important asset for the NSSAB in supporting Board members to provide much valued guidance for EM Nevada Program's waste acceptance efforts. Ms. Bartling recently announced her intention to retire. Through February 2025, she will be assisting with the transition of a new RWAP manager. The EM Nevada Program wishes her the best in her retirement and looks forward to introducing the new RWAP manager to the NSSAB in the coming months.
- **Acting EM-1 Chief of Staff:** Catherine Hampton, the deputy program manager for EM Nevada, has been asked to serve as the chief of staff for EM Senior Advisor Candice Robertson (EM-1) and Principal Deputy Assistant Secretary Jeff Avery (EM-2). This is a temporary assignment, but it speaks volumes as to her talents, abilities, and years of service to the EM Complex.
- **French Radioisotope Thermoelectric Generator (RTG):** The waste profile for the French RTGs from Lawrence Livermore National Laboratory has been submitted to NDEP for review.
- **New Hires:** Navarro has brought in several new folks in recent months. Scott Anderson has been hired as a Deputy Program Manager/Operations and Integrations Manager. Mike Wiskerchen will oversee waste management activities and Jeffy Gnoose will bring his waste engineering expertise to disposal operations at the site and Alfred Brock has joined Navarro's Quality Assurance team as a Quality Control Engineer.
- **DOE HQs Intergovernmental Conference:** The DOE HQs Intergovernmental Conference was held during the first week of December 2024 in Las Vegas. This conference provides a great opportunity for DOE and EM leaders to engage with stakeholders and Tribal leaders. DDFO Boehlecke spoke on two panels and Navarro organized and carried out a two-bus tour of the NNSS. The EM Nevada Program welcomed Jeff Avery (EM-2) to its offices and updated him on Program activities.
- **EM Site-Specific Advisory Board (EM SSAB):** The EM Nevada Program is preparing to host the EM SSAB National Chairs Meeting at the Molasky Corporate Center in Las Vegas in April 2025. Chair Mark Hilton and Vice-Chair Kevin Trainor will be representing the NSSAB at the board table with the chairs and vice-chairs of the other seven SSABs from across the nation. NSSAB members are welcome and encouraged to attend the meeting on April 23 and April 24, 2025, and the networking event on the evening of April 23, 2025. There will be additional information forthcoming.
- **STEM Grants:** Navarro has announced its community commitment grants supporting education in science, technology, engineering and math (STEM). This year Navarro committed almost \$24,000 in grants to this important endeavor. Navarro has committed more than \$61,000 to the STEM grants since inception that target communities in southern Nevada.

The STEM Grant recipients this year were:

- Wells Combined Schools from Elko County

- Tonopah Middle School in Nye County
- Carroll M. Johnson STEM Academy
- Coral Academy of Science Windmill
- Coral Academy at Nellis
- Las Vegas Academy of the Arts
- Montessori Visions Academy in LV

Post Closure Inspection Observation and Evaluation for Groundwater Sites – Work Plan Item #6 and for Industrial Sites and Soils Sites – Work Plan Item #7 (*Jackie Petrello, DOE*)

- **NSSAB – 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
 - NSSAB Members will observe post-closure inspections and provide an oral report at the April 16th NSSAB Meeting
 - Based on member reports, NSSAB recommendation is due in April 2025
- **NSSAB – Work Plan Item #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
 - NSSAB Members will observe post-closure inspections and provide an oral report at the June 18th NSSAB Meeting
 - Based on member reports, NSSAB recommendation is due in June 2025
- **Background**
 - Atmospheric and underground nuclear weapons tests were conducted at the NNSS between 1951 and 1992
 - Historic nuclear testing resulted in the contamination of some groundwater, surface soils, and industrial facilities
 - The EM Nevada Program is responsible for completing environmental corrective actions at these historic nuclear testing locations in accordance with the FFACO
- **Key Terminology**
 - FFACO – a regulatory agreement between federal agencies and the State of Nevada that identifies sites of historic contamination to be addressed by DOE and the U.S. Department of Defense
 - Corrective Action Site (CAS) – A site that has been identified as needing remediation
 - Corrective Action Unit (CAU) – A grouping of CASs that are similar in remediation technique, type of contaminants or proximity to each other
- **Closure Options**
 - Corrective actions must be considered when site conditions exceed a final action level
 - Possible Corrective Action Alternatives (CAAs) identified in the FFACO:
 - **Closure in Place** with use restrictions, as necessary
 - **Clean Closure** (removal of contaminants, no use restrictions)
 - **No Further Action**
 - CAAs evaluated based on general standards and remedy selection decision factors defined by the U.S. Environmental Protection Agency (EPA)
- **EPA General Standards**

