



Nevada Site Specific Advisory Board (NSSAB)

Full Board Meeting

**National Atomic Testing Museum, Frank Rogers Auditorium
755 East Flamingo Road, Las Vegas, Nevada
5:00 p.m. – January 16, 2013**

Members Present: Kathleen Bienenstein (Chair), Edward Brown, Matthew Clapp, Thomas Fisher, Arthur Goldsmith, Donna Hruska (Vice-Chair), Cheryl Kastelic, Janice Keiserman, Barry Li Marzi, Michael Moore, Edward Rosemark, James Weeks

Members Absent: Jason Abel, William Sears, Jack Sypolt

Liaisons Present: John Klenke (Nye County Nuclear Waste Repository Project Office [NWRPO]), Phil Klevorick (Clark County), Mike Lemich (White Pine County Commission), Tim Murphy (State of Nevada Division of Environmental Protection [NDEP]), Genne Nelson (National Park Service [NPS]), Dan Schinhofen for Joni Eastley (Nye County Commission), Rob Boehlecke for Scott Wade (DOE)

Liaisons Absent: Nancy Boland (Esmeralda County Commission), Marcy Brown (West Career and Technical Academy [WCTA]), Charlie Myers (Elko County Commission), Kevin Phillips (Lincoln County Commission),

DOE: Kelly Snyder (Deputy Designated Federal Officer [DDFO]), Bill Wilborn

Facilitator: Barb Ulmer (Navarro-Intera [N-I])

Scribe: Rochelle LaGrow (N-I)

Others Present: Chris Andres (NDEP), Sherry Brown (Mesquite, NV)

Open Meeting/Introductions/Chair's Opening Remarks

Following introductions, Member Arthur Goldsmith moved to approve the agenda as presented. The motion was seconded and passed unanimously.

Liaison Updates

Clark County (*Phil Klevorick*)

Liaison Phil Klevorick informed the Board that Clark County has been participating in recent scoping meetings regarding an I-11 Corridor, and said this is something DOE should be interested in. Liaison Klevorick requested an update on the Greater-Than-Class-C Environmental Impact Statement from DOE. Liaison Klevorick also inquired about the possible renaming/reinventing of the DOE Transportation Working Group (TWG); as there was very little focus on transportation and more attention on environmental topics at the last meeting in November.

Nye County Commission (*Dan Schinhofen*)

Nothing new to report.

Nye County Nuclear Waste Repository Project Office (*John Klenke*)

Liaison John Klenke noted that Nye County appreciated the opportunity to present the Nye County Drilling Proposal at the last NSSAB meeting, and Nye County is willing to work jointly with DOE on a modified proposal.

State of Nevada Division of Environmental Protection (*Tim Murphy*)

Liaison Tim Murphy affirmed that the amount of waste being shipped to the NNSS has been significantly reduced due to budget constraints. In regard to U-233 waste, NDEP continues to work with DOE and has nothing new to report.

U.S. National Park Service (*Genne Nelson*)

Liaison Genne Nelson stated the Park Service's primary interests are groundwater contamination, up-gradient activities of the Park, and any changes to transportation of waste in the future. The Park Service continues to stay current on the studies of the Underground Test Area (UGTA) Activity.

West Career and Technical Academy

Vice-Chair Donna Hruska, Chair of the Membership Committee, provided the WCTA update. During the January 24 NSSAB Membership Committee meeting, Liaison Marcy Brown will present a dry run of her briefing that she will present to WCTA Environmental Science and Engineering students. The Membership Committee will provide appropriate suggestions.

White Pine County Commission (*Mike Lemich*)

Nothing to report.

U.S. Department of Energy (*Rob Boehlecke, DOE*)

Liaison Rob Boehlecke provided the following update regarding Consolidated Edison Uranium Solidification Project (CEUSP) Waste: "The DOE appreciates the Advisory Board's interest in the transport and disposal of the CEUSP material currently located in Oak Ridge. As was mentioned during various 2012 Board meetings, many of the specifics of this activity are not releasable to the public. Additionally, it was explained that at some point updates on the project would be stopped. Therefore, the DOE will no longer be providing updates regarding this activity, but will notify the Advisory Board when the transport and disposal activities are completed in their entirety. We would like to thank the Board again for their support of disposing of waste at the NNSS."

