



Nevada Site Specific Advisory Board (NSSAB)

Full Board Meeting

**Frank H. Rogers Science and Technology Building
755 East Flamingo Road, Las Vegas, NV
5:00 p.m. – March 16, 2016**

Members Present: Amina Anderson, Michael D'Alessio, Pennie Edmond, Donna Hruska (Chair), Janice Keiserman (Vice-Chair), Michael Moore, Donald Neill, Steve Rosenbaum, Edward Rosemark, William Sears, Thomas Seley, Jack Sypolt, Cecilia Flores Snyder, Francisca Vega

Members Absent: Michael Anderson

Liaisons Present: Christine Andres (State of Nevada Division of Environmental Protection [NDEP]), Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), John Klenke (Nye County Nuclear Waste Repository Project Office [NWRPO]), Phil Klevorick (Clark County),

Liaisons Absent: Frank Carbone (Nye County Commission), Ralph Keyes (Esmeralda County Commission), Jonathan Penman-Brotzman (U.S. National Park Service [NPS])

Department of Energy (DOE): Robert Boehlecke, Jhon Carilli, Tiffany Lantow, Kelly Snyder (Deputy Designated Federal Officer [DDFO]), Scott Wade, Bill Wilborn

Navarro (Contractor): Kaylyssa Hughes, Dona Merritt, Ken Rehfeldt

**Desert Research Institute:
(Contractor):** Chuck Russell

Facilitator: Barb Ulmer (Navarro)

Public Signed In: Debbie Dwelle (Pahrump, NV), Anthony Graham (University of Las Vegas, Nevada [UNLV]), Harry Greene, Darrell Lacy (NWRPO), Irene Sanzare (Nye County Emergency Management), Bill Stremmel (Pahrump, NV),

Open Meeting/Chair's Opening Remarks

Chair Donna Hruska opened the meeting by requesting if there were any additional agenda items. Member Michael D'Alessio requested that an agenda item be considered for the Board to discuss the addition of a liaison from Nye County Emergency Management. Vice-Chair Janice Keiserman moved to approve the agenda as amended. The motion was seconded and passed unanimously.

Public Comment

There was no public comment.

U.S. DOE Update (*Scott Wade, DOE*)

Mr. Scott Wade opened by providing a budget update. For fiscal year (FY) 2016, the budget for Environmental Management (EM) activities at the Nevada National Security Site (NNSS) was enacted for \$62.38 million, which is generally level with the prior FY. For FY 2017, the President's budget for EM activities at the NNSS was for \$62.176 million, again similar to prior FYs. FY 2017 proposed funding level will allow the Nevada Field Office (NFO) to continue progress toward EM remediation activities for soils, groundwater, and waste management. Tonight, the NSSAB will provide its perspectives and recommendations for FY 2018 baseline prioritizations as the Federal government starts the budget planning process almost two years in advance. Mr. Wade continued by informing the Board that he will take the NSSAB's FY 2018 baseline prioritizations determined this evening and utilize them when he internally defends NFO's budget request with EM Headquarters (HQs) in late April 2016.

Mr. Wade reported that since the beginning of FY 2016, the NNSS has received 372,000 cubic feet of low-level waste (LLW) and 27,000 cubic feet of mixed LLW (MLLW) in 460 truck shipments. In March 2016, the NNSS is expecting 116,000 cubic feet of LLW/MLLW. Summer is the peak time for waste shipments to the NNSS.

Mr. Wade updated that drilling at Well ER-20-12 at Pahute Mesa started in early October 2015 and was completed in early January 2016. Drilling also has been completed at two additional wells at Yucca Flat. The drilling of these wells has been difficult with challenges both with safety issues as well as with the geology of the area. There have been no serious injuries while performing these drilling activities.

Mr. Wade continued that two trainings for Public Information Officers (PIO) were conducted early this calendar year. These trainings included sessions from DOE's national Transportation Emergency Preparedness Program (TEPP). TEPP has trained over 600 first responders since 2014 in 60 classes in 25 cities within Nevada. In June 2016, a follow-on tabletop exercise will be conducted for PIO to practice communications during a mock emergency that involves a LLW radioactive incident.

In FY 2016, Mr. Wade noted that there has been a number of meetings that the Department has and will participate to provide transparency and opportunities to share different viewpoints and perspectives with stakeholders. The NFO participated in the Waste Management Symposia in March 2016. The NFO will also participate in the National Transportation Stakeholders Forum in June 2016. NDEP, Clark and Nye County are invited to present on its perspectives on LLW shipment and disposal at the NNSS. In September 2016, the NFO will participate in the

RadWaste Summit and National Cleanup Workshop to provide further opportunities for interaction and communication of the EM Program. The NFO will be meeting with representatives of the CGTO to have a dialogue to obtain their unique perspectives on the revegetation at the closed area at the Area 5 Radioactive Waste Management Complex (RWMC).

Mr. Wade went on to update the Board that the first meeting of the newly formed LLW Stakeholder Forum was held in February 2016 in order for intergovernmental agencies to discuss and exchange information regarding the shipment and disposal of LLW at the NNSS. This group will meet on a quarterly basis and the next meeting is scheduled for May 11, 2016. Quarterly transportation reports with information on each waste shipment to the NNSS are available to the public on the NFO website at <http://www.nv.energy.gov/emprograms/wastevolumes.aspx>.

Mr. Wade stated that Christine Gelles, Acting Assistant Secretary for Waste Management at EM HQs, will be leaving the Department.

In response to a Board question, Mr. Wade provided the following clarification:

- With the reduction in funding from FY 2016 to FY 2017, the NFO will still be able to address environmental restoration and waste management activities included in the baseline for the NNSS without any substantive reduction due to the fact that EM activities are being completed and heavy equipment has been procured for the Area 5 RWMC. In this manner, the NFO strives to be a good steward of the taxpayer dollar as activities continue to be completed at the NNSS.

Liaison Updates

Clark County (*Phil Klevorick*)

Liaison Phil Klevorick encouraged the public to be involved with activities that Mr. Wade mentioned in his update, i.e. the PIO tabletop exercise and the LLW Stakeholder Forum. Liaison Klevorick reported that the final Greater-Than-Class-C (GTCC) Environmental Impact Statement (EIS) was released by DOE in February 2016. Clark County and the NSSAB had provided comments during the public comment process in June 2011. It was DOE's determination that GTCC waste will not be disposed at the NNSS. Clark County favored this decision as it was the opinion that there are better solutions for GTCC waste. He concluded by giving kudos to the NFO for its publication, the 65th Anniversary Souvenir Edition, which provides a good historical account of the NNSS. In January 2016, Liaison Klevorick mentioned that the Clark County Commission presented the NNSS with a special proclamation honoring the Site's 65th anniversary.

