

CAB MEETING ATTENDANCE

Full Board Meetings

FY 2010

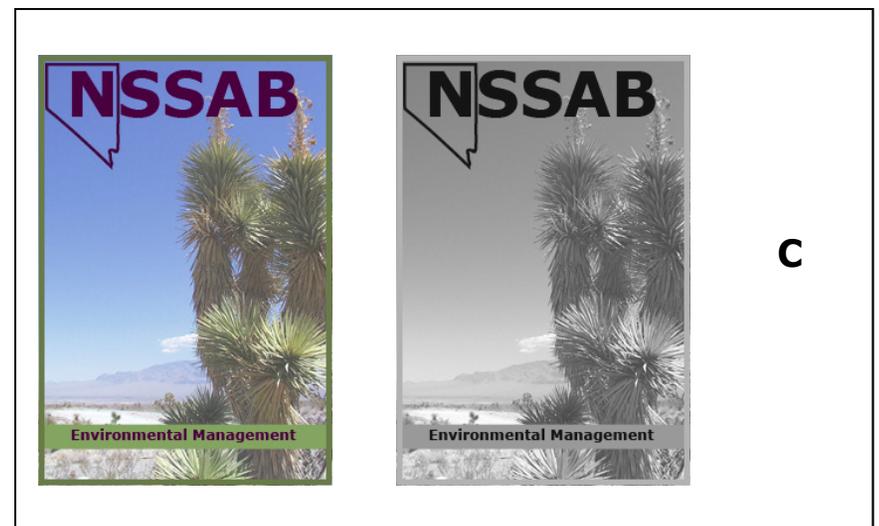
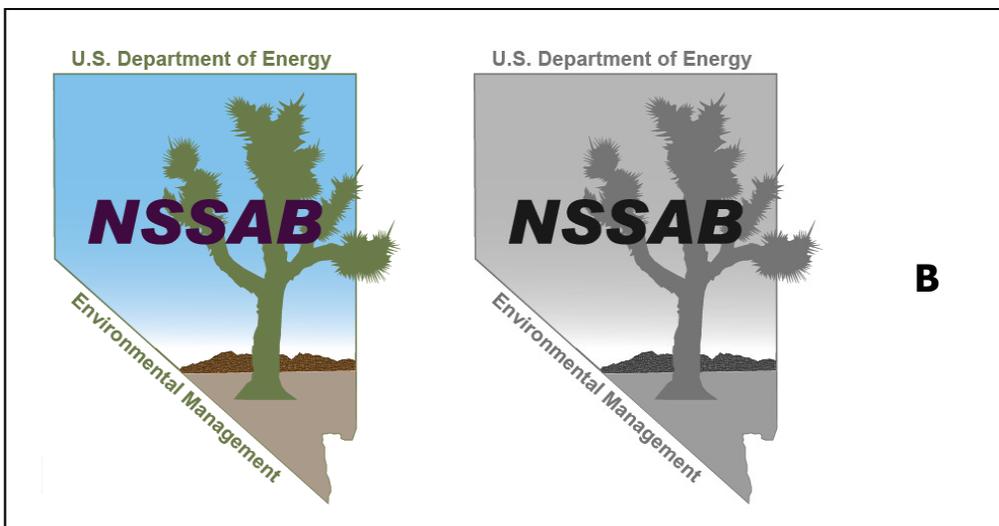
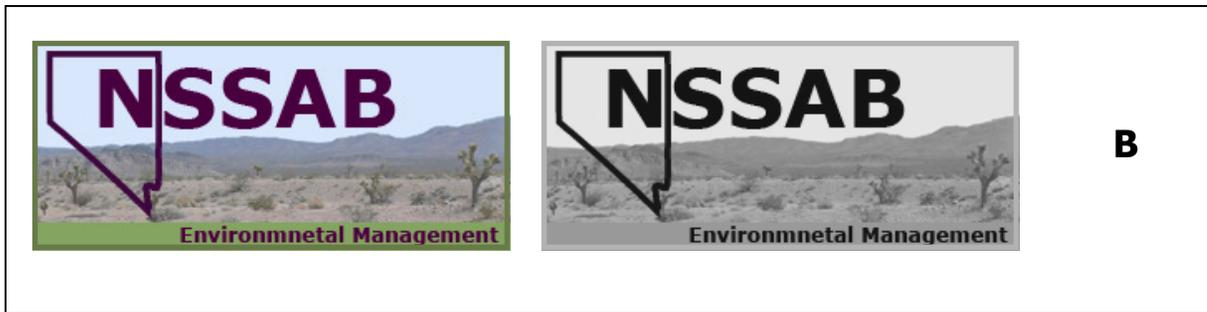
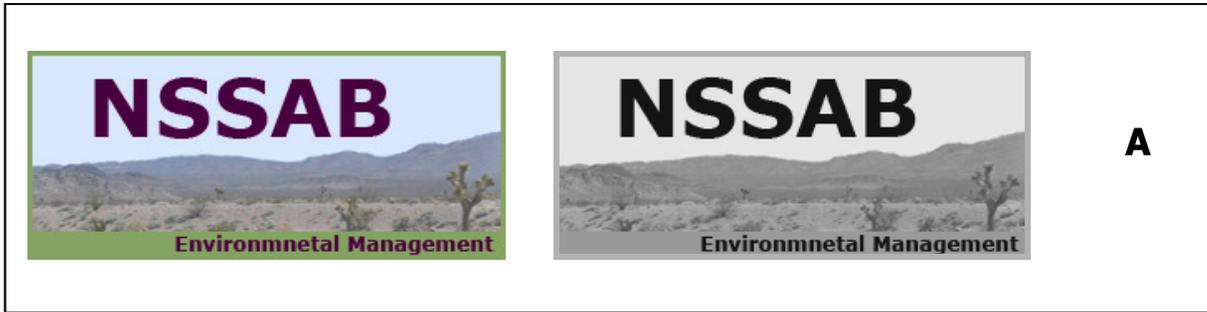
October, 2009 through September, 2010

