



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

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### **Full Board Meeting**

**Frank H. Rogers Science and Technology Building  
755 East Flamingo, Las Vegas, NV  
4:00 p.m. – November 8, 2017**

- Members Present:** Amina Anderson, Arcadio Bolanos, Francis Bonesteel (Vice-Chair), Karen Eastman, Pennie Edmond, Raymond Elgin, Cecilia Flores Snyder, Charles Fullen, Dick Gardner, Donald Neill, Autumn Pietras, Steve Rosenbaum (Chair), Richard Stephans, Jack Sybolt, Richard Twiddy, Dina Williamson-Erdag
- Members Absent:** Michael Anderson, Michael D'Alessio, Edward Rosemark, William Sears
- Liaisons Present:** Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), Mark McLane (State of Nevada Division of Environmental Protection [NDEP]), Vance Payne (Nye County Emergency Management [NCEM]), Jonathan Penman-Brotzman (U.S. National Park Service [NPS]), Delon Winsor (Esmeralda County Commission)
- Liaisons Absent:** John Klenke (Nye County Nuclear Waste Repository Project Office [NWRPO]), Phil Klevorick (Clark County), Carol McKenzie (White Pine County Commission), Dan Schinhofen (Nye County Commission)
- Student Intern:** Anthony Graham (University of Nevada, Las Vegas [UNLV])
- Department of Energy (DOE):** Robert Boehlecke, Kelly Snyder (Deputy Designated Federal Officer [DDFO]), Bill Wilborn
- Facilitator:** Barb Ulmer (Navarro)
- Contractors:** Mark Krauss and Fred Dohse (Mission Support and Test Services, LLC); Brian Haight and Kaylyssa Hughes (Navarro); Jeff Sanders and Jeff Sanchez (U.S. Geological Survey [USGS])
- Public Signed In:** Chip Gribble (Richmond, CA), David G. Hermann (Las Vegas, NV)

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

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

## **Public Comment**

There was no public comment at this time, although there was public comment provided later in the evening.

## **U.S. DOE Update** *(Bill Wilborn, DOE)*

Mr. Bill Wilborn opened that field workers at Clean Slate II on the Tonopah Test Range are stockpiling contaminated soils on-site in preparation for a transportation campaign to ship and dispose at the Area 5 Radioactive Waste Management Complex (RWMC) at the Nevada National Security Site (NNSS). Waste shipments are scheduled to begin in late November or early December 2017.

Mr. Wilborn provided an update on recent groundwater sampling results for Well ER-EC-11. Final verification indicated results of 18,000 picocuries/liter, which is under the Safe Drinking Water Act. Well ER-20-11 is located off the boundary of the northwest section of the NNSS. This well is located on federally-owned, U.S. Air Force land and approximately 14 miles from the nearest public water supply.

Mr. Wilborn updated on the new mixed low-level waste (MLLW) cell at the Area 5 RWMC. Construction of the cell is scheduled to be complete by April 2018. The new MLLW cell will be operational before the current MLLW cell is filled; therefore MLLW shipments planned for the fiscal year will not be impacted.

Mr. Wilborn continued that an expected volume of 326,000 cubic feet of LLW from West Valley is to be disposed at the NNSS. The waste will be shipped by rail to a transfer location in Kingman, Arizona, rather than Parker, Arizona.

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

Mr. Wilborn noted that the Environmental Management (EM) Intergovernmental Meeting will be held November 15-16, 2017, in San Antonio, Texas. This is an annual meeting that includes local, county, state, and federal government officials.

Lastly, Mr. Wilborn reported on a Show Cause Meeting held today regarding a Notice of Alleged Violation (NOAV) issued to the NNSS by NDEP as a result of accepting waste containers from a generator and disposed as LLW. It was determined after disposal that the waste contained chromium. The generator self-identified to the NNSS and its state generators. Since discovery, there have been multiple meetings to discuss this issue. Meeting attendees detailed what happened, covered the current corrective actions both implemented by the generator and the NNSS, and discussed additional corrective actions for implementation in the future as lessons

learned. A draft plan for corrective actions is due to NDEP in January 2018. DDFO Kelly Snyder reminded the Board that updates were included in the NSSAB's Monthly Reports since July 2016 and are available for review on the NSSAB's website.