CGTO (*Richard Arnold*)

Liaison Richard Arnold noted that EM HQs worked closely with the tribes to develop and include tribal text in the GTCC EIS. As a result, EM HQs has adopted the model for including tribal text in future DOE EISs. Under the CGTO that represents 16 different tribes, a committee has been appointed to participate in a meeting with the NFO to discuss recommendations and solutions for the revegetation efforts at the Area 5 RWMC. It shows and reaffirms the commitment that the NFO has working with the CGTO to preserve the resources at the NNSS. The CGTO has been working closely with EM HQs on the State and Tribal Working Group and will be holding its next meeting in May 2016. There have been staff changes with the retirement of a National Nuclear Security Administration (NNSA) Federal employee who worked closely with the CGTO as the National Environmental Policy Act Compliance Officer and manager for the American Indian Consultation Program. This position has recently been filled for NNSA-issues, and Bill Wilborn will

be the point of contact with the CGTO for EM-related activities. Lastly, Liaison Arnold respectfully asked to be invited to future LLW Stakeholder Forum meetings.

NWRPO (*John Klenke*)

Liaison John Klenke congratulated the NSSAB on its membership recruitment drive as he noticed advertising on the Nye County electronic sign, the Pahrump newspapers, and on a television interview on Pahrump Channel 46 with Chair Hruska and Member D'Alessio.

NDEP (*Christine Andres*)

Liaison Christine Andres also mentioned that she heard advertising for the NSSAB membership recruitment drive on KNPR radio. At the January 20th NSSAB meeting, she had announced that the permit modification for a new MLLW cell was due to NDEP on March 15, 2016. Since that meeting, it was discovered that the schedule was put together based on the new permit request that was made over five years ago. NDEP operates under a different process for a new permit versus a modification to an existing permit. NFO will be adjusting the time frame, and NDEP anticipates receiving the permit modification in the November 2016 to February 2017 time frame. State and local NDEP representatives also attended the Waste Management Symposia, and internal meetings were held to discuss waste streams that are entering the State of Nevada with NFO and DOE/EM HQs. On a local level, NDEP continues to oversee soils and groundwater activities at the NNSS.

Fiscal Year 2018 Baseline Prioritization – Work Plan Item #8 (*Robert Boehlecke, DOE*)

- **Tonight's Path Forward**
 - [Baseline briefing](#)
 - The ranking process
 - Description of each task
 - Group discussion
 - Individuals rank tasks
 - Tallying of prioritizations
 - Vote on final recommendation
- **Environmental Management (EM) Baseline Definition**
 - Tool that provides for life-cycle planning and execution of a mission
 - Includes scope of work, cost estimates, and schedule
 - Elements are fully integrated
- **EM Baseline Components**
 - Scope of Work – the description of all work elements that need to be accomplished
 - Cost Estimates – the estimated cost, number of hours, and type of labor resources, material, equipment, etc.
 - Schedule – timeline and prioritization of work to be completed that identifies predecessor/successor tasks
- **EM Baseline Planning Considerations**
 - Annual Funding
 - Approved fiscal year budgets
 - Scope prioritized to maximize the amount of work that can be accomplished
 - Resource Availability
 - Weather Conditions
 - Risk Analysis
 - Uncertainties built into baseline

- **EM Baseline Status and Changes**
 - EM Contractors report monthly performance status to Nevada Field Office (NFO)
 - Baseline changes are made when scope is added, deleted, or modified
 - NFO Change Control Board meets monthly to discuss and approve/disapprove all proposed changes
- **EM Project Baseline Summaries**
 - NFO EM program separated into three Project Baseline Summaries (PBSs) as follows:
 - Soil and Water Remediation (PBS VL-NV-0030)
 - Soils, Underground Test Area, Industrial Sites, and Program Management (includes NSSAB support)
 - Operate Waste Disposal Facility (PBS VL-NV-0080)
 - Low-Level Waste (LLW) and Mixed LLW (MLLW)
 - Nevada Community and Regulatory Support (PBS VL-NV-0100)
 - Agreements in Principle and Grants
 - PBS designations are consistent across the DOE EM complex
- **EM Life-Cycle Baseline for Fiscal Year (FY) 2016 – 2030**

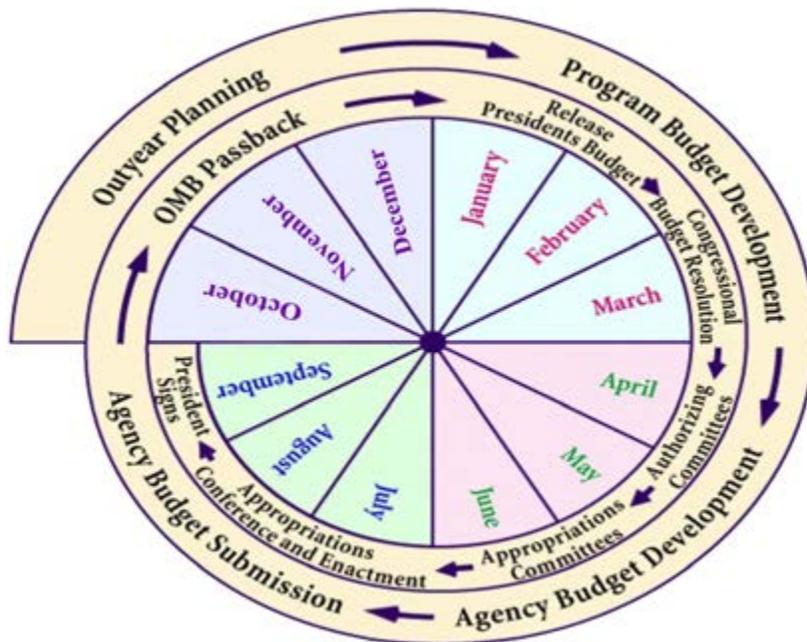
Scope	Planning Estimates (\$K)	Schedule Completion
Soils	\$55,979	FY 2021
Underground Test Area	\$344,297	FY 2030
Industrial Sites	\$76,286	FY 2030
Program Management	\$108,737	FY 2030
Low-Level Waste	\$418,175	FY 2030
Agreements in Principle and Grants	\$74,536	FY 2030
EM NFO Grand Total	\$1,078,010	FY 2030

- **Federal Budget Process**



- Example of DOE budget planning timeline

- **Federal Budget Cycle**



- **NFO Budget Process**

- NSSAB Recommendation – March 2016
 - Budget Guidance Issued by EM Headquarters (HQ) to Field Offices – March 2016
 - DOE Response to NSSAB – April 2016
 - NFO Budget Briefing Presented to EM HQ – April 2016
 - Integrated Priority List Submitted to EM HQ – April 2016
 - Office of Management and Budget (OMB) Budget Decisions Issued – August 2016*
 - Final DOE Budget to OMB – September 2016*
 - OMB Passback – December 2016*
 - President’s Budget to Congress – February 2017*
- *Based on last fiscal year planning