| Name | 11/18/09 | 12/16/09 | 1/13/10 | 3/10/10 | 5/12/10 | 7/14/10 | 9/1/10 | Maximum Terms Limit | |
|-------------------------------|----------|----------|--|---------|---------|---------|--------|---------------------|------|
| Kathleen Bienenstein | ✓ | ✓ | M e e t i n g C a n c e l l e d | ✓ | E | ✓ | ✓ | 2014 | |
| Bob Gatliff | ✓ | E | | ✓ | ✓ | ✓ | | | |
| Patricia Fleming | | | | | | U | U | RM | |
| David Freeman | | | | | | ✓ | | RS | |
| David Hermann | E | ✓ | | ✓ | ✓ | ✓ | | | |
| Donna Hruska | | | | | | ✓ | U | ✓ | 2016 |
| Robert Johnson | ✓ | ✓ | | | E | ✓ | ✓ | ✓ | 2012 |
| Michael Long | | | | | | E | E | E | 2016 |
| John McGrail | ✓ | ✓ | | ✓ | ✓ | ✓ | ✓ | U | 2014 |
| Vernell McNeal | E | U | | | U | U | U | RS | |
| Gregory Minden | | | | | | ✓ | ✓ | ✓ | 2016 |
| Michael Moore | | | | | | ✓ | ✓ | ✓ | 2016 |
| Harry Mortenson | | | | | | ✓ | ✓ | ✓ | 2016 |
| Diane Niezgodski | | | | | | U | U | RM | |
| Ted Oom | E | ✓ | | | E | ✓ | E | | 2012 |
| Jack Ramsey | ✓ | E | | | ✓ | ✓ | ✓ | | 2010 |
| Ted Schweitzer | ✓ | ✓ | | | U | E | | | 2014 |
| Herb Spiegel | ✓ | E | | | U | U | | | 2014 |
| Hal Sullivan | ✓ | ✓ | | | ✓ | U | ✓ | ✓ | 2012 |
| Michael Voegele | | | | | | ✓ | ✓ | E | 2016 |
| Jim Weeks | ✓ | ✓ | | | E | ✓ | ✓ | ✓ | 2012 |
| Walt Wegst | ✓ | ✓ | | | E | ✓ | ✓ | ✓ | 2012 |
| Key: | | | | | | | | | |
| ✓ = Present | | | | | | | | | |
| E = Excused U = Unexcused | | | | | | | | | |
| RM = Removed RS = Resigned | | | | | | | | | |
| Term End | | | | | | | | | |

Please rank the selections in your order of preference.

NOTE:

1. The selections are also shown in grayscale as many documents are not printed in color.
2. Once a selection is made by the NSSAB, it must be approved by DOE HQ.