Liaison Boehlecke stated the federal government is under a continuing resolution through March 27, 2013. There is the potential for a full year continuing resolution at FY 2012 levels, which is

consistent with FY 2013 work scope. Lastly, it was announced that the Underground Test Area staff will be participating in the Devil's Hole Workshop in early May 2013 in Death Valley. This would be a great opportunity to attend presentations regarding technical aspects of UGTA Activity and a NNSS tour would be offered.

Public Comment

There was no public comment.

Recommendation: Industrial Sites-Closing Use Restriction Sites (Work Plan Item #2)

After review of the draft recommendation letter that was previously discussed and developed at the November 28, 2012 NSSAB Full Board meeting and included in member packets, Member Goldsmith moved to approve the letter as written. The motion was seconded and passed unanimously.

Recommendation: Nye County Drilling Proposal (Work Plan Item #4)

After Board discussion, it was decided that additional information regarding the Nye County Drilling Proposal contained in a January 14, 2013 email from NWRPO did not change the draft recommendation the Board had agreed upon at the November 28, 2012 NSSAB Full Board meeting. Member Michael Moore moved to approve the letter as written. The motion was seconded and passed unanimously.

NNSS Final SWEIS Update (Rob Boehlecke, DOE)

- **Overview of Nevada Site Office (NSO) Activities**
 - Historic nuclear weapons testing conducted from 1951 to 1992
 - Current major mission areas include stockpile stewardship/non-proliferation, national security training, emergency response, and Environmental Management (EM)
- **National Security Mission Area**
 - Certifying the reliability of nuclear stockpile through experiments
 - Disposition of improvised nuclear devices
 - Conducting controlled chemical and biological simulant releases
- **EM Mission Area**
 - Waste Management (low-level waste [LLW] and mixed low-level waste [MLLW])
 - Environmental Restoration (surface soils, industrial sites, and groundwater)
- **Non-Defense Mission Area**
 - General site support and infrastructure
 - Renewable energy
 - Other research and development
- **SWEIS Alternatives**
 - No Action – reflects use of existing facilities and operations
 - Reduced Operations – reflects diminished activity levels and decommissioned facilities with no new projects or facilities proposed
 - Expanded Operations – includes activities and level of operations under “No Action” plus expansion of existing activities and additional capabilities

- **Preferred Alternative**
 - “Hybrid” alternative – elements selected from each action alternative
 - Process for selecting Preferred Alternative
 - Consulted key program officials at NSO
 - Incorporated public comments
- **Public Comments on the Draft SWEIS**
 - Statistics
 - 128 comment documents received
 - 758 comments identified
 - Key issues raised
 - Unconstrained transportation routing in Las Vegas
 - General risks from waste transportation and disposal
 - Other themes raised
 - DOE’s definition of No Action Alternative
 - General concerns about risks of radiation
 - Concerns about resumption of nuclear testing
 - Alternate uses of land or return to the public
 - Perception-based impacts to local economy
 - Alternative energy
 - Mostly positive
 - Concerns about water/land use
- **Current Transportation Practices**
 - Primarily all truck transport to NNSS
 - Minimal rail-to-truck shipments
 - Transportation within Las Vegas Valley restricted by previous agreements with State of Nevada (e.g. routing through I-15/U.S. 95 interchange or over O’Callaghan-Tillman Bridge prohibited)

- **Estimated Number of Shipments Over a 10-year Period**

Truck	No Action Alternative	Expanded Operations Alternative	Reduced Operations Alternative
In-state radioactive waste shipments	2,300	15,000	2,300
Out-of-state radioactive waste shipments	25,000	30,000	25,000
Out-of-state radioactive material shipments	240	11,000	180

Truck-to-Rail	No Action Alternative	Expanded Operations Alternative	Reduced Operations Alternative
Out-of-state radioactive waste shipments (rail only)	2,300	15,000	2,300
Out-of-state radioactive waste shipments (rail and truck)	38,000	92,000	38,000