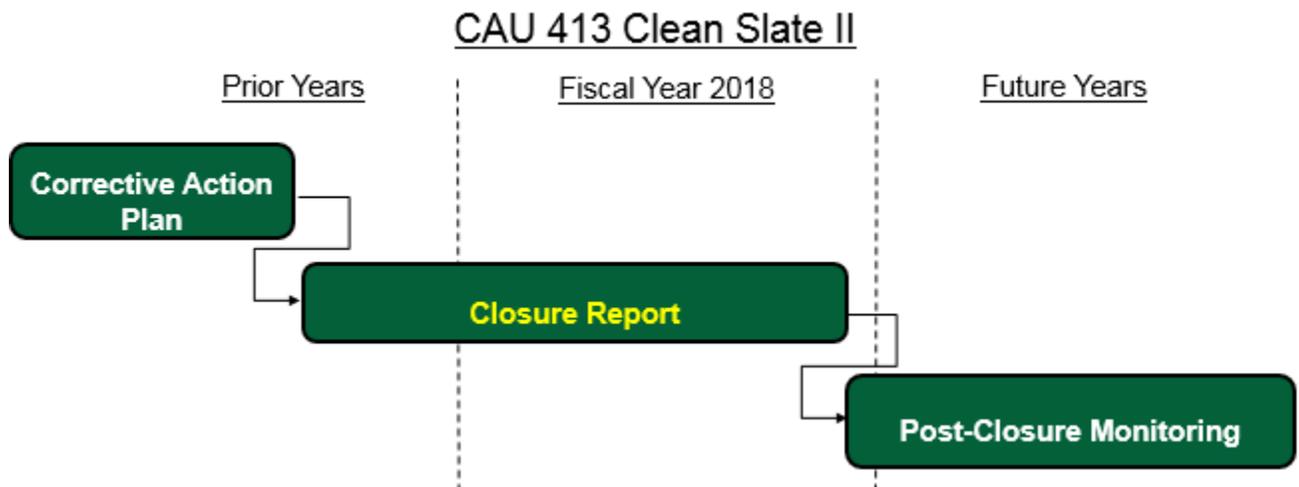
- **Tonight’s Path Forward**

- Baseline briefing
- The ranking process
- Description of each task
- Group discussion
- Individuals rank tasks
- Tallying of prioritizations
- Vote on final recommendation

- **The Ranking Process**

- Presentation of each of the 9 tasks
 - Each task has been assigned a letter
 - Tasks are either individual items or groupings of items
- Group discussion with members and liaisons
- Each member will rank the tasks with 1-9 points using their worksheet

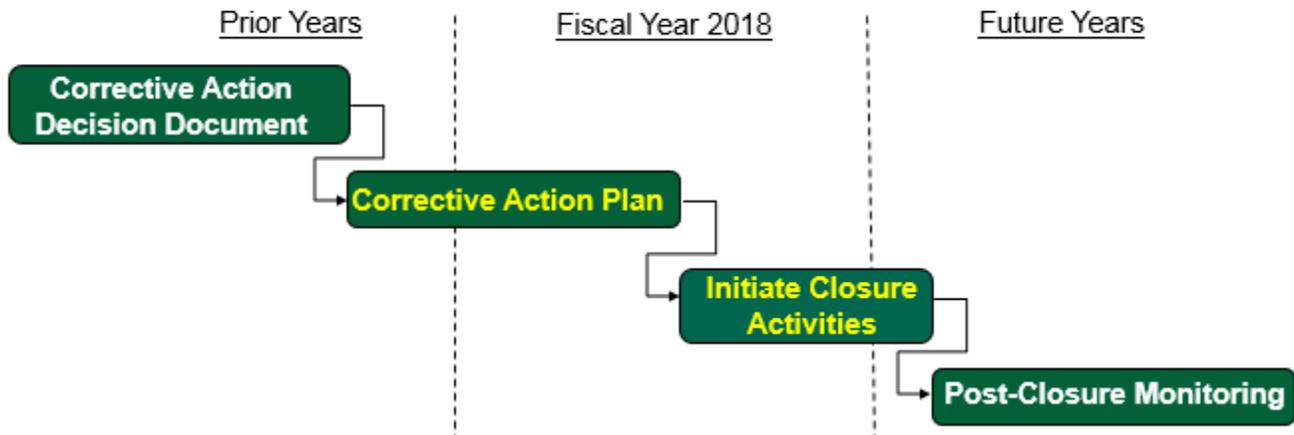
- 9 points being highest priority and 1 point being lowest priority
 - NSSAB Office will tally the rankings and present the results to the Full Board tonight
 - Further discussion, if necessary
 - NSSAB will vote on final ranking recommendation
- **Tonight's Path Forward**
 - Baseline briefing
 - The ranking process
 - [Description of each task](#)
 - Group discussion
 - Individuals rank tasks
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 - Vote on final recommendation
- **Task – A ~ Off-Site Soils – Two Corrective Action Units (CAUs)**
 - CAU 413, Clean Slate II Plutonium Dispersion (located on the Nevada Test and Training Range [NTTR])
 - Complete Closure Activities (includes preparation of closure report)
 - Continue Soils Studies (air monitoring)
 - Risk/consequences if task not completed: agreements and schedules with U.S. Air Force and State of Nevada Division of Environmental Protection (NDEP) would be affected



- **Task – A ~ Off-Site Soils – CAUs (continued)**
 - CAU 414, Clean Slate III Plutonium Dispersion (located on the NTTR)
 - Complete Corrective Action Plan and submit to NDEP and initiate closure activities
 - Continue Soils Studies (air monitoring)
 - Risk/consequences if task not completed: agreements and schedules with U.S. Air Force and NDEP would be affected

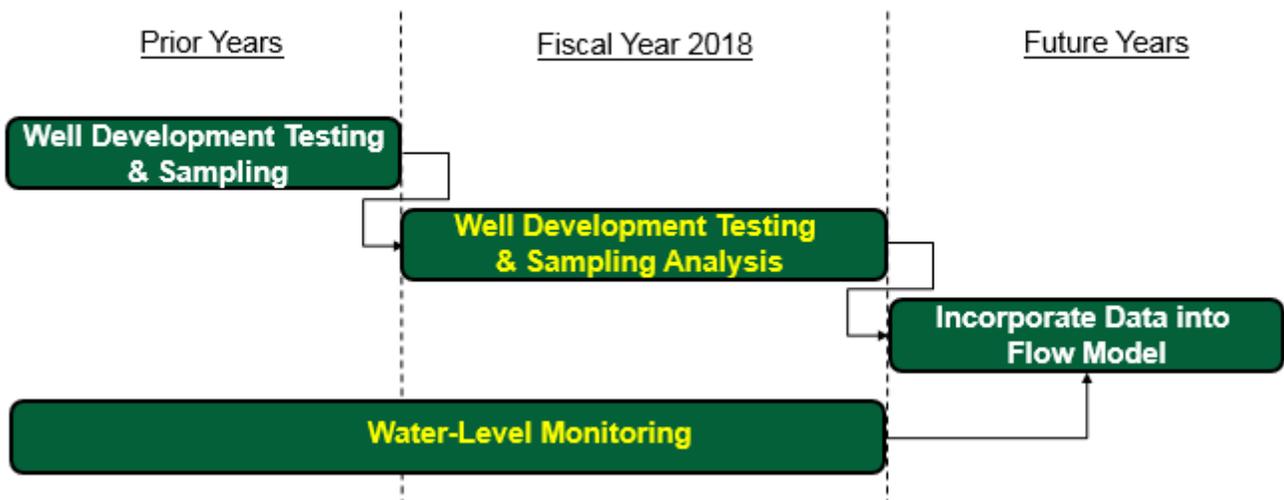
Off-Site Soils - Two Corrective Action Units (CAUs)