### **Liaison Updates**

#### **CGTO (*Richard Arnold*)**

Liaison Richard Arnold noted that the CGTO attended the RadWaste Summit in September 2017, which provided a positive experience for the tribes to hear different perspectives on radioactive waste. The EM Nevada Program and the Nevada Field Office (NFO) have been proactively interfacing with the tribes, which has been appreciated and the CGTO looks forward to a continued positive relationship. Liaison Arnold updated on the tribal revegetation project at the Area 5 RWMC. The EM Nevada Program has been hosting weekly meetings to update NDEP, the tribes, contractor staff, and DOE. A fall planting is scheduled for mid-December 2017. The project includes a blend of tribal practices and scientific approaches to revegetate the 92-Acre Area. Test plots have incorporated and will be used for the revegetation. A blend of seeds and plants have been ordered. The EM Nevada Program has issued a request for proposal for interested restoration contractors to work in tandem with the tribal revegetation committee. This committee will be providing cultural oversight on tribal techniques that will be incorporated in the restoration contractor's approach in order to bring balance back to the land. December 2017 and April 2018 plantings have been scheduled and will include traditional activities, such as land blessings and the monitoring of the growth and the activities during the entire process. Ecologists from the Desert Research Institute and ethno-ecologists from Portland State University will also be participating in the project. Liaison Arnold reported that the CGTO will be involved with the upcoming LLW Stakeholders Forum and also the EM Intergovernmental and State and Tribal Government Working Group meetings next week. A tribal planning committee has been implemented to streamline interactions between the tribes and DOE. The planning committee is developing a cultural awareness training that will be conducted in January 2018. Lastly, Liaison Arnold noted that planning is underway for the next annual meeting with the NFO in April 2018.

#### **Esmeralda County Commission (*Delon Winsor*)**

Liaison Delon Winsor had nothing to report.

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

Liaison Vance Payne thanked the EM Nevada Program staff for their support with planning in conjunction with the Local Emergency Planning Committee for the upcoming tabletop exercise. Since the closure of the Nye Regional Medical Center in Tonopah, Nevada, Liaison Payne reported that additional funding is being sought for ambulance services. Liaison Payne ended that he is looking forward to discussions with other stakeholders during the EM Intergovernmental Meeting next week.

#### **NDEP (*Mark McLane*)**

Liaison Mark McLane provided a follow-on to Mr. Wilborn's NOAV update that NDEP's priority is to ensure that the issue does not happen again in the future. On a weekly basis, Liaison McLane reported that NDEP staff have observed construction of the new MLLW, and the liner will be installed this week.

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

Liaison Jonathan Penman-Brotzman noted that his role as environmental protection specialist includes environmental, regulatory, and emergency services at Death Valley National Park (DVNP). The NPS and NCEM are collaborating on a Nye County All-Hazards, All-Risks agreement. The NPS is working on becoming more community-oriented by reaching out to its gateway communities. Liaison Penman-Brotzman updated that the Environmental Assessments (EA) for the Bonnie Claire road construction and the Scotty's Castle historical district rebuild resulting from the 2015 food disaster will be released for public review in the next few weeks. The NPS will be sending notifications for an EA to Cooperating Agencies regarding a joint U.S. Department of Defense Navy telecommunications site in the Panamint Range.

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

UNLV Student Intern Anthony Graham reported that his main goal is to be a contact between students in the UNLV community and EM Nevada Program activities. Recently, campus resources that he used for promoting these activities have been diverted to students' reactions in coping with the October 1 event. Student Intern Graham has continued to produce the monthly newsletters and include links to NSSAB educational sessions that has increased the number of YouTube views. Student Intern Graham stated that he is part of the planning team for the national conference for the National Council of Public History in April 2018. A tour of places with historical significance, including the NNSS, is being planned as part of the conference. Student Intern Graham is crafting the tour literature and the itinerary, and he opened it up to the NSSAB for suggestions.