- All CAAs must meet four general standards to be selected for further evaluation:
 - Protection of human health and the environment
 - Compliance with environmental cleanup standards
 - Control the source(s) of the release
 - Comply with applicable federal, state, and local standards for waste management
- **EPA Remedy Selection Decision Factors**
 - Only CAAs that meet the EPA general standards are scored on the remedy selection decision factors:
 - Short-term reliability and effectiveness
 - Reduction of toxicity, mobility, and/or volume
 - Long-term reliability and effectiveness
 - Feasibility
 - Cost
- **Groundwater Closure**
 - Corrective action is closure in place with monitoring and institutional control
 - Reasons for this corrective action:
 - Current groundwater contamination removal and stabilization technologies are not cost effective
 - Risk to groundwater user and the environment requires access to groundwater – prevent access – reduce the risk
 - FFAO, Appendix VI, Chapter 3, Section 3.2
- **Post-Closure Monitoring Program**
 - CASs that are closed in place under the FFAO require some form of reporting, maintenance, or inspections and are referred to as Post-Closure Monitoring sites that include:
 - Closed Soils Sites
 - Closed Industrial Sites
 - Closed Underground Test Area [UGTA] (groundwater) Sites
- **Sites Closed in Place under FFAO**
 - FFAO sites that have been closed in place have requirements for regular inspections and/or maintenance
 - Inspections and maintenance are required to ensure that any controls (posting, fencing, landfill caps, etc.) are maintained and are performing as designed
 - Controls and inspection requirements vary by site based on the potential hazards
 - Climate, weather events, animal burrows, and other factors may affect the controls over time
- **Monitoring and Inspections**
 - UGTA (Groundwater) Sites
 - Groundwater levels in approximately 50 wells per year are monitored
 - An additional 50 wells per year are inspected to ensure the well head is secure
 - Sampling is conducted annually in one well and samples are obtained from 29 wells every six years
 - UGTA (Groundwater) Sites - Annually
 - Verify Use Restrictions
 - Verify institutional controls
 - Determine groundwater usage on the NNSS and surrounding hydrographic basins

- Industrial and Soils Sites- Closed in Place
 - Over 160 surface sites on the NNSS require annual post-closure monitoring and inspections
 - An additional 20 sites require inspections on a three or five-year basis
 - Three sites require an additional inspection if precipitation exceeds one inch in a 24-hour period
- Typical inspections:
 - Posting and warning signs are present and legible
 - Land fill caps are free of large cracks
 - Other items that may affect the integrity of the site
- **Reporting Provide to NDEP**
 - Industrial and Soils Sites
 - Annual Non-RCRA CAU Post-Closure Inspection Report
 - UGTA (Groundwater) Sites
 - Post-Closure Annual Letter Report
 - Yucca Flat Post-Closure Sampling Report (every 6 years)
 - Rainier Mesa Post-Closure Sampling Report (every 6 years)
 - Frenchman Flat Post-Closure Sampling Report (every 6 years)
 - Post-Closure Presentation (every 12 years)
 - Frenchman Flat 5-year Evaluation Report
- **NSSAB Recommendations from August 2022**
 - Report observed burrowing animal and erosion activity on the checklist
 - DOE Response: burrowing animal and erosion activity documented any time that the use restriction controls could be affected
 - Provide separate cooling stations, other than vehicles and the labs, for the safety of the workers when performing sampling activities
 - DOE Response: Anticipated weather conditions are considered during planning, pre-field briefings, and tailgate safety briefings at the job site; worker safety is taken very seriously and planning for hot or cold weather is a key piece of preparation; when the NSSAB visit occurred, there were pandemic-related restrictions on the number of people in the air-conditioned sample trailer, which have since been lifted
 - Photograph observations at each site and include photos on the next version of the checklist and tag photos with GPS information
 - DOE Response: Photographs are taken at each site and inspected and utilized by the inspector on subsequent inspections; and while GPS coordinates are not associated with each picture, the site location, directions and any applicable details are associated with each picture
- **NSSAB Site Visits – Groundwater Sites (Work Plan #6)**
 - Two NSSAB members will have an opportunity to observe the Post Closure Inspections of **groundwater sites**:
 - UGTA Well Site – WW-C-1 sampled annually through 2026
 - Well site inspections conducted annually at sampling and water level monitoring locations
- **NSSAB Site Visits – Industrial Sites and Soils Sites (Work Plan #7) ***
 - Two NSSAB members will have an opportunity to observe the Post Closure Inspections of **Industrial Sites and Soils Sites**:
 - CAU 547 Miscellaneous Contaminated Waste Sites in Areas 2 and 3
 - CAU 568 Plutonium Dispersion Sites in Area 3