Department of Energy
National Nuclear Security Administration
Nevada Site Office
P.O. Box 98518
Las Vegas, NV 89193-8518



OCT 28 2010

Walt Wegst, Chair
Nevada Site Specific Advisory Board
232 Energy Way
North Las Vegas, NV 89030

RESPONSE TO THE NEVADA SITE SPECIFIC ADVISORY BOARD (NSSAB)
SEPTEMBER 2, 2010, LETTER OF SUPPORT, RESOURCE CONSERVATION AND
RECOVERY ACT (RCRA) PART B MIXED LOW-LEVEL WASTE (MLLW) STORAGE
UNIT PERMIT APPLICATION

Thank you for the numerous hours the Board dedicated to reviewing the RCRA Part B MLLW storage unit permit application that was submitted to the Nevada Division of Environmental Protection (NDEP). Your letter of support for the permit was transmitted to NDEP as part of their public comment period. In addition to the NSSAB letter of support, NDEP also received formal comment from one other entity.

On September 17, 2010, NDEP issued approval, through a Notice of Decision, for the Nevada National Security Site (NNSS) to operate a MLLW storage unit. The permit is effective October 17, 2010, through October 17, 2015. This permit will allow the NNSS to continue receiving MLLW while the new MLLW disposal unit is being constructed.

The Nevada Site Office appreciates the Board's active participation in this permitting process, and we look forward to receiving additional recommendations on other Waste Management activities.

E. Frank Di Sanza
Federal Project Director
Waste Management Project

WMP:6916.KS

cc via e-mail:

C. A. Brennan, DOE/HQ (EM-13) FORS
A. E. Clark, DOE/HQ (EM-13) FORS
M. A. Nielson, DOE/HQ (EM-13) FORS
T. H. Murphy, NDEP, Las Vegas, NV
D. M. Rupp, NREI, Las Vegas, NV
C. G. Lockwood, PSG, NNSA/NSO,
Las Vegas, NV
K. K. Snyder, PSG, NNSA/NSO,
Las Vegas, NV
NNSA/NSO Read File

Public Notification of Corrective Actions

October 5, 2010

Las Vegas, Nevada

The Department of Energy (DOE) will not be submitting any Corrective Action Unit (CAU) final Corrective Action Decision Documents (CADDs), CADD/Corrective Action Plans (CAPs), CADD/Closure Reports (CRs), or Streamlined Approach for Environmental Restoration (SAFER) Work Plans, proposing closure-in-place to the Nevada Division of Environmental Protection (NDEP), during the next 60 days.

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c/o Nuclear Testing Archive

775 East Flamingo Road

Las Vegas, NV 89119

Northern Nevada Public Reading Facility

Nevada State Library and Archives

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The following is a list of all documents submitted to the Public Reading Facilities during September 2010. Attached is the Introduction from the document listed below.

| CAU Number | CAU Description | Document |
|-------------------|------------------------|----------------------------------|
| 98 | Frenchman Flat | External Peer Review Team Report |

Introduction for CAU 98 External Peer Review Team Report

The Nevada National Security Site (NNSS) (formerly the Nevada Test Site [NTS]), located in southern Nevada, was the primary site used in the United States for underground testing of nuclear weapons. Underground testing in deep vertical shafts and tunnels was conducted at the NTS from 1951 to 1992. Between 1965 and 1971, 10 underground nuclear tests were conducted at Frenchman Flat, the subject of this report. Seven tests were detonated in the Northern Testing Area, and three were detonated in the Central Testing Area. All 10 tests were exploded at the bottom of drilled vertical holes and mined shafts.

The U.S. Department of Energy (DOE) initiated the Underground Test Area (UGTA) subproject to assess and evaluate radiologic groundwater contamination resulting from underground nuclear test at the NTS and vicinity. For Frenchman Flat, the UGTA subproject addresses media contaminated by the underground nuclear tests, which is limited to geologic formations within the saturated zone or to 100 meters (m) or less above the water table, and media contaminated by the well used for a radionuclide migration experiment (RNM-2S). Groundwater transport has been judged to be the primary mechanism of migration for the subsurface contamination away from the Frenchman Flat underground nuclear tests.

The goal of the UGTA subproject is to assess the public risk from groundwater contaminated as the result of nuclear testing. The primary method to assess this risk is the development of models of groundwater flow and radionuclide transport and using these models to forecast the potential extent of contaminated groundwater for the next 1,000 years. Contaminated groundwater is defined for this project as groundwater that exceeds the radiological standards of the *Safe Drinking Water Act* (CFR, 2009).

Model forecasts will provide the basis for negotiating a compliance boundary for the Frenchman Flat Corrective Action Unit (CAU). This compliance boundary represents a regulatory-based distinction between groundwater contaminated or not contaminated by underground testing. The compliance boundary for Frenchman Flat will be negotiated between the Nevada Division of Environmental Protection (NDEP) and the DOE National Nuclear Security Administration Nevada Site Office (NNSA/NSO). The starting point for the negotiations will be a modeling forecast that provides an estimate of the three-dimensional (3-D) volume of groundwater that is likely to be contaminated as a result of the nuclear testing at Frenchman Flat within the next 1,000 years. The perimeter of this volume of groundwater is referred to as the “contaminant boundary.”