### **Radioactive Waste Acceptance Program (RWAP) Assessment Process Improvement Opportunities (Work Plan Item #6)** (*Bill Wilborn, DOE*)

- **NSSAB Work Plan Item #6**
  - Provide a recommendation for ways to improve the RWAP assessment process by September 2018
    - Up to two NSSAB members are invited to observe a RWAP facility evaluation and present their observations to the Full Board
    - DOE will try to implement the September 2017 RWAP recommendation
    - Modules audited: Quality Assurance, Radiological Characterization, Chemical Characterization, Traceability, and Transportation
    - 3-day audits with five auditors plus two days travel for out-of-state generators
- **NSSAB Path Forward**
  - Up to two NSSAB members to observe an RWAP facility evaluation
  - NSSAB members report their observations to the Full Board by September 2018
  - Full Board provides a recommendation for ways to improve the RWAP assessment process by September 2018

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

- There is DOE travel reimbursement available for one NSSAB member each to attend two proposed audits or to send two NSSAB members to one audit.

Vice-Chair Frank Bonesteel made a motion to send two NSSAB members to observe the audit in Paducah, Kentucky, in this fiscal year. The motion was seconded and passed unanimously.

Members were asked to check their availability to attend the audit. The two members chosen to attend and observe the audit will be decided at the January 17, 2018 Full Board meeting. The members chosen will be responsible for providing an update during a Full Board meeting in order to develop a recommendation.

### **Core Library (Work Plan Item #2)** (*Bill Wilborn, DOE*)

- **NSSAB Work Plan Item #2**
  - From a community perspective, provide a recommendation to the EM Nevada Program on its preferred path forward for the Underground Test Area (UGTA) Core housed at the Mercury Core Library

### **Mercury Core Library and Data Center** (*Jeff Sanchez, USGS*)

- **Overview**
  - What is a “Core Library” and Why libraries exist
  - Location of the Mercury Core Library
  - History and purpose
  - Objectives and scope
  - Summary of available samples and hard copy records
  - Mercury Core Library webpage
  - Staffing and facility overview
  - FY 2017 utilization and report products
  - Closing comments
  - Questions
- **Core Library: The What**
  - What is a Core Library?
    - A dedicated facility established for the purpose of
      - Long-term storage, management, and utilization of geologic samples (e.g., cuttings/core samples)
      - Long-term storage of records that provide supplementary data and information on the geologic samples
      - Work space and support for research scientists and academia utilizing the samples and records
- **Core Library: The Why**
  - Why do Core Libraries exist?
    - Preserve the geologic record of the earth’s subsurface (e.g., pre-testing/post-testing impacts)
    - Document and expand the knowledge of geology, hydrogeology, geochemistry, impacts of testing, etc.
    - Provide invaluable information for important models and decisions
    - Represent a large investment in time, effort, and funding
    - Link to 38 core libraries listed on the USGS Core website
- **Mercury Core Library Location**
  - Mercury, NV, on the NNSS
  - 65 miles northwest of Las Vegas, NV
  - Physical address: Building A23-158 Mercury Highway

- **History and Purpose**
  - Extensive underground nuclear testing began in the late 1950s and early 1960s at the NNSS
  - The Atomic Energy Commission (predecessor to DOE needed a central geologic/data repository)
  - DOE/USGS Interagency Agreement
  - USGS continues to manage the Core Library
  - Same facility since 1962 (prior to 1997: six facilities)
- **Objectives and Scope**
  - Provide a long-term central repository for EM and National Nuclear Security Administration (NNSA) core/cuttings samples and historical borehole records
  - Provide technical support to DOE, national laboratories, contractors, and others who utilize the Core Library
  - Provide work space, materials, and support to personnel utilizing the Core Library
  - Fulfill requests from scientists and educators to display samples for examination and selection for on- and of-site analysis
  - Process cuttings, core, drilling core plugs, and composite samples for on- and off-site analysis
  - Maintain necessary equipment including a wet saw, core drill, sample dryer oven, microscopes, electric forklift, and stock picker forklift
  - Photograph new and archived core/cuttings samples (currently no funding available for archived samples)
  - Other: provide a base of field operations and logistical support for ongoing USGS field projects conducted on the NNSS (e.g., groundwater networks, biological studies, etc.)
- **Summary of Available Samples**
  - Core/cuttings boxes in storage
    - Total: 42,283
    - EM: 2,496 (6%)
    - NNSA: 39,787 (94%)
  - Total boreholes: 2,673 (over 2 million feet of drilled samples)
  - NOTE: No “Rad Contaminated” samples or Yucca Mountain samples in storage
- **Summary of Available Records**
  - Borehole history files: 5,902 boreholes
  - Historical aerial photos: ~20,000
  - Geophysical logs: estimated > 6,000
  - Maps: >1,000
  - Historical reports: >2,500
  - Over 150 file cabinets and storage bins in use
- **Mercury Core Library Website**
  - Available core/cuttings images: >34,900 (>560 boreholes)
  - Available thin-section images: >3,500 (>260 boreholes)
  - Databases available on the webpage
    - Site characteristic records, rock sample and lithologic description records, rock property records, fracture characteristic records, hydraulic property records
    - NNSA petrographic, geochemical, and geophysical data
  - Over 47,000 website visits in FY 2017