CAU 414 Clean Slate III



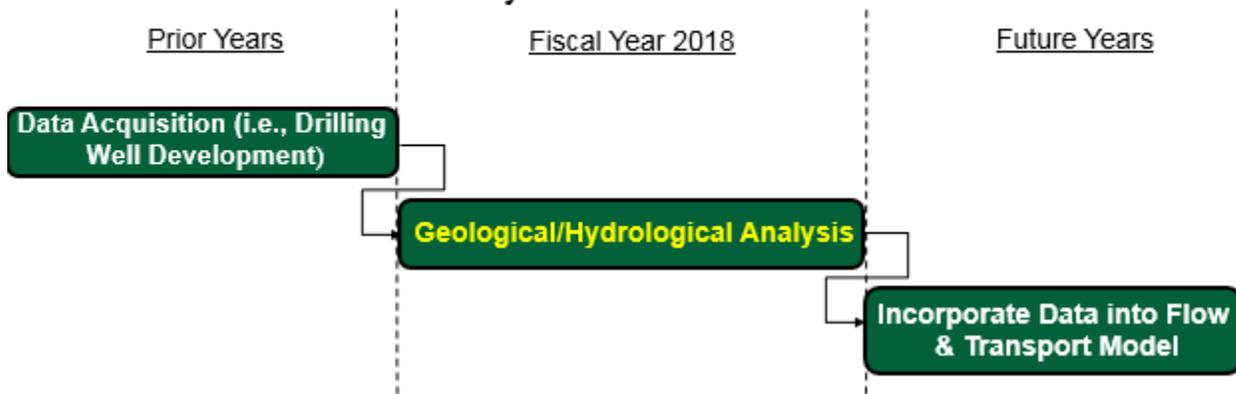
- **Task – B ~ Pahute Mesa – Well Development Testing & Sampling Analysis/Water Level Monitoring**
 - Complete well development testing and sampling analysis of Well ER-20-12
 - Risk/consequences if task not completed: potential for small impact to analysis and evaluation work

Pahute Mesa – Well Development Testing & Sampling Analysis/Water Level Monitoring



- **Task – C ~ Pahute Mesa – Geological and Hydrological Analysis and Evaluation**
 - Continue geological and hydrological analysis and evaluation
 - Work is specific to ongoing characterization activities through FY 2020
 - Risk/consequences if task not completed: potential for delay of Flow and Transport document

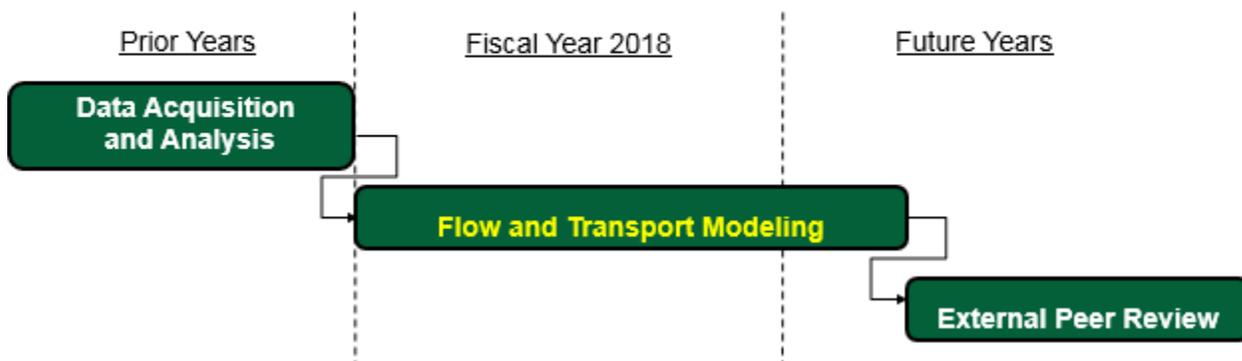
Pahute Mesa – Geological and Hydrological Analysis and Evaluation



- **Task – D ~ Pahute Mesa – Flow and Transport Modeling**

- Begin development of the Central and Western Pahute Mesa Flow and Transport Model
 - Work includes all supplemental modeling
- Risk/consequences if task not completed: potential for delay of External Peer Review and subsequent NDEP decision

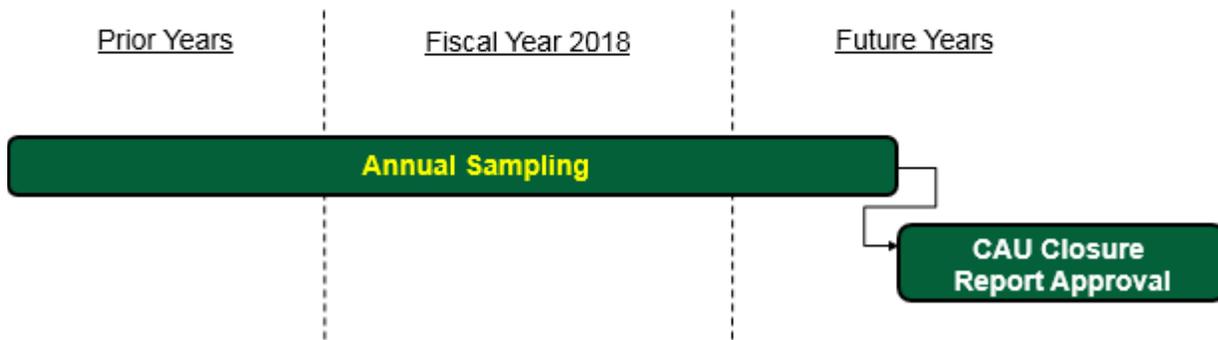
Pahute Mesa – Flow and Transport Modeling