The corrective action strategy for the Frenchman Flat CAU follows a four-step process described in the *Federal Facility Agreement and Consent Order* (FFACO) (1996, as amended March 2010):

1. The Corrective Action Investigation Plan (CAIP) stage
2. The Corrective Action Investigation (CAI) stage
3. The Corrective Action Decision Document (CADD)/Corrective Action Plan (CAP) stage
4. The Closure Report (CR) stage

The final step in the CAI stage is a decision point as to whether or not the modeling evaluations are adequate for moving on to the next stage. As diagramed in the FFACO (1996, as amended March 2010), the corrective action strategy requires an external peer review before making this decision. A previous external peer review concluded that there was insufficient confidence in model predictions as a result of data limitations, ineffective model strategies, and uncertainty analyses that failed to address alternative geologic and hydrologic conceptual models (IT, 1999). The previous peer review panel recommended an integrated program of modeling and field data collection, and recommended exploring alternative conceptual models that might create localized vertical flows between the alluvium and the lower carbonate aquifer (LCA) down through “gaps in” and/or “faults through” the volcanic confining units and into the LCA.

Based on the results of the previous peer review panel, a decision was made at that time to continue in the CAI stage. Since 1999, extensive data collection and modeling evaluations have been conducted as part of the second phase of the CAI stage, including the following:

- Performing data collection, including drilling, hydrologic testing, and field and laboratory testing.
- Performing geophysical investigations, including a detailed 3-D seismic survey spanning the two test areas.
- Modeling the groundwater environment and the radiological source term, and forecasting future extent of radiological contamination for 1,000 years.
- Conducting iterative model evaluations, and monitoring groundwater near and downgradient of test areas.
- Identifying and documenting land-use policies designed to restrict future public access to groundwater contaminated by underground testing.

Integrated interpretation of the existing geologic and geophysical information together with new deep boreholes significantly increased the inferred thickness of the alluvial fill in the basin and the thickness and spatial extent of the volcanic hydrostratigraphic unit. The new data, particularly the 3-D seismic and accompanying gravity data, greatly refined the subsurface faulting pattern in the Frenchman Flat basin. These data resulted in a number of changes in the base hydrostratigraphic model and enabled the development of a series of viable alternative hydrostratigraphic models.

In addition, based on the recommendations of the 1999 peer review panel (IT, 1999), the computational methods used for groundwater flow and transport modeling were revised, and the models of Frenchman Flat were updated. The groundwater flow models for the Frenchman Flat were redeveloped for the base and alternative hydrostratigraphic models, taking boundary conditions and recharge distributions from regional flow models. Calibration and Monte Carlo analysis addressed a range of flow rates through the test cavities and transport parameters, leading to estimated contaminant boundaries for each test site.

Sufficient confidence has now been developed in the site characterization and modeling to seek a second external peer review. This report documents that external peer review, which was conducted between April and September 2010. The peer review team was tasked with addressing the following questions:

1. *Are the modeling approaches, assumptions, and model results for Frenchman Flat consistent with the use of modeling studies as a decision tool for resolution of environmental and regulatory requirements?*
2. *Do the modeling results adequately account for uncertainty in models of flow and transport in the Frenchman Flat hydrological setting?*
 - a. *Are the models of sufficient scale/resolution to adequately predict contaminant transport in the Frenchman Flat setting?*
 - b. *Have all key processes been included in the model?*
 - c. *Are the methods used to forecast contaminant boundaries from the transport modeling studies reasonable and appropriate?*
 - d. *Are the assessments of uncertainty technically sound and consistent with state-of-the-art approaches currently used in the hydrological sciences?*
3. *Are the datasets and modeling results adequate for a transition to CAU monitoring studies—the next stage in the UGTA strategy for Frenchman Flat?*

The external peer review team comprised the following members:

- Mary Lou Zoback, Risk Management Solutions, Newark, California
- Chunmiao Zheng, Department of Geological Sciences, University of Alabama
- Douglas Walker, Illinois State Water Survey, Champaign, Illinois
- James Rumbaugh, Environmental Simulations Inc., Reinholds, Pennsylvania
- Ken Czerwinski, Department of Chemistry, University of Nevada, Las Vegas
- Charles Andrews, S.S. Papadopulos & Associates, Inc., Bethesda, Maryland

[Appendix A](#) presents brief resumes of the peer review team members.