Reference Report: Wood, D.B., 2007, Digitally available interval-specific rock-sample data compiled from historical records, NNSS and vicinity, Nye County, Nevada (ver. 2.2, February 2017): U.S. Geological Survey Data Series 297.

- **Staffing Overview**

- Three full-time on-site staff
  - Core Library Manager (USGS)
    - Steward of NNSA and EM geologic samples and historical hard copy records
    - Supervisor managing and coordinating daily operations
  - Administrative Assistant (NNSS Management and Operating [M&O] Contractor)
    - Provides administrative, security, safety, and facility operations support
  - Teamster (NNSS M&O Contractor)
    - Provides warehouse, maintenance, sample management and processing, and inventory support
  - Other: two USGS Hydrologic Technicians
    - Maintain EM's well monitoring network

- **Facility Overview**

- Four facilities (~21,000 square feet [ft<sup>2</sup>])
  - Building 23-154: administrative/technician offices and hard copy records storage (~2,500 ft<sup>2</sup> ~12% footprint)
  - Building 23-156: EM core/cuttings storage warehouse, sample processing area, teamster office, and staging/display area (~4,000 ft<sup>2</sup> ~20% footprint)
    - Current EM core storage utilization: 43%
  - Building 23-158: NNSA core/cuttings storage warehouse, administrative office, and display area (~4,000 ft<sup>2</sup> ~20% footprint)
    - Current NNSA core storage utilization: 96%
  - Building 23-151: NNSA core/cuttings storage and equipment storage warehouse (~10,250 ft<sup>2</sup> ~48% footprint)
    - Current NNSA core storage utilization: 94%
  - Other: two 10 x 20 foot railcar boxes used for storage of unused core boxes, sample containers, and field equipment

- **FY 2017 Utilization**

- Received, processed, and added 101 boxes of core/cuttings to storage
- Pulled and photographed over 290 boxes of new and archived core/cuttings for the webpage
- Pulled over 450 boxes of core/cuttings for normal display and examination for
  - Global Security Program
  - UGTA Activity
  - National Security Technologies, Los Alamos National Laboratory (LANL), Lawrence Livermore National Laboratory (LLNL), Sandia National Laboratory (Sandia), University of Nevada, Las Vegas, Navarro, and seven visitor bus tours
- Shipped out core/cuttings samples from three boreholes for off-site analysis
- Averaged 50 technical, support, maintenance, and guest personnel visiting the Core Library each month
- Provided cuttings sample containers and core boxes to the Global Security Program for collection of samples in the field

- **Report Products**
  - Weekly, monthly, and annual reports summarizing Core Library operations were submitted to the USGS DOE Program Manager
- **Closing Comments**
  - The Mercury Core Library is an important and unique NATIONAL ASSET
  - Invaluable resource for maintaining, documenting, and expanding knowledge concerning geology, hydrology, and geochemistry of the NNSS and vicinity
  - Important to preserve the geologic record from an area impacted by nuclear testing
  - Crucial information for decisions concerning future utilization of NNSS sub-surface testing
  - Geologic samples and historical hard copy records are
    - One-of-a-kind and cannot be reproduced
    - Represent a large investment in time, effort, and funding
    - Complement each other when stored together and properly managed
  - Decisions affecting Core Library operations or changes in location needs to be a collaborative effort involving all stakeholders including EM, NNSA, National Laboratories, State of Nevada, USGS, and the public