- CAU 383 E-Tunnel Muck Pile in Area 12
- CAU 139 Waste Disposal Sites (trenches) in Area 1
 - *substitutions may be made based on NNS activities or weather
- **Key Messages**
 - Environmental corrective actions are performed in accordance with regulatory agreements with the State of Nevada and national standards
 - Remediation strategies prioritize the protection of personnel, public health, safety, and the environment
 - Post-closure monitoring is conducted to ensure the long-term protection of the public
 - Use restrictions are implemented to prevent unauthorized access to or disturbance of areas where contamination remains above action levels
 - Site controls are customized for location, accessibility, land use, and contamination
- **Key Messages - Groundwater**
 - Annual monitoring focuses on groundwater system stability, well site integrity, and maintenance of institutional control
 - Six-year monitoring adds radionuclide measurements to assess contamination progression
 - Twelve-year evaluation assures monitoring is consistent with contaminant boundary forecast
- **NSSAB Path Forward – 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
 - NSSAB Members will observe post-closure inspections and provide an oral report at the April 16th NSSAB Meeting
 - Select two NSSAB members **tonight**
 - Time commitment for the onsite observation would be (1) full day
 - Proposed timeframe is the first week in March (targeting Tues., March 4) *
 - Based on member reports, NSSAB recommendation is due in April 2025
 - *substitutions may be made based on NNS activities or weather
- **NSSAB Path Forward – Work Plan Item #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
 - NSSAB Members will observe post-closure inspections and provide an oral report at the June 18th NSSAB Meeting
 - Select two NSSAB members **tonight**
 - Time commitment for the onsite observation would be (1) full day
 - Proposed timeframe is the first two weeks in April (Monday – Thursday in the weeks of March 31-April 3 or April 7-10) *
 - Based on member reports, NSSAB recommendation is due in June 2025
 - *substitutions may be made based on NNS activities or weather

In response to Board questions, the following clarifications were provided regarding the work plan presentation:

- It is the current assumption that the NNSA/NFO as the NNS landlord will assume long-term monitoring and inspections upon EM Nevada Program’s mission completion. The

remaining UGTA closure of the Pahute Mesa groundwater corrective action site is scheduled in the fiscal year 2029-2030 timeframe that will be followed by another year of transition. The EM Nevada Program has tasked Navarro with developing a transition plan that is already in progress to capture the professional personal knowledge of NNSS employees. The EM Nevada Program and Navarro are working closely with Ms. Knapp and her NNSA/NFO management and HQs to ensure that the funding will be in place. Long-term activities will continue as the NNSA/NFO is also a FFACO signatory. All these DOE entities are working closely with the DOE Office of Legacy Management (OLM) to share its experience and lessons learned as considerations of this eventual transition. The OLM provides long-term monitoring and inspections on DOE sites that do not have an established landlord, as an example, the closed sites on the TTR located on U.S. Air Force land were transferred to OLM.