The peer review process started with a four-day meeting in Las Vegas, Nevada, from April 6 to 9, 2010. This meeting (see [Appendix B](#)) consisted of technical presentations and a site visit conducted

by project staff to review the site conditions, field experiments, data collection, and modeling activities of the CAI of Frenchman Flat. Following the initial meeting, periodic conference calls among the team members were held to discuss the tasks of the team, and a team meeting was held on June 7 and 8, 2010, at the University of Nevada, Las Vegas. The team prepared a draft report of its findings in June 2010 and presented its findings to project staff at a meeting in Las Vegas on August 19, 2010.

This report is organized into 10 sections, including this introduction section. [Section 2.0](#) provides background information on Frenchman Flat, the radiological source terms, and the contaminant boundaries that have been calculated. [Section 3.0](#) describes and provides comments on some of the basic data on geology and hydrogeology in Frenchman Flat reviewed by the peer review team to provide foundation for answering the questions for which it was tasked. [Section 4.0](#) is a general discussion on the use of mathematical models as regulatory decision tools to frame the peer review team's opinions on the three review questions. [Sections 5.0](#) through [7.0](#) discuss the peer review team's response to the three questions. [Section 8.0](#) discusses the limitations of analyses that assume that geologic and groundwater conditions are static for the next 1,000 years and are at steady state. [Section 9.0](#) summarizes recommendations of the peer review team, and [Section 10.0](#) lists the documents reviewed by the peer review team and references cited in this report.

Public Notification of Corrective Actions

November 4, 2010

Las Vegas, Nevada

The Department of Energy (DOE) will not be submitting any Corrective Action Unit (CAU) final Corrective Action Decision Documents (CADDs), CADD/Corrective Action Plans (CAPs), CADD/Closure Reports (CRs), or Streamlined Approach for Environmental Restoration (SAFER) Work Plans, proposing closure-in-place to the Nevada Division of Environmental Protection (NDEP), during the next 60 days.

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Carson City, NV 89701-4285

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| CAU Number | CAU Description | Document |
|-------------------|---------------------------|-----------------|
| 408 | Bomblet Target Area (TTR) | CR |

Executive Summary for CAU 408 Closure Report

This Closure Report (CR) presents information supporting the closure of Corrective Action Unit (CAU) 408: Bomblet Target Area (TTR), Tonopah Test Range, Nevada. This CR complies with the requirements of the *Federal Facility Agreement and Consent Order* that was agreed to by the State of Nevada; U.S. Department of Energy (DOE), Environmental Management; U.S. Department of Defense; and DOE, Legacy Management. Corrective Action Unit 408 is located at the Tonopah Test Range, Nevada, and consists of Corrective Action Site (CAS) TA-55-002-TAB2, Bomblet Target Areas. This CAS includes the following seven target areas:

- Mid Target
- Flightline Bomblet Location
- Strategic Air Command (SAC) Target Location 1
- SAC Target Location 2
- South Antelope Lake
- Tomahawk Location 1
- Tomahawk Location 2

The purpose of this CR is to provide documentation supporting the completed corrective actions and data confirming that the closure objectives for the CAS within CAU 408 were met. To achieve this, the following actions were performed:

- Review the current site conditions, including the concentration and extent of contamination.
- Implement any corrective actions necessary to protect human health and the environment.
- Properly dispose of corrective action and investigation wastes.
- Document Notice of Completion and closure of CAU 408 issued by the Nevada Division of Environmental Protection.

From July 2009 through August 2010, closure activities were performed as set forth in the *Streamlined Approach for Environmental Restoration Plan for CAU 408: Bomblet Target Area, Tonopah Test Range (TTR), Nevada*. The purposes of the activities as defined during the data quality objectives process were as follows:

- Identify and remove munitions of explosive concern (MEC) associated with DOE activities.
- Investigate potential disposal pit locations.
- Remove depleted uranium-contaminated fragments and soil.
- Determine whether contaminants of concern (COCs) are present.
- If COCs are present, determine their nature and extent, implement appropriate corrective actions, and properly dispose of wastes.

Analytes detected during the closure activities were evaluated against final action levels to determine COCs for CAU 408. Assessment of the data indicated COCs are not present at CAS TA-55-002-TAB2; therefore, no corrective action is necessary.

No use restrictions are required to be placed on this CAU because the investigation showed no evidence of remaining soil contamination or remaining debris/waste upon completion of all investigation activities. The MEC was successfully removed and dispositioned as planned using current best available technologies. As MEC guidance and general MEC standards acknowledge that MEC response actions cannot determine with 100 percent certainty that all MEC and unexploded ordnance (UXO) are removed, the clean closure of CAU 408 will implement a best management practice of posting UXO hazard warning signs near the seven target areas. The signs will warn future land users of the potential for encountering residual UXO hazards.