### **Core Library ~ Work Plan Discussion** (*Bill Wilborn, DOE*)

- **Considerations Due to Change**
  - EM Nevada Program considering options for management of EM UGTA Core only
  - Considerations include
    - More requests for core in the past; less mission need in the future
    - Efficiencies in electronic data files/photographs
    - Past rental agreements for facilities may be less economical for the space needed
    - Need for new Occupancy Agreements
      - Economic impact to NNSA
      - Shared resources
    - Currently one location for all Core with one management and labor team
- **Path Forward**
  - From a community perspective, provide a recommendation to the EM Nevada Program on its preferred path forward for the EM UGTA Core housed at the Mercury Core Library

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

- All of the EM cores and cuttings have been photographed.
- The Mercury Core Library documents any requests to view both the EM and NNSA cores/cuttings, and information is available on each requester and the number of requests per year. Recently, there have been no requests to view the EM core. The results of any scientific research is not always shared with the Mercury Core Library; therefore is not included in the documentation.
- In ~1997, the primary users of the core, i.e. LANL, LLNL, Sandia, Defense Threat Reduction Agency, made the determination which samples were to remain long-term in the Mercury Core Library for future use versus samples that were disposed.
- Core library employees are currently digitizing the borehole records, which will eventually be available on a server for internal users, then reviewed for possible public release.



- EM core/cuttings are funded by the EM Nevada Program for environmental restoration purposes, and the rest are NNSA core/cuttings from drilled shot holes, exploratory holes, tunnels, etc.
- The management and maintenance of contaminated core/cuttings from post-shot or cavity samples were the responsibility of the organization who sponsored and conducted a nuclear test. These cores/cuttings would have been analyzed for radiological content and test impact by the sponsoring organization.
- The storage of the EM core at the Mercury Core Library is not a matter of national security.
- A construction of a new facility for EM core on the NNSA would probably not be a practical alternative from an economic standpoint, as there would be costs associated with construction of a new facility, cost of moving the samples, cost per square foot and fixed costs would remain the same, resources would be divided between two facilities, etc.
- For the past few years, the EM Nevada Program has considered renegotiating the contract for the Mercury Core Library and other EM facilities at the NNSA with a more serious review in the past six months. It is a different method of doing business that will take time for renegotiation. The storage costs are substantial, although the need for the EM core has diminished over the years as the EM mission is nearing closure with a final completion date in 12 years or in 2030.
- Once all EM cores/cuttings are digitized or photographed, the UGTA Activity probably would not require the physical samples to a large degree. For Pahute Mesa, the samples have undergone multiple characterization activities that have been included in the models. Any cuttings from new drilling activities would be analyzed and compared to other samples and included in the models. Storage of EM core off-site would take longer to access, but may be more economical in the long run.
- The EM Nevada Program or Mercury Core Library staff have not contacted or interacted with other core libraries as each has its own individual mission and objective of a central storage facility for samples.
- If an UGTA contractor wanted to analyze EM core, DOE pays the costs for that activity through the contract. If another agency wanted to analyze EM core, that agency would pay for the costs; however it is not a large revenue generator.
- The Mercury Core Library is owned by the federal government and the NNSA Management and Operating (M&O) contractor is responsible for the lease agreements.
- The EM Nevada Program's costs for the Mercury Core Library is about 50 percent. If the EM Nevada Program consolidated all its facilities into one facility off-site of the NNSA, the cost savings would be between 40-60 percent. If the EM core were housed in an off-site facility, the costs savings would just be for the Mercury Core Library.
- The EM Nevada Program is currently working with the M&O contractor on an occupancy agreement, and there is the option to request a need to renegotiate. If the EM Nevada Program decided to move its samples, it would just be the EM core/cuttings. As a result, the EM and NNSA core/cuttings would be in different locations. Since the majority of the labor resources are funded by the EM Nevada Program, NNSA may need to acquire additional labor to manage its samples.
- If the EM Nevada Program moved its core/cuttings to an off-site facility, it would remain a fully functional core library.
- The EM Nevada Program has reviewed its EM core/cuttings and is looking to downsize by disposing duplicate samples.