- **SWEIS Transportation Analysis**
 - Constrained Case
 - Avoids truck shipment through I-15/U.S. 95 interchange in Las Vegas and Hoover Dam or the new O’Callaghan-Tillman bridge, and continue transloading at Parker, AZ and West Wendover, NV
 - Transportation by (a) all truck and (b) the combination rail-to-truck analyzed

- Unconstrained Case
 - Analyzed several routes for truck transport through Southern Nevada
 - Analyzed additional rail-to-truck transload locations at Apex and Arden, NV and Kingman, AZ
 - Transportation by (a) all truck and (b) the combination rail-to-truck analyzed
- **Constrained Case Routes**
 - Maps
 - Transportation Route for Trucks
 - Transportation Route for Rail
 - Route from Parker, AZ to Wendover, NV
- **Unconstrained Case Routes**
 - Maps
 - Various Routes throughout Las Vegas metropolitan area
 - Transportation Route for Trucks
 - Transportation Route for Rail
- **What We Learned**
 - Constrained vs. unconstrained truck-only transport
 - Radiological impacts (dose and latent cancer fatalities [LCFs]) to public and workers slightly lower under unconstrained case
 - Primarily a function of lower route mileage and/or quicker trips due to higher average speed on roadways
 - Constrained vs. unconstrained for rail-to-truck transport
 - Radiological impacts to public and workers under unconstrained case vary slightly (depending on transfer stations utilized), but generally lower than those seen in constrained case
 - Truck-only vs. mainly-rail modes
 - Rail-to-truck mode results in lower doses and LCFs than truck-only
 - Rail-to-truck is much more fuel-efficient, and results in much lower (~1:4 ratio) levels of greenhouse gas and criteria pollutant emissions
 - Public and stakeholder primary concerns
 - Human health and safety in the event of a transportation accident – clear preference to maintain existing routes
- **Outcome**
 - Maintain current routing commitments – avoid Las Vegas metropolitan area and Hoover Dam and O’Callaghan-Tillman Bridge
- **Anticipated Key Dates for Final SWEIS**
 - February 6, 2013 – Publication and distribution of final NNSS SWEIS
 - February 15, 2013 – Federal Registration Notice of Availability for final SWEIS
 - March 2013 – Record of Decision (minimum of 30 days after Notice of Availability)

Per survey results, DDFO Kelly Snyder noted that the TWG will continue with its next meeting planned for summer 2013.

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

- Currently, the majority of waste shipments through the southern route are transported via Highway 160
- NSSAB has ability to request specific speakers regarding the SWEIS
- Unconstrained case for routing was analyzed during the SWEIS process, but will not be utilized

- Every comment and its resolution addressed and included in the final SWEIS document, including the 68 comments submitted by the NSSAB

There were concerns that were expressed regarding the SWEIS:

- 30-day comment review period is too short and hybrid alternative(s) will disadvantage reviewers and commentators from providing thorough and meaningful comments in a timely manner
- The misrepresentation of I-80 running by the NNSS on the Constrained Case Routes, Transportation Route for Trucks map should be addressed to ensure that the general public is not misinformed
- In the table containing truck-to-rail shipment figures, there are rail only figures listed; however, on the following maps there are no rail connectors shown

FY 2015 Baseline Prioritization (Work Plan Item #5) *(Kelly Snyder, DOE)*

- **A New Approach to the Budget Prioritization Recommendation**
 - Previously, the NSSAB prioritized projects as a whole (i.e., #1 priority – UGTA, #2 – Waste Disposal, etc.)
 - New recommendation approach will allow for greater impact – rather than ranking the major activities, the Board will prioritize the tasks within the activities
- **Environmental Management Baseline Overview** *(Rob Boehlecke, DOE)*
 - **EM Baseline Defined**
 - Tool that provides for life-cycle planning and execution of a mission
 - Includes scope of work, budget, and schedule
 - Elements fully integrated
 - **EM Baseline Components**
 - Scope of Work – description of all work elements that need to be accomplished
 - Budget – 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 vs. continuing resolution; 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 NSO
 - Baseline changes are made when scope is added, deleted, or modified (requires NSO approval)
 - **EM Baseline Project Baseline Summaries**
 - EM Baseline separated into three Project Baseline Summaries (PBS) as follows (not in priority order)
 - Soil and Water Remediation (PBS VL-NV-0030) – Soils, UGTA, Industrial Sites, EM Program Management (includes NSSAB support)
 - Operate Waste Disposal Facility (PBS VL-NV-0080) – LLW