- **Task – E ~ All UGTA CAUs – Annual Sampling**

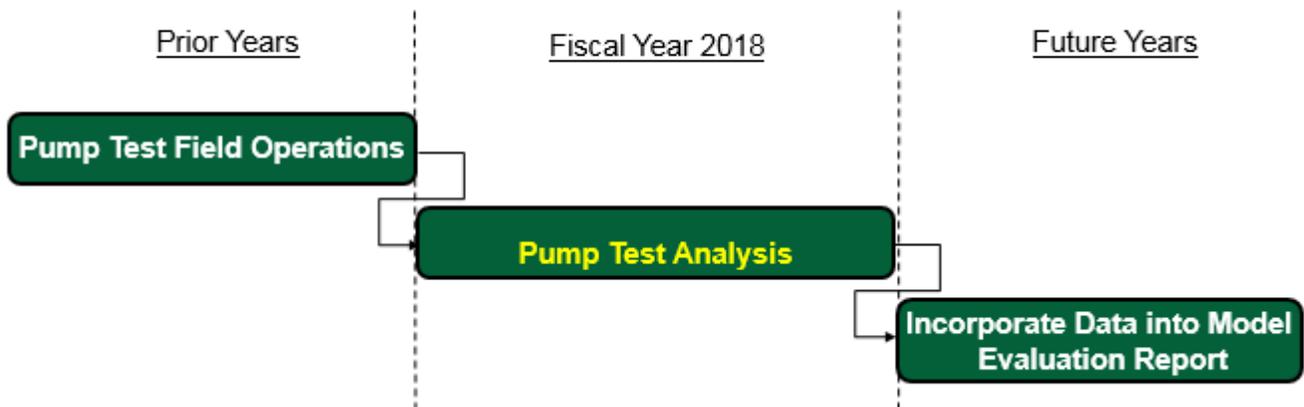
- Continue ongoing sampling activities for each CAU as prescribed by the NNSS Integrated Sampling Plan
 - 73 active wells, six categories
 - Two-five year frequency
 - Primary contaminant of concern is tritium
- Risk/consequences if task not completed, DOE will fall short of Integrated Sampling Plan expectations
 - Possibility of making up in near future or address as a documented sampling variance
- Priorities with funding and resources likely to be main impact

All UGTA CAUs – Annual Sampling



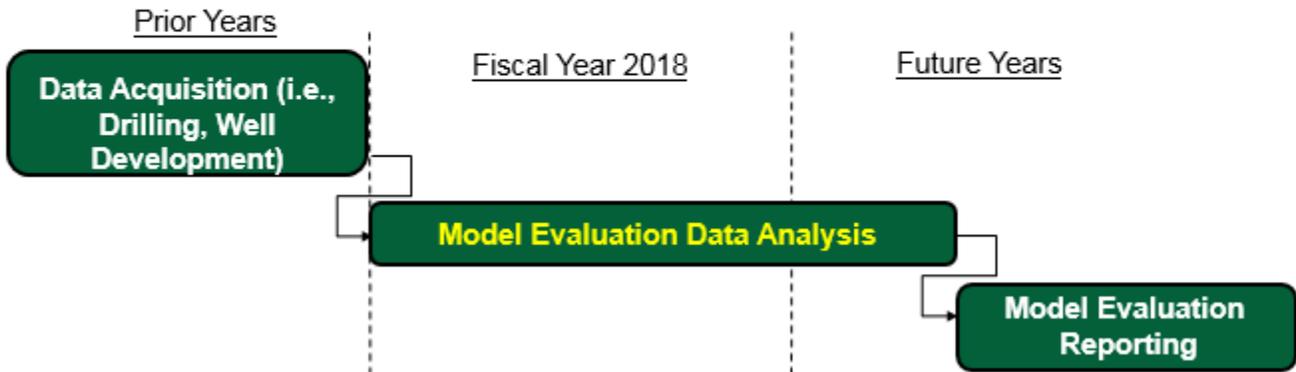
- **Task – F ~ Yucca Flat - Multiple Well Pump Test**
 - Complete multiple well pump test
 - Includes work currently being performed with transducers
 - Risk/consequences if task not completed: potential to delay model evaluation

Yucca Flat – Multiple Well Pump Test



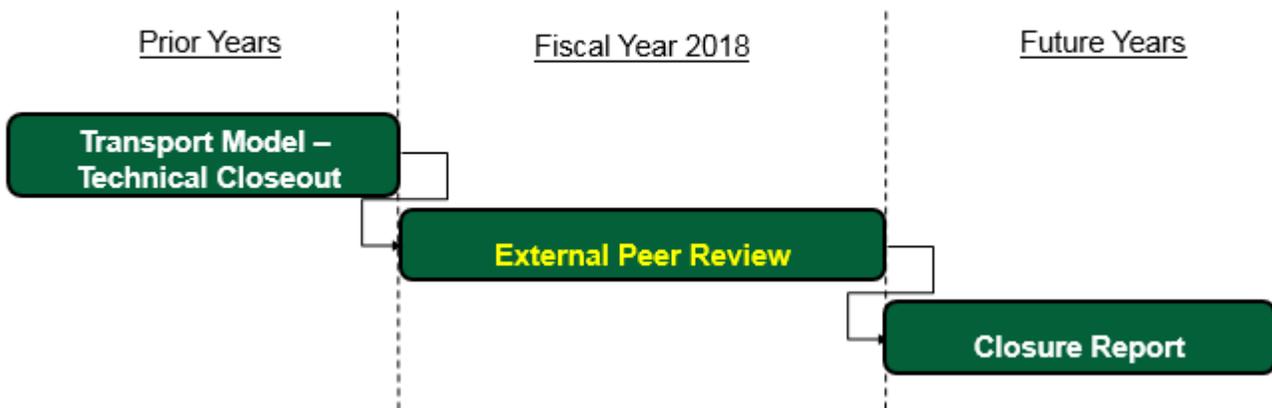
- **Task – G ~ Yucca Flat – Model Evaluation Activities**
 - Continue additional data collection, analysis, and evaluation, if necessary
 - Risk/consequences if task not completed: potential to delay closure of CAU

Yucca Flat – Model Evaluation Activities



- **Task – H ~ Rainier Mesa – External Peer Review**
 - Complete External Peer Review
 - Risk/consequences if task not completed: potential to delay closure of CAU

Rainier Mesa – External Peer Review



- **Task – I ~ Area 5 Radioactive Waste Management Disposal Operations**
 - Maintain capability to safely receive and dispose approximately 1.2 M cubic feet of LLW and MLLW
 - Continue environmental monitoring activities at the Area 5 Radioactive Waste Management Complex
 - Continue Facility Evaluations of generators per the NNSW Waste Acceptance Criteria
 - Maintain Performance Assessment, Composite Analysis, and Documented Safety Analysis to dispose waste
 - Risk/consequences if task not completed:
 - NNSW-specific: potential for inability to dispose of own wastes; consequently forced to expend additional costs for commercial disposal
 - DOE complex: potential for missed milestones; additional costs; inability to dispose some wastes

Area 5 Radioactive Waste Management Disposal Operations



- **Tonight's Path Forward**
 - Baseline briefing
 - The ranking process
 - Description of each task
 - Group discussion
 - Individuals rank tasks
 - Tallying of prioritizations
 - Vote on final recommendation