Vice-Chair Bonesteel made a motion that DOE provide additional information regarding the costs of rental currently at the NNSS, the timeline that DOE wants to make a decision on this activity, the accessibility/suitability of the current facility, and whether the EM cores/cuttings are actually needed or not in the Mercury Core Library. The motion was seconded and passed with a majority.

### **Public Comment**

The following public comment was provided by Chip Gribble from Richmond, CA: I wanted to make a comment on the last conversation about the core records. I am a retired regulator cleaning up contaminated sites for the State of California; so I have done this for a while. Regarding the core records, I think that the question that I would consider is not so much whether there is a need, but is there a value to those. The value is that those provide part of the answers to questions about contamination. The answers is something that we as a society are paying a lot of money for, and those questions will be asked over and over again for as long as we have a society. We should want to preserve the record of answers. The cores are not necessarily the key part of the answers, because that is supposed to be in the paper document. But this is an unusual site in that the contamination is so deep, you are talking about hard rock, and those are expensive samples to collect. That is what is different from most other contaminated sites. I think that the question is whether there is a value, and there is, and is it worth preserving and how much effort should we as a society go to preserve that part of the record. That is the answer that we are all working on here.

### **Internal Peer Review Process Improvement (Work Plan Item #3)** *(Bill Wilborn, DOE)*

- **NSSAB Work Plan Item 3**
  - From a community perspective, the NSSAB will provide recommendations as to how the UGTA internal peer review process could be enhanced
    - NSSAB members are invited to observe an Internal Peer Review and present their observations to the Full Board by September 2018
- **UGTA's Planned Path Forward for Pahute Mesa Internal Peer Reviews**
  - Review water balance analyses (discharge, boundary, recharge, and chemistry)
  - Corrective Action Investigation Plan revision kickoff meeting – develop schedule for Internal Peer Reviews
  - Multiple Internal Peer Reviews to follow – not yet scheduled
- **What to Expect**
  - Very technical exchange between the UGTA Leads and committee members
  - Not a rubber stamp of approval
  - Sessions held in Las Vegas, Nevada and may include conference calls
  - Each session usually lasts between 3 and 5 hours
  - Dates typically not set more than 30 days in advance
  - Agendas are set based on what needs to be accomplished
  - Each session has a different subject matter – very dynamic dialogue/debate
- **NSSAB Path Forward**
  - When schedule is set, choose members to observe UGTA Internal Peer Review sessions
  - Members attending UGTA Internal Peer Review sessions will provide timely written updates after each session that will be emailed to the NSSAB
  - Provide a recommendation by the Full Board as to how the UGTA internal peer review process could be enhanced by September 2018

Regarding this work plan item, the NSSAB Office will notify the Board once dates have been set for the Internal Peer Reviews for Pahute Mesa.

### **Community Analysis – Work Plan Item #7** (Kelly Snyder, DOE)

- **EM Nevada’s Objective**
  - Better understand the level of interest and concern that communities near the NNSS have regarding EM activities
    - For this purpose, *community* is defined as the geographic locations near the NNSS
  - NSSAB’s recommendation will help determine what needs to be communicated, how to communicate it, and how often
  - Evaluating outreach efforts is subjective, and there is no measurable way to determine if outreach efforts are successful
    - Involving the NSSAB may provide new, useful information to better shape the EM Nevada outreach program
- **NSSAB Work Plan**
  - The NSSAB will develop a plan for gathering information from fellow community members regarding their EM interests and to gauge their level of concern regarding these activities
  - The NSSAB will provide a recommendation for how the EM Nevada Program could shape its outreach based on the results of the community feedback
  - Final recommendation is due July 2018
- **Tonight’s NSSAB Objective and Near Term Activities**
  - Determine if this work plan will be led by the Full Board or through a committee
    - A committee is limited to 9 members or less
  - The Full Board or Committee will then need to develop a plan that covers the following:
    - Determine what needs to be gathered from the community
    - Determine how members will gather that information
    - Develop a schedule
    - Determine how this information will be consolidated and presented to the EM Nevada Program
  - EM Nevada Program will need to review the plan before any official community outreach is conducted
- **EM Nevada’s Active Outreach Program**
  - NSSAB
  - Open Houses
  - Fact Sheets
  - Websites
  - Exhibits
  - Operation Clean Desert
  - Community Conversations
  - Social Media
- **Five Reasons for Low Attendance/Little Involvement**
  - *Unaware*
    - The message is not reaching the community
  - *Uninterested*
    - The subject is not of interest or additional information is not wanted