- The EM Nevada Program does not revegetate corrective action sites unless it is a landfill that needs plants to stabilize the closure cap and prevent precipitation from reaching the waste.
- Opportunistic samples of tissue from roadkill, such as mule deer, big horn sheep, pronghorn antelope, mountain lions, and their kill sites, are collected to conduct data assessments of potential dose to a person consuming these animals. Collaborator studies are also conducted with the U.S. Fish and Wildlife Service. Biota monitoring is also performed on pinion pine nuts, other plants, birds and small animals. Although consumption of plants and animals contribute to a potential public dose, it is well below dose limits to members of the public. Detailed information on this topic is available to the public in the annual NNSS Environmental Report that can be accessed [here](#).
- There are NNSS sites that it is not feasible to remove all contaminants during remediation; therefore, the best course of action under the FFACO is negotiated with NDEP. **Clean Closure** is the removal of contaminants with no use restrictions, and **Closure in Place** is closure with use restrictions, as necessary. Post-closure monitoring and reporting required for each closed site is different based on the conditions and the closure documentation agreed upon by NDEP. Post-closure monitoring activities ensure that sites remain in the same condition as when closed under the FFACO. The assumption with closures is that the NNSS will remain under federal control for the seeable future.

Chair Hilton led Board discussion and requested NSSAB members that are interested in observing post-closure inspections in support of work plan items #6 and #7.

NSSAB members selected to observe post-closure inspections for **groundwater sites** (work plan item #6) are Members Lisa Blandi and Brandon Schmidt with Member Robert Blackstock as an alternate. NSSAB Members Blandi and Schmidt will provide an oral report on their observations at the April 16th NSSAB meeting.

NSSAB members selected to observe post-closure inspections for **Industrial Sites** and **Soils sites** (work plan item #7) are Members Robert Blackstock and Anntoinette Rivera with Members Lisa Blandi, John Cole, and Thomas Fisher as alternates. NSSAB Members Blackstock and Rivera will provide an oral report on their observations at the June 18th NSSAB meeting.

The NSSAB Office will support NSSAB members with any travel and planning logistics.

Annual Nevada National Security Site Environmental Report (NNSER) – Work Plan Item #2 (Tiffany Gamero, DOE)

- **NSSAB – Work Plan Item #2**
 - From a community perspective, the NSSAB will provide a recommendation for ways that Chapter 11 of the NNSER could be enhanced (i.e., readability, presentation of information, etc.)
 - NSSAB recommendation is due either tonight or during February 19, 2025, NSSAB Full Board Meeting
- **Discussion Topics**
 - Purpose
 - DOE Order (O) 231.1B, *Environment, Safety and Health Reporting* and 458.1, *Radiation Protection of the Public and the Environment* Requirements
 - Overview
 - Chapter 11
- **NNSER Purpose**
 - As required by DOE O 231.1B, prepared annually by Mission Support and Test Services, LLC (MSTS), the NNS management and operating (M&O) contractor
 - Working with MSTS, Navarro prepares EM input and coordinates EM Nevada Program review
 - Contains information on environmental program performance, site-wide environmental monitoring, and surveillance effectiveness
 - Documents compliance with environmental standards and requirements including the radiological protection requirements of DOE O 458.1
 - Mechanism for providing technical information and sampling results to the public living near DOE sites
 - Key component of DOE’s commitment to transparency and public understanding of DOE operations
- **DOE O 231.1B and 458.1 Requirements**
 - Summary of environmental data for calendar year that addresses:
 - Site environmental management performance, including
 - Effluent releases
 - Environmental monitoring*
 - Types/quantities of radioactive materials discharged to the environment*
 - Calculated Total Effective Dose to a representative member of the public
 - Calculated collective dose to public from exposure to radiation source
 - Environmental occurrences and responses reported
 - Compliance with environmental standards and requirements*
 - Significant site programs and efforts
 - Property clearance activities, including
 - Types, quantities, and summary of approved authorized limits
 - Results of radiological monitoring* and surveys of cleared property
 - Independent verification results
- **NNSER Overview**
 - Published annually in three volumes for the preceding calendar year: NNSER (15 chapters and two appendices), NNSER Summary, and NNSER Attachment A: Site Description