- Nevada Community and Regulatory Support (PBS VL-NV-0100) – Agreements in Principle (AIPs) and Grants

- **EM Life-Cycle Baseline for FYs 2013 – 2032**

Scope	Budget (\$K)	Schedule Completion
Soils	\$143,476	FY 2027
UGTA	\$507,955	FY 2032
Industrial Sites	\$80,307	FY 2029
Program Management	\$154,988	FY 2032
LLW	\$539,940	FY 2032
AIPs and Grants	\$87,021	FY 2032
EM NSO Grand Total	\$1,513,687	FY 2032

- **The Ranking Process**

- Presentation of each of the 11 tasks – each task 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 1-11 points (11 points being highest priority and 1 point being lowest priority)
- Results will be tallied during meeting
- NSSAB will vote on final ranking recommendation

- **FY 2015 Soils Tasks** (*Rob Boehlecke, DOE*)

- **Task – A: Off-Site Soils – Three Corrective Action Units (CAUs) – FY 2015**
Baseline - \$753K

- CAUs 411 and 412 – complete closure activities and request closure approvals (via Closure Reports) from the State of Nevada
- CAU 541 – continue determining recommended corrective action for the site and document the proposed actions (Corrective Action Decision Document [CADD])

- **Task – B: NNSS Soils – Four CAUs – Baseline - \$1,337K**

- CAUs 550 and 571 – complete remediation planning and submit plan to State of Nevada; start closure activities
- CAU 568 – finalize the recommended corrective actions for the site (CADD) and request approval from the State of Nevada
- CAU 573 – continue determining the recommended corrective action for the site and document the proposed actions (CADD)

- **Task – C: Soils Studies – Baseline - \$778K**

- Conducted by Desert Research Institute (DRI) in support of the Soils Activity
 - Includes air monitoring on NNSS and Nevada Test and Training Range, fire studies, and contaminant transport studies
- Research can affect closure decisions for CAUs in similar environments with similar features

- **FY 2015 Groundwater Characterization Tasks** (*Bill Wilborn, DOE*)

- **Task – D: Frenchman Flat Groundwater Characterization Closure Activities**
Baseline - \$673K

- Complete negotiations with the State of Nevada regarding regulatory boundaries
- Establish long-term monitoring requirements
- Complete internal peer review

- Prepare closure documents
- Request approval from the State of Nevada to conclude characterization activities (via a Closure Report)
- **Task – E: Frenchman Flat Post Closure Drilling** – Baseline - \$3,289K
 - Start drilling one post-closure monitoring well
- **Task – F: Pahute Mesa Well Development, Testing, and Sampling** – Baseline - \$483K
 - Complete analysis of three wells (ER-20-11, ER-EC-14, and ER-EC-15)
- **Task – G: Pahute Mesa Aquifer Tests** – Baseline - \$1,892K
 - Start planning and implement aquifer testing of multiple existing wells
- **Task – H: Pahute Mesa Modeling Analysis and Evaluation** – Baseline - \$2,879K
 - Start Flow and Transport Modeling
- **Task – I: Yucca Flat** – Baseline - \$1,241K
 - Complete external peer review
 - Begin drafting CADD/Corrective Action Plan
- **Task – J: Rainier Mesa/Shoshone Mountain (CAU 99) Closure Report** – Baseline - \$398K
 - Begin negotiations with the State of Nevada regarding regulatory boundaries
 - Establish long-term monitoring requirements
 - Prepare closure documents
- **FY 2015 LLW Tasks** (*Rob Boehlecke, DOE*)
 - **Task – K: Area 5 Radioactive Waste Management Disposal Operations** - Baseline - \$15,140K
 - Maintain capability to safely dispose up to 1.2 million cubic feet of DOE LLW/MLLW
 - Continue environmental monitoring activities at the Area 5 Radioactive Waste Management Complex (RWMC)
 - Maintain Performance Assessment and Composite Analysis and Documented Safety Analysis to dispose waste
 - Continue facility evaluations of generators per the NNSS Waste Acceptance Criteria