- *Unavailable*
  - People are too busy
- *Unconcerned*
- *Unappealing*
  - The subject is too complex or poorly communicated
- **Considerations When Conducting Outreach**
  - What does the community want to know vs needs to know?
    - Example: DOE has an active groundwater monitoring program (wants to know) vs there is a near-term risk to the public (needs to know)
  - Will the outreach cause unnecessary fear of negative attention?
    - Example: There must be something wrong if effort is being put into explaining this to the community
    - Consideration: nuclear-related items have a negative stigma
  - Complex subjects require balancing highly advanced sciences with understandable explanations
  - Resources and financial impacts
  - Often there is a small set of community members who want others to care as much as they do about a specific topic
    - The loudest voice in the room gets the most attention but does not always represent the entire room's viewpoints
- **Tonight's NSSAB Objective and Near Term Activities**
  - Determine if this work plan will be led by the Full Board or through a committee
    - A committee is limited to 9 members or less
  - The Full Board or Committee will then need to develop a plan that covers the following:
    - Determine what needs to be gathered from the community
    - Determine how members will gather that information
    - Develop a schedule
    - Determine how this information will be consolidated and presented to the EM Nevada Program
  - EM Nevada Program will need to review the plan before any official community outreach is conducted

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

- The main goal for this work plan item is for the NSSAB to poll their communities to determine what is most important to each community in regard to EM Nevada Program activities (groundwater, waste disposal, transportation, etc.), and how communities would like to receive messaging from DOE.
- NSSAB liaisons and members of the public may serve on a committee for this work plan item.

Member Richard Twiddy made a motion to form a committee to develop a plan for this work plan item and bring back to the Full Board for approval and implementation. The motion was seconded and passed with a majority.

The Board discussed that the Community Analysis Committee should include a diverse representation of the communities involved on the NSSAB. Volunteers included Amina Anderson (Beatty, NV), Arcadio Bolanos (Las Vegas, NV), Frank Bonesteel (Pahrump, NV), Anthony Graham (UNLV Student Intern), Steve Rosenbaum (N. Las Vegas, NV), Cecilia Flores Snyder

(Las Vegas, NV), Richard Stephans (Boulder City, NV), and Richard Twiddy (Mesquite, NV). Liaisons Arnold and Penman-Brotzman volunteered as advisors. The NSSAB Office will contact Edward Rosemark (Panaca, NV) and Mike Anderson (Goldfield, NV) to see if they are interested in participating on the committee. The NSSAB Office will poll committee members for the most convenient meeting date, and then schedule the date, time, and location of the first meeting. The committee chair will be elected at this first meeting.

#### **45-Day Review** (Rob Boehlecke, DOE)

- **45-Day Review**
  - NV-02 - Evaluate Planned Closure (status) of EM Nevada Landfill in 2030
  - NV-03 - Optimize Selection of Groundwater Monitoring Well Sites
  - NV-04 - Perform Analysis to Determine Need for EM Nevada Treatment Facility
  - Nevada will also contribute to several EM HQ level reviews including looking at potential changes/updates to the way we interact with Site-Specific Advisory Boards and looking at grants and fee agreements
  - NV-01 - Modify Regulatory Strategy to Allow Incremental Turnover of Closed Sites
- **NV-01 – Modify Regulatory Strategy to Allow Incremental Turnover of Closed Sites**
  - What is the actual decision EM Nevada Program is pursuing
    - The decision statement is: Should EM Nevada Program pursue a change in regulatory strategy to allow for some of the closed sites to be turned over to the Office of Legacy Management (OLM) prior to closure of all EM Nevada Program Federal Facility Agreement and Consent Order (FFACO) sites (currently planned for ~2030)
    - Initial analysis led to further refinement and we are now concentrating on the sites on the Nevada Test and Training Range (NTTR) that are accessed through the Tonopah Test Range
- **Partners for NV-01**
  - EM Nevada Program
  - NNSA
  - DOE's OLM
  - Sandia National Laboratory
  - U.S. Air Force
- **Next Steps for NV-01**
  - ~December 2017: complete 45-day decision paper and gain EM HQ approval
  - ~December 2019: complete all remaining FFACO investigation and closure work for sites to be turned over
  - Date to be determined (likely in FY 2020 or beyond): complete all administrative actions to turn over sites to OLM