The DOE, National Nuclear Security Administration Nevada Site Office, provides the following recommendations:

- A Notice of Completion to the DOE, National Nuclear Security Administration Nevada Site Office, is requested from the Nevada Division of Environmental Protection for closure of CAU 408.
- Corrective Action Unit 408 should be moved from Appendix III to Appendix IV of the *Federal Facility Agreement and Consent Order*.

Overview of Underground Test Area Frenchman Flat Peer Review



Bill Wilborn, Federal Sub-Project Director
Underground Test Area (UGTA)
Nevada Site Specific Advisory Board
November 10, 2010



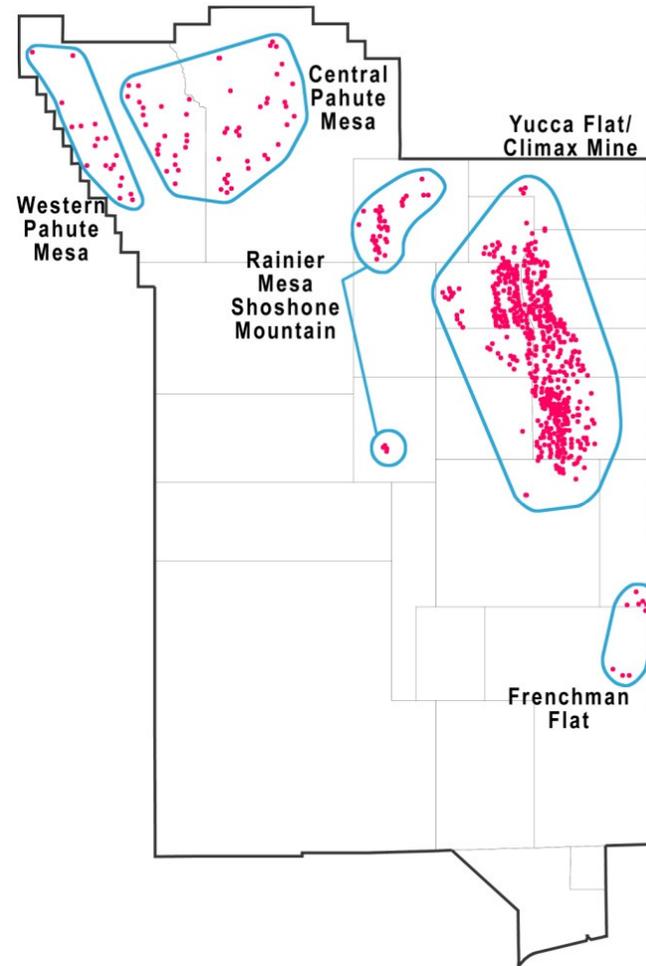
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Corrective Action Units

- There are five Corrective Action Units (CAUs) that make up the UGTA sub-project
 - CAUs are determined by location and type of contamination
 - The Central and Western Pahute Mesa CAUs are managed as one unit



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Frenchman Flat Chronology

- 1999
 - Phase I peer review
 - Initiate Phase II Corrective Action Investigation (CAI) site characterization and modeling studies
- 2001
 - Revised Corrective Action Investigation Plan (CAIP)
- 2001 to 2003
 - Phase II site characterization studies
 - Five new boreholes in two clusters



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Frenchman Flat Chronology

(continued)

- 2001 to 2003 (continued)
 - 3-D seismic reflection survey
 - Multi-well aquifer test in central test area
- 2005
 - Hydrostratigraphic Framework model
 - Revised source term report
- 2006
 - Phase II groundwater flow model
- 2007
 - Transient hydrologic source term for CAMBRIC



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Frenchman Flat Chronology

(continued)

- 2010
 - Phase II transport model
 - Geochemistry data added to flow and transport studies
 - Phase II **PEER REVIEW**
- 2011
 - Moving forward in producing the Frenchman Flat Corrective Action Decision Document/Corrective Action Plan (CADD/CAP) with June deadline to State of Nevada Division of Environmental Protection (NDEP) for comments and/or approval



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Peer Review

- Requirement of the UGTA strategy
- Panel of recognized experts in the fields of geology, geophysics, nuclear chemistry and hydrology/hydrological modeling with experience in planning and completing projects in applied science
- Four-day workshop and field trip to kick-off six-month process
- Overview of the UGTA Sub-Project, site characterization, and modeling studies for the Frenchman Flat CAU
 - Study results are summarized for panel members to gain the necessary information needed to complete the review (Frenchman Flat Documentation Overview N-I/28091-07)



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2010 Peer Review Questions

1. Are the modeling approaches, assumptions and model results for Frenchman Flat consistent with the use of modeling studies as a decision tool for resolution of environmental regulatory requirements?
2. Do the modeling results adequately account for uncertainty in models of flow and transport in the hydrological setting of Frenchman Flat?
3. Are the data sets and modeling results adequate for a transition to CAU monitoring studies, the next stage in the UGTA strategy for Frenchman Flat?