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

- In a scenario where sufficient funding is not available, the regulatory agreements and milestones with NDEP for the Off-Site Soils Task A would be affected and delayed during the entire process from the characterization report, the corrective action decision document, and the closure report. With the U.S. Air Force (USAF), the agreements and the momentum moving forward with cleanup activities would also be delayed.
- The tests on the NTTR were conducted by the DOE under an agreement with the USAF. A Memorandum of Understanding between DOE and the U.S. Department of Defense (DoD) outlines that it is DOE's responsibility to clean up the contamination. The DoD has provided its vision for utilizing the land surrounding these sites; therefore DOE can determine the appropriate closure. Per the Federal Facility Agreement and Consent Order (FFACO), the DOE and NDEP are required to be in agreement with the closure activities, and DoD needs to be kept apprised of the cleanup activities and has the opportunity to provide comment along the way; therefore all parties are on the same page as the cleanup progress goes forward. DOE has ultimate responsibility for monitoring and maintenance of these sites into perpetuity.
- The USAF has provided to DOE a scenario for future land use surrounding each corrective action site (CAS) and the majority is for training for ground troops or continuation of a bombing range. The USAF would not have troops actually training in these CASs, but in the area surrounding these sites. The NTTR is approximately three times the size of the NNSS, and there is ample room to conduct activities away from any contamination areas if closure in place was chosen for a specific site. If the USAF would change the future land use for any of these sites, then DOE would adjust its closure to accommodate this effort.

- Desert Research Institute conducts air monitoring on the Tonopah Test Range (TTR) and the NTTR and has found no migration of contamination. In July 2016, the NSSAB has approved a work plan item to provide a recommendation on these air monitoring stations on the TTR.
- The Soils Activity works with USAF civilian employees who tend not to be relocated as often as its military personnel. DOE is working on agreements with the current USAF military personnel in order to enjoy the same working relationship and momentum with any USAF transfers.
- Nearing a 20-year renewal under a Congressional Land Action, the USAF will be developing another EIS that continues to look at the current and future activities that will be conducted at the NTTR as it is viewed as a national asset, and continued aerial and ground activities will be conducted at the NTTR for the foreseeable future.
- For these Soils CAUs, the demarcation team has marked the areas of contamination. The EM Soils Activity plans to characterize the sites and determine the extent of the contamination and develop a plan for closure with oversight from NDEP.
- DOE currently conducts inspections and post-closure monitoring for sites that have been closed under the FFACO on the NTTR.
- The DOE will be a cooperating agency for the USAF EIS and will provide information in the development of the document, not only for the soils sites but also for Underground Test Area (UGTA) well sites located on the NTTR.
- New Well ER-2-2, the most northerly of the new wells in Yucca Flat, began to collapse during drilling due to the geology of the area and was sealed off and cannot be used for future sampling. Well ER-4-1 is located south of Well ER-2-2. Further south, Well ER-3-3 is the well that the NSSAB visited during the groundwater-focused tour in February 2016. The groundwater in Yucca Flat flows in a southerly direction. Well ER-3-3 contained a very high angle fault and has provided valuable data for the conceptual models in that this fault is not contributing contamination to the Lower Carbonate Aquifer (LCA). There has been no contamination found in the LCA in Yucca Flat.
- There will not be an UGTA drilling campaign in FY 2018, and UGTA probably won't drill any additional wells until around FY 2020. The UGTA tasks in the FY 2018 baseline include computer modeling, internal reviews and analysis, review of the conceptualizations, comments and responses, etc. This UGTA work in FY 2018 will not require hiring of additional personnel.
- In UGTA annual sampling, some wells are sampled in a 2-year frequency, some wells are sampled in a 3-year frequency, and some wells are sampled in a 5-year frequency, etc. UGTA samples a percentage of the wells in its inventory every year. Wells that are not close to a source are sampled less frequently, and wells that are close to a source or a historic nuclear test are sampled more often. These sampling frequencies are part of the NNSS Integrated Sampling Plan and is a requirement initiated by the NFO and not as part of a closure report under the FFACO. If unexpected contamination is found in a well during sampling under the NNSS Integrated Sampling Plan, the well would be elevated to a higher priority category and the sampling would be more frequent. More detailed information on well sampling can be accessed in the NNSS Environmental Report online at <http://www.nv.energy.gov/library/publications/aser.aspx>
- Disposal and storage at the NNSS has not been closed or restricted to the extent that waste from other DOE sites was sent to another DOE site or commercial facility.
- Corrective Action Alternatives (CAA) [clean closure, closure in place, or closure in place with use restrictions] for Clean Slate II and III will be determined after the sites have

gone through the characterization process; so the final costs for closure will be calculated after the CAA scenario is chosen for each site. Although, the baseline does make assumptions for Clean Slate II and III for closure in place that also includes some clean closure of higher contamination areas. Under the FFACO, NDEP and DOE will determine the FY 2018 milestones and deadlines for Clean Slate II and III in late April or early May 2016. Once a milestone has been finalized, NDEP may approve a change if there is a compelling reason.

- The baseline considers both the near-term FFACO milestones, as well as the priorities in completing each of the tasks in each fiscal year.

Rank	Task	Title
1	I	Area 5 Radioactive Waste Management Disposal Operations
2	E	All UGTA CAUs - Annual Sampling
3	D	Pahute Mesa – Flow and Transport Modeling
4	C	Pahute Mesa - Geological and Hydrological Analysis and Evaluation
5	B	Pahute Mesa – Well Development Testing & Sampling Analysis/Water Level Monitoring
6	A	Off-Site Soils - Two CAUs
7	F	Yucca Flat – Multiple Well Pump Test
8	G	Yucca Flat - Model Evaluation Activities
9	H	Rainier Mesa - External Peer Review

After review of the draft recommendation letter for FY 2018 Baseline Prioritization, Member Michael Moore moved to approve the letter with the understanding that the list of prioritizations reflects the rankings above. The motion was seconded and passed unanimously.

Radioactive Waste Acceptance Program (RWAP) Assessment Improvement Opportunities (Work Plan Item #7) (Jhon Carilli, DOE)

- **NSSAB Work Plan Item #7**
 - NSSAB members to observe an RWAP Facility Evaluation and present their observations to the Full Board at the May 18, 2016 Full Board meeting and provide a recommendation for ways to improve the RWAP assessment process
- **Background**
 - Cold War-related activities and nuclear research generated LLW at sites across the country
 - DOE is responsible for consolidating and disposing LLW generated by DOE clean-up activities
 - Annually, the NNSA disposes approximately 5% of the total waste generated in the Environmental Management (EM) Program
- **Regulatory Authority for LLW Disposal**
 - Atomic Energy Act of 1954, as amended
 - DOE Order 435.1 and DOE Manual 435.1-1
 - Disposal Authorization Statement
 - Performance Assessment/Composite Analysis (PA/CA) – analysis of the impacts to protect workers and public
 - Disposal Facility Monitoring Plan
 - Closure Plan
 - Maintenance Plan