*EM Nevada Program contributes input

- National Nuclear Security Administration Nevada Field Office (NNSA/NFO) and EM Nevada Program groundwater sampling and monitoring activities discussed in Chapters 2 (Compliance Summary), 5 (Water Monitoring), and 11 (Environmental Corrective Actions)
- NNSA/NFO and EM Nevada Program Radioactive Waste Management and Radioactive Waste Acceptance Program (RWAP) activities included in Chapter 10 (Waste Management)
- EM Nevada Program laboratory quality control results for groundwater analyses are summarized in Chapter 14 (Quality Assurance Program)
- EM Nevada Program activities to characterize, remediate, close, and conduct post-closure monitoring of Underground Test Area (UGTA), Industrial Sites, and Soils corrective action sites are covered in Chapter 11
- **Chapter 11**
 - Objective: Summarize EM Nevada Program Activities
 - Provide updates and accomplishments on Federal Facility Agreement and Consent Order (FFACO) corrective action sites (CASs)/Corrective Action Units (CAUs) including UGTA and Industrial Sites/Soils sites
 - Current format established in the 2019 report
 - Chapter Introduction
 - Corrective Actions Progress
 - Corrective Action Sites – Active Investigations
 - UGTA
 - Industrial Sites
 - Corrective Action Sites – Post-Closure Activities
 - UGTA (by CAU)
 - Industrial Sites and Soils
 - EM Nevada Public Outreach
 - Content highlights included in NNSER Summary
- **Key Messages**
 - NSSAB input must be focused on Chapter 11 as it is the only chapter dedicated to EM Nevada Program environmental restoration mission activities
 - As the NNS lead, NNSA/NFO is primarily responsible for the activities covered in the other chapters
 - Seeking feedback and suggestions on:
 - Level and depth of technical information presented
 - Flow of information presented
 - Information gaps
 - Other input
- **NSSAB Path Forward– Work Plan Item #2**
 - From a community perspective, the NSSAB will provide a recommendation for ways that Chapter 11 of the NNSER could be enhanced (i.e., readability, presentation of information, etc.)
 - NSSAB recommendation is due either tonight or during February 19, 2025, NSSAB Full Board Meeting

The NSSAB was provided with copies of Chapter 11 of the NNSER to review in advance of the meeting, along with links to the most recent 2023 NNSER and a summary that both can be accessed [here](#).

Chair Hilton led Board discussion on work plan item #2 with the following proposed recommendations provided by members during the meeting on ways that Chapter 11 of the NNSER could be enhanced:

1. Provide a link to the FFACO in the reference section (*M. Hilton*)
2. Update the Navarro STEM grants information (*M. Hilton*)
3. Add a clarification of the terms “closure” and “post-closure” in the context of the FFACO (*K. Trainor*)
4. Strive for consistency in maps used in the NNS Environmental Report Summary to match the rest of the document (*L. Olson-Arzaga*)
5. Ensure that all locations referenced are included on the maps (*T. Fisher*)
6. Make some of the maps larger by splitting up onto multiple pages so the symbols can be delineated and clearly seen (*G. Elgort*)
7. Emphasize EM Nevada Program accomplishments earlier in the chapter (*L. Olson-Arzaga*)

After careful consideration and lengthy discussions, Chair Hilton decided to defer the above proposed recommendations to the next Full Board meeting on February 19, 2025. NSSAB members are asked to ponder these proposed recommendations and consider any additional enhancements to Chapter 11 of the NNSER prior to the February meeting. Ms. Gamero thanked the NSSAB for its interest and consideration regarding work plan item #2.

Other NSSAB Business (*Mark Hilton, Chair*)

Vice-Chair Kevin Trainor provided an update on the EM SSAB National Chairs Meeting that was held in Oak Ridge, TN, in September 2024. Chair Mark Hilton provided an update on the DOE EM National Cleanup Workshop held in Arlington, VA, in September 2024.

Meeting Wrap-Up and Adjournment

Upcoming calendar of events:

- LLW Stakeholders Forum – Molasky Corporate Center, virtual only at 1-3 p.m. (invite only) – February 6, 2025 (Member Lisa Blandi to attend)
- NSSAB Liaison Intergovernmental meeting – Molasky Corporate Center, Las Vegas, NV at 3 p.m. – February 19, 2025 (Chair Mark Hilton and Vice-Chair Kevin Trainor to attend)
- NSSAB Full Board meeting – Molasky Corporate Center, Las Vegas, NV at 4 p.m. – February 19, 2025
- Waste Management Symposia – Phoenix, AZ – March 9-13, 2025 (Member Lori Olson-Arzaga to attend)
- EM SSAB National Chairs Meeting – Molasky Corporate Center, Las Vegas, NV – April 23-24, 2025

Member Brandon Schmidt made a motion to adjourn the meeting. The motion was seconded and passed with a majority. The meeting was adjourned at 7:40 p.m.