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Peer Review Expectations

- UGTA objective (Federal Facility Agreement and Consent Order [FFACO])
 - “. . . define boundaries around each UGTA CAU to identify water that may be unsafe for domestic and municipal use.”
- Model Reliability (Environmental Protection Agency (EPA) Model Guidance, 2009)
 - “confidence that (potential) users have in a model and its outputs such that they are willing to use the model and accepts its results (Sargent 2000). Specifically, reliability is a function of the model’s performance record and its conformance to best available, practicable science.”



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Peer Review Expectations

(continued)

- Can the Frenchman Flat flow and transport model be used to achieve the goals of the UGTA strategy?
- Expert Judgment Assessment: best available practical science
- Are the results sufficient to start a monitoring/model program?
- Not requesting an assessment of regulatory decisions within the UGTA strategy
 - NDEP responsibility
 - Peer review should not be technically constrained (free-roaming technical review) but should evaluate the studies within the perspective of the regulatory decision problem



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Peer Review Expectations

(continued)

- Purpose of Peer Review (EPA Model Guidance, 2009)
 - Evaluate whether assumptions, methods, and conclusions derived from environmental models are based on sound scientific principles
 - Check the scientific appropriateness of a model for informing a specific regulatory decision



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Review Limitations

- FFACO Agreement
 - 1,000 yr compliance requirement
 - Safe Drinking Water Act: Federal regulatory standard adopted by NDEP
- Classified Inventory
 - National security restrictions
 - NDEP will review classified modeling results
- Monitoring plans/Monitoring details
 - Information provided for context on monitoring approaches
 - Monitoring plans developed in the Corrective Action Decision Document/Corrective Action Plan (CADD/CAP) stage



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Recommendations

- Monitoring design – better understanding the direction of flow due to low velocities
- Model Development – Re-evaluate geochemical age dating
- Water Level monitoring - develop water budgets between volcanic and alluvium, more evaluation of water level changes
- Model Complexity –consider using less complex models

(Peer Review Team Report, Section 9)



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Conclusion

- In their final report, the peer review team –
 - responded affirmatively to all three questions posed
 - Complimented UGTA for its –
 - thorough evaluation of processes that could affect radionuclide migration
 - assessments of uncertainty and model evaluations that “ ... go far beyond those conducted at other contaminated sites in the United States,” and
 - expertise in the surface and subsurface geology and structure of the Frenchman Flat basin



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Conclusion

(continued)

- The overall results of the external peer review are positive with the panel concluding the UGTA studies for the Frenchman Flat CAU "... should proceed to the next stage with an emphasis on monitoring studies."



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Study of Treatment Capability for Mixed Low-Level Waste at the Nevada National Security Site



Frank DiSanza

Federal Project Director

Nevada Site Specific Advisory Board (NSSAB)

November 10, 2010



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Nevada National Security Site (NNSS) Waste Disposal Background

- Since the 1960s, low-level waste has been disposed at Area 5 Radioactive Waste Management Site (RWMS)



- Existing Mixed Low-Level Waste (MLLW) disposal unit (Pit 3) will close in November 2010
- A new MLLW disposal unit (Pit 18) will open in early 2011



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MLLW Treatment

- Some types of MLLW must be treated prior to disposal to ensure the waste meets disposal requirements
 - Example: MLLW containing liquids
- Most generators currently utilize commercial waste treatment capabilities
 - Existing commercial facilities are not capable of treating classified MLLW due to security requirements
- MLLW treatment at the NNSS would require a State of Nevada permit
- Only Department of Energy (DOE) waste (non-commercial) would be accepted for treatment



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Exploring the Benefits of Treatment at NNSS

- Would allow DOE and State of Nevada Division of Environmental Protection (NDEP) additional oversight
 - Existing commercial facilities are located outside the state of Nevada
 - NDEP would oversee treatment versus relying on out-of-state regulators
 - Waste treatment would continue to be verified in accordance with the Radioactive Waste Acceptance Program



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Exploring the Benefits of Treatment at NNSS (continued)

- Would allow for more DOE control of the waste treatment process for wastes destined for ultimate disposal at the NNSS

- Would provide treatment capabilities within the DOE Complex



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Evaluation of Treatment Technologies