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

- The first corrective action unit that went into closure on the NTTR was Double Tracks a couple of years ago. This site was clean closed, leaving no contamination; therefore there is not a need to turn this site over to OLM for long-term monitoring. The majority of the 11 sites on the NTTR that required long-term monitoring are landfills.
- For closed sites on the NNSS, the EM Nevada Program plans to continue post-closure monitoring until 2030 when the EM mission is complete. At that time, NNSA will still be conducting mission work and will probably assume any long-term monitoring and actions for these closed sites.

- OLM is an office within the DOE that manages closed DOE sites across the country. In Nevada, the Central Nevada Test Area and Shoal sites have been managed by OLM since 2006. NDEP is the regulatory authority for these two sites under the FFACO.

Mr. Boehlecke concluded that the Board will receive updates on NV-01 as the EM Nevada Program goes through the process. Updates on the other 45-day review items will also be provided as new information becomes available.

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

From October 16 – 19, 2017, Chair Rosenbaum, Vice-Chair Bonesteel, and Member Rosemark attended the fall EM SSAB National Chairs' Meeting hosted by the Hanford Site in Kennewick, Washington. Vice-Chair Bonesteel read a written update from Member Rosemark who was unable to attend the meeting. A highlight from the Hanford tour was the B Reactor that has been designated by the U.S. Park Service to the National Register of Historical Places. Chair Rosenbaum added that attendees received an update on the EM Program nationally. Chair Rosenbaum noted that he will be collaborating with the Northern New Mexico Citizens' Advisory Board on a national recommendation regarding infrastructure and transportation at the next EM SSAB National Chairs' Meeting.

The Waste Management Symposia is scheduled for March 18-22, 2018, in Phoenix, Arizona. The conference management for attendance has not been approved at this time, although DOE would like to begin preliminary planning for two NSSAB members to attend the conference. Chair Rosenbaum and Member Chuck Fullen volunteered to attend with Member Flores Snyder as the first alternate and Vice-Chair Bonesteel as the second alternate.

Eight letters were provided to Board members for informational purposes:

- NSSAB Recommendation for Proposed Changes to Long-Term Monitoring for Industrial and Soils Sites (FY 2017) – dated August 16, 2017
- DOE Response to NSSAB Recommendation regarding Proposed Changes to Long-Term Monitoring for Industrial and Soils Sites (FY 2017) – dated September 27, 2017
- NSSAB Recommendation for RWAP Assessment Improvement Opportunities (FY 2017) – dated September 20, 2017
- DOE Response to NSSAB Recommendation regarding RWAP Assessment Improvement Opportunities (FY2017) – dated October 16, 2017
- NSSAB Recommendation for Groundwater Communication Activities (FY 2017) – dated August 16, 2017
- DOE Response to NSSAB Recommendation regarding Groundwater Communication Activities (FY 2017) – dated October 12, 2017
- NSSAB Recommendation for Communication Improvement Opportunities (FY2017) – dated September 20, 2017
- DOE Response to NSSAB Recommendation regarding Communication Improvement Opportunities (FY2017) – dated October 11, 2017

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

Upcoming calendar of events:

- LLW Stakeholder Forum in Las Vegas – November 9, 2017

- Community Conversations in Tonopah, NV – December 12, 2017
- NSSAB Educational Session in Beatty, NV – January 17, 2018 starting at 3 p.m.
- NSSAB Full Board Meeting in Beatty, NV – January 17, 2018 starting at 4 p.m.

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

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

Meeting adjourned at 8:10 p.m.