- NNSS Waste Acceptance Criteria (WAC)
 - Annual Review of PA/CA
 - Independent review by LLW Federal Review Group
- **NNSS: Ideal Location for LLW Disposal**
 - Low precipitation
 - High evapotranspiration
 - No surface water
 - No pathway to groundwater
- **Key Terminology**
 - Waste Generator Sites: DOE and Department of Defense sites that generate LLW and mixed low-level waste (MLLW) radioactive waste
 - Waste Stream: a waste or group of wastes from a process or a facility with similar physical, chemical, and radiological properties
 - NNSS WAC: document that establishes rigorous disposal acceptance criteria for waste generator sites and their proposed waste streams
 - Waste Profile: application by a generator to dispose a waste stream at the NNSS that demonstrates compliance with the NNSS WAC
- **RWAP**
 - The RWAP consists of three activities:
 - WAC (Facility Evaluations and Waste Acceptance Review Panel)
 - Coordination of Waste Certification Officials
 - Waste Assistance and Technical Support
- **Facility Evaluation Background**
 - Utilizing a schedule, the RWAP team visits every active generator on a regular basis (typically annually)
 - Conducted by certified RWAP personnel at the generator's location:
 - Audit – *comprehensive* Waste Certification Program review
 - Review of entire program
 - Multiple day visit – 3 days on average
 - Planned – generator receives notification and provides requested program documents for RWAP review before on-site visit
 - Surveillance – *focused* Waste Certification Program review
 - Review of a specific area with limited scope
 - Visit lasts 1-2 days on average
 - Impromptu – generator receives minimal notification for security measures only
- **Purpose of RWAP Facility Evaluations**
 - Facility Evaluations evaluate compliance and implementation for the following program elements:
 - Quality Assurance (QA)
 - Waste Traceability
 - Resource Conservation and Recovery Act (RCRA) Waste Characterization (hazardous waste characterization)
 - Radiological Characterization
- **QA**
 - Verify that generator has an approved site QA Plan demonstrating compliance to the NNSS WAC
 - Verify that generator has an approved NNSS WAC Implementation Crosswalk and performed an annual review of referenced procedures, processes, and methods

- Implementation Crosswalk – generator’s description of how NNSS WAC requirements are met
 - Verify that the generator has the required training to perform self-assessments
 - Verify waste disposal packaging and contents
- **Waste Traceability**
 - Verify waste containers are controlled to ensure integrity and packages not comprised
 - Verify inspections and acceptance testing are conducted
 - Verify containers are properly stored, moved, and shipped
 - Verify control of measuring and test equipment
- **RCRA Waste and Radiological Characterization**
 - Verify that waste characterization methods and procedures employed document the physical and chemical characteristics
 - Verify that generator’s waste characterization documentation matches the approved waste profile submitted to DOE
 - Verify that controls are in place to verify and evaluate stabilization methods, packaging, labeling, sealing, separation, segregation, and prohibited item removal
- **DOE Role**
 - Oversees waste acceptance and disposal and approve waste profiles
 - Ensures environmental protection and worker and public safety
 - **Observes contractor during Facility Evaluations**
 - Documents observations and provides feedback to the contractor RWAP auditors and interfaces with the site Federal representatives
- **NDEP Role**
 - Oversees hazardous waste management as outlined in the State of Nevada RCRA permit (includes Federal Facility Agreement and Consent Order [FFACO])
 - Provides joint oversight with DOE by participating in RWAP processes per an Agreement in Principal
 - **Attends and observes DOE, NNSS Federal contactor, and generator during Facility Evaluations**
- **Navarro Contractor Role**
 - Reviews waste profiles for compliance with the NNSS WAC
 - Maintains and provides technical support for NNSS WAC
 - **Performs Facility Evaluations (audits and surveillances) and oversees any corrective actions**
 - Recommends approval of waste streams that can be safely disposed at the NNSS
 - Ensures the disposal facility will continue to meet requirements
 - Ensures environmental protection and worker and public safety
 - Ensures waste originated from DOE or Department of Defense
- **Navarro Contractor General Auditor Training**
 - Required Reading
 - RWAP procedures
 - NNSS WAC
 - Waste generator approval process
 - On-the-job training
 - Checklist review and completion
 - Corrective action plan and objective evidence reviews
 - Classroom training
 - Root cause analysis

- Auditor/lead auditor classroom training; requires passing score on exam
 - Proficient oral and written communication skills
- **Navarro Contractor Auditor Specific Training**
 - Auditor: participate in a minimum of four RWAP Facility Evaluations under the guidance of a qualified Subject Matter Expert (SME)
 - Lead Auditor: participate in a minimum of two RWAP Facility Evaluations as Lead Auditor (LA) under the guidance of a qualified SME/LA
- **Navarro Contractor Functional Specific Training**
 - Radiological Characterization Auditor: participate in a formal training course in radiation detection, radiochemical analysis, or radioactive waste management
 - Chemical Characterization Auditor: participate in a formal RCRA training course
- **Facility Evaluation Process**
 - Notify waste generator of Facility Evaluation
 - Request program documents for review
 - Review shipment discrepancy log
 - Develop checklist
 - Brief RWAP team of scope & responsibilities
 - Perform interviews of generator personnel
 - Observe work being performed
 - Conduct in-briefing with generator personnel
 - Evaluate and document objective evidence
 - Issue report approximately 30 days after Facility Evaluation
 - Brief generator during exit meeting of any Observations and/or Corrective Action Requests (CARs)
 - Observation – a weakness in a generator’s QA or waste certification program that, if left uncorrected, could result in a condition adverse to quality
 - Requires a written response by generator
 - Maintains approval to ship waste to NNSS
 - CAR – document that tracks deficient (requirements violation) conditions adverse to quality until satisfactorily resolved
 - Requires in-depth investigation by generator
 - Suspends approval to ship waste to NNSS
 - Formal CAR closeout process:
 - Generator determines a root cause based on its investigation
 - Generator provides a corrective action plan (CAP) to DOE that identifies problem and its proposed solution
 - DOE reviews the CAP and accepts or rejects until satisfied that generator has a viable solution
 - RWAP performs on-site verification once CAP is completed
 - DOE approves generator to ship waste after verification determines compliance
 - Process takes approximately 60 days
- **NSSAB Path Forward**
 - NSSAB Members observe an RWAP Facility Evaluation for National Security Technologies, Inc. (NSTec) – March 22 – 23, 2016
 - NSSAB members report their observations to the Full Board at the May 18, 2016 meeting
 - Full Board provides a recommendation for ways to improve the RWAP assessment process at the May 18, 2016 meeting

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

- During a facility evaluation, the RWAP Team verifies that the generator's personnel have the appropriate training and qualifications, procedures, processes, and methods.
- The RWAP auditor reviews the documentation to verify that a generator has certified that its transporter meets all the requirements contained in the NNSW WAC to ship waste to the NNSW.
- Observations are a weakness in a generator's QA or waste certification program that if left uncorrected could result in a condition adverse to quality. The generator is required to respond to any Observation(s) resulting from a facility evaluation, and the response needs to address corrective actions to resolve the Observation.
- During a facility evaluation, a generator may provide objective evidence to a potential Observation to prove compliance to the NNSW WAC. An Observation may be closed during the facility evaluation if adequate objective evidence is provided by the generator during field work. Daily out-briefs and exit interviews are standard procedure, which minimizes any misunderstandings that may occur during a facility evaluation.