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

- Tasks have been planned with assumptions (closure in place, closure with no additional action, uncertainty of necessary tasks, etc.)
- Soils studies do not impact any other work involving the study areas ~ meant to serve strictly as data collection activities
- DOE does not receive funding from outside entities, such as DRI or U.S. Air Force
- DOE has budgeted for all 11 tasks, but not funded at this point
- If no formal budget passed, DOE will work under continuing resolution
- A future regulatory boundary negotiated with NDEP would describe the actions that DOE would need to take if contamination exceeds boundary
- At this time, no deadline dates or milestones have been established with the State of Nevada in regards to UGTA tasks in the FY 2015 Baseline
- A conservative approach to develop regulatory boundaries will be used based on current models and the first to be established in FY 2015

- Each CAU may have a specific designed regulatory boundary based on risks and uncertainties in model
- Long-term monitoring networks are a requirement to complete closure activities, including Frenchman Flat; regardless of the low potential for groundwater movement beyond set boundaries
- Since each UGTA CAU is unique and each would need to be addressed in the Closure Report as a distinct CAU for the specifics for closure, a final decision involving the compilation of CAUs into a single closure document has not been made
- The baseline assumption is that DOE EM will maintain disposal capabilities for Area 5 RMWC until all other EM Activities are complete
- Generators no longer directly pay a fee for waste disposed at NNS; EM waste funded by EM HQ and NNSA waste funded by NNSA HQ, etc.
- Cost of the 11 tasks do not equal the total EM budget, as tasks and costs that are required are not included for prioritization
- All tasks, except for Area 5 RWMC, have predecessor activities from FY 2014
- If tasks or portions of tasks need to be rescheduled due to funding constraints, NSSAB's prioritizations will be valuable in making those decisions

Board members held group discussion regarding the presentation and individually ranked the tasks. Results were tallied and final rankings listed below:

1. Task K – Area 5 Radioactive Waste Management Disposal Operations
2. Task F – Pahute Mesa Well Development, Testing, and Sampling
3. Task H – Pahute Mesa Modeling Analysis and Evaluation
4. Task G – Pahute Mesa Aquifer Tests
5. Task A – Off-Site Soils – Three CAUs
6. Task B – NNS Soils – Four CAUs
7. Task C – Soils Studies
8. Tasks I and J – Yucca Flat UGTA Activities and Rainier Mesa/Shoshone Mountain (CAU 99) Closure Report (tie)*
9. Task E – Frenchman Flat Post Closure Drilling
10. Task D – Frenchman Flat Groundwater Characterization Closure Activities

*Note: there is not an 11th place ranking due to Tasks I and J tied for eighth priority

After review of the draft recommendation letter for FY 2015 Baseline Prioritization, Member 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.

Other NSSAB Business (Kathy Bienenstein)

- EM SSAB Chairs' conference call – December 18, 2012
 - Received budget update from EM Headquarters
 - New Strategic Planning Tool demonstrated by webinar that will be utilized to communicate the challenge of meeting commitments across the DOE complex with fiscal constraints – rollout expected spring 2013
- EM SSAB Chairs' Meeting ~ April 23-25~Hanford, WA

- NSSAB sponsored recommendation letter for a proposed EM SSAB National Work Plan to be presented
- Round Robin Topics
 - Through Board discussion, groundwater, transportation of waste and membership/liaison process became topics of interest
 - The NSSAB Office will continue working with Chair Bienenstein and Vice-Chair Hruska to develop Round Robin topics and email slides to NSSAB for review

The next Full Board meeting will be held on Wednesday, April 17, 2013, at 5 p.m. at the National Atomic Testing Museum. There will be a pre-meeting briefing beginning at 4 p.m. on the current activities of the NNS.

Board members closed the meeting with an assessment. There was a common theme that the Board would like more detailed information on topics for prioritization (removing high-level information and excessive use of acronyms), and they also expressed their desire to hear DOE's opinions regarding discussion topics. Overall, the Board liked the new approach and felt it worked well. They appreciated the opportunity to provide valuable input on the prioritization process.

Member Moore moved the meeting be adjourned. The motion was seconded and passed unanimously.

Meeting adjourned at 8:44 p.m.