In summary, Members Flores Snyder and Sypolt will observe the RWAP surveillance of NSTec on March 22 – 23, 2016, and provide an update at the May 18, 2016, Full Board meeting. The NSSAB will discuss recommendations for possible improvements to the RWAP assessment process.

Other NSSAB Business (*Donna Hruska, Chair*)

Chair Hruska informed the Board that she and Vice-Chair Keiserman will be attending the EM Site-Specific Advisory Board National Chairs' Meeting in Oak Ridge, Tennessee on April 19 -21, 2016. Other NSSAB members are welcome to attend and pay their own travel expenses, and if interested should contact the NSSAB Office for registration information. She went on to explain that each Board presents a round robin topic directly to EM-1 on Board accomplishments and/or Board needs. The NSSAB decided to focus on the various ways that it promotes outreach in the community, i.e. committees, tours, workshops, trainings, student internship, membership drive, television interviews, etc. The Board feels that despite Nevada's numerous outreach opportunities, many community members are unaware of the NSSAB and the activities that take place at the NNSW, and DOE should pursue ways it could support and/or fund additional resources for education and community outreach in southern Nevada to increase public awareness of the NSSAB and EM Program at the NNSW. The NSSAB Office will put together the draft PowerPoint slides and email to the Board for its input before submitting to EM HQs.

The groundwater-focused public tour was held in February 2016. NSSAB members in attendance had the opportunity to observe a drilling of a well in Yucca Flat and visit the core library in Mercury, Nevada.

Member Steve Rosenbaum provided a briefing on the meetings that he attended during the Waste Management Symposia in Phoenix, Arizona last week. Due to the lateness of the hour, Chair Hruska informed the Board that she will provide her update via email.

DOE budgeted for one NSSAB member to attend the National Transportation Stakeholders Forum in Orlando, Florida from June 7 – 9, 2016. The Board voted and Member D'Alessio was chosen to represent the Board at this conference. Other members are welcome to attend by registering at

<http://energy.gov/em/downloads/spring-2016-national-transportation-stakeholders-forum-meeting-florida> and paying their own travel expenses.

The PIO tabletop exercise will be held in Las Vegas, Nevada, on Wednesday, June 22, 2016, from 8 – 11 a.m. This exercise will focus on PIO and the tools available in handling an incident with a radiological element. NSSAB members interested in attending the tabletop were noted by a show of hands. As the date gets closer, the NSSAB Office will let these interested members know if there will be seating available.

Member D'Alessio reported that he attended the initial meeting of the newly-formed LLW Stakeholders Forum (former Transportation Working Group) in February 2016. He updated the Board that briefings were provided that gave participants a good baseline education on LLW transportation from which to start a dialogue by all involved in the group. Member D'Alessio noted that he is excited about the future and path forward for the group that will benefit both the Board and all others involved with the process. For continuity, the NSSAB affirmed that Member D'Alessio would continue to represent the Board at the May 11, 2016, meeting of the LLW Stakeholder Forum.

Member D'Alessio suggested that the NSSAB recommend to the NFO to approve an additional liaison position for Nye County Emergency Management (NCEM). NCEM is responsible for responding to all radiological incidents that occur in Nye County south of Tonopah, Nevada, and he felt that it is important to have NCEM representation on the Board. Member Rosemark made a motion to recommend to the NFO to approve an additional liaison from NCEM to serve on the NSSAB. The motion was seconded and passed unanimously. The NSSAB Office will draft a recommendation on behalf of the NSSAB and submit to the NFO.

Vice-Chair Keiserman provided an update on the Membership Committee. She reported that a meeting with a professor from the Department of History at UNLV and one of his graduate students, who is interested in an internship with the Board, was held this afternoon to discuss the parameters for a potential internship. It was discussed that the graduate student could be involved with Communication Improvement Opportunities – Work Plan #10 regarding community outreach and increasing the awareness of the NSSAB and EM activities at the NNSS. In subsequent years, this internship project may include undergraduate students interested in the environmental sciences and mentored by the graduate student. Member D'Alessio made a motion to move forward with the pursuit of a student intern from UNLV. The motion was seconded and passed unanimously. Vice-Chair Keiserman also reported that the current membership recruitment drive is ongoing with the application deadline of March 31, 2016. Members were encouraged to recruit potential new members.

The new NSSAB Office mailing address is P.O. Box 98952, M/S 167, Las Vegas, Nevada 89193-9852 and new fax number is 702-295-2025.

Four letters were provided to Board members for informational purposes:

- NSSAB Recommendation for Frenchman Flat Long-term Monitoring Plan – Closure Report (Work Plan Item #5) – dated January 20, 2016
- DOE Response to NSSAB Recommendation for Flat Long-term Monitoring Plan – Closure Report (Work Plan Item #5) – dated March 7, 2016
- NSSAB Recommendation for Path to Closure for Rainier Mesa/Shoshone Mountain (Work Plan #6) – dated January 20, 2016

- DOE Response to NSSAB Recommendation for Path to Closure for Rainier Mesa/Shoshone Mountain (Work Plan #6) – dated March 7, 2016

Communication Improvement Opportunities (Work Plan #10)

In response to providing recommendations on ways that DOE can improve/enhance communication to the public, Member D’Alessio suggested that the NSSAB be involved in more public involvement activities that reach larger audiences, i.e. radio and television interviews. Chair Hruska noted that the public may be more involved if the NSSAB held more frequent meetings of less duration. Member Pennie Edmond suggested that additional tours of the NNSS be offered for local high school students. Member Rosemark added that DOE should utilize more catchy phrases/events to capture the public’s attention, i.e. “revisit of history” event during spring break at the Las Vegas sign. Vice-Chair Keiserman suggested more promos on YouTube. DDFO Kelly Snyder added that the NNSS has 152 YouTube videos that have 98,000 views and are available at <https://www.youtube.com/user/NNSANevada>. She asked the Board to think about what the NSSAB objectives would be for these additional public promotions and discuss at the May 18th Full Board meeting.

Meeting Wrap-Up/Adjournment

The next Full Board meeting will be held at 5 p.m. on Wednesday, May 18, 2016 at the Frank H. Rogers Science and Technology Building, 755 East Flamingo, Las Vegas, Nevada with an educational session by the UGTA Activity on “Hydrologic Source Term,” beginning at 4 p.m.

For the July 20th Full Board meeting in Tonopah, Nevada, a block of rooms has been reserved for the NSSAB members, liaisons, and speakers.

Member D’Alessio moved that the meeting be adjourned. The motion was seconded and passed unanimously.

Meeting adjourned at 10:10 p.m.