- At the request of DOE, the Nevada Site Office Management and Operating contractor (National Security Technologies, LLC) began an evaluation with the objectives to:
 - Provide a conceptual study of waste treatment needs (i.e., demand)
 - Identify potential waste treatment technologies to meet demand
 - Analyze implementation considerations for initiating MLLW treatment at the NNSS



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Evaluation of Treatment Technologies

(continued)

- A review of DOE complex-wide waste generation forecast data indicates that current and future Departmental demand for mixed waste treatment capacity will remain steady and strong
- Analysis and screening of over 30 treatment technologies was narrowed to four (4) to align with the MLLW streams projected to be generated across the DOE Complex:
 1. Macroencapsulation
 2. Stabilization/Microencapsulation
 3. Sort and Segregation
 4. Bench-scale Mercury Amalgamation



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Evaluation of Treatment Technologies

(continued)

- Macroencapsulation definition specifies a *coating* of the waste/debris using resins, plastics, or cementitious materials



- Stabilization/Microencapsulation definition indicates it is applicable to waste streams, and specifically *limits* its main ingredients to cementitious materials



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Evaluation of Treatment Technologies (continued)

- Sort and Segregation would be employed to provide waste minimization by removing non-regulated components and/or prohibited items from MLLW
- Bench-scale Mercury Amalgamation would be used to treat small amounts of mercury from received waste



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Historical and Projected MLLW Volumes for the Two Major Treatment Types

| Technology | Total Historical Waste Volumes (ft ³) (2006-2009) | Total Projected Range Median Value* (ft ³) (2010-2016) | Average Projected Average Annual Volume (ft ³) (2010-2016) |
|---|---|--|--|
| Macroencapsulation/ Microencapsulation | 114,273 | 464,950 | 66,421 |
| Stabilization | 19,680 | 50,700 | 7,243 |
| Totals | 133,953 | 515,650 | 73,664 |

MLLW = mixed low-level waste
ft³ = cubic feet



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NNSS Logistics

- Funding would be necessary to:
 - Prepare permit application
 - Minor upgrades to existing facilities
 - Procurement of treatment equipment
- No new facilities would have to be constructed
 - Anticipate using the existing mixed waste storage facilities
- Waste requiring treatment would be shipped in the same manner as LLW
 - Department of Transportation compliant and must meet NNSS Waste Acceptance Criteria



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NNSS Logistics

(continued)

- Most waste successfully treated at the NNSS would be disposed on-site
 - Some waste may require additional off-site treatment if a non-permitted item were discovered (e.g. incineration of organic liquid, thermal desorption of sludge, etc.)
 - Waste requiring off-site treatment would be sent to an appropriate Treatment, Storage and Disposal Facility for treatment



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Permitting

- Obtaining a permit would require the Nevada Site Office to complete the Resource Conservation and Recovery Act permitting process with pre-application public meeting, 45-day public comment of draft State of Nevada permit, etc.



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Significant Permitting Elements

- **Waste Acceptance Criteria**
 - Mandate shipment and receipt only of waste streams that can be successfully treated by the selected technologies
- **Treatment technologies specifications**
 - Demonstrate treatment technology can meet Land Disposal Restrictions (LDR) treatment requirements
- **Waste Analysis Plan**
 - Specify the sampling and analysis which will need to be performed on treated wastes to verify treatment has met LDR requirements prior to disposal



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NSSAB Involvement

- The Nevada Site Office requests the NSSAB provide a recommendation evaluating if the Nevada Site Office should pursue submitting an application to NDEP for a Mixed Waste Treatment permit at the NNSSS
 - Recommendation due no later than the end of January 2011



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ENVIRONMENTAL MANAGEMENT SITE-SPECIFIC ADVISORY BOARD

**Hanford
Oak Ridge**

**Idaho
Paducah**

**Nevada
Portsmouth**

**Northern New Mexico
Savannah River**

September 2, 2010

Inés R. Triay
Assistant Secretary for Environmental Management
U.S. Department of Energy, EM-1
1000 Independence Avenue, SW
Washington, DC 20585

Dear Assistant Secretary Triay:

The Environmental Management Site-Specific Advisory Board (EM SSAB) Chairs are very pleased with the boost in clean-up that each of our respective sites received from the American Recovery and Reinvestment Act (ARRA) budget allocations. It has accelerated cleanup, in the near-term, of sites, removing waste that would have been more problematic if left for future remediation.

The ARRA budget has also reduced the need for surveillance and maintenance of our sites with the decommissioning and removal of old facilities and infrastructure. This has also provided access to contaminated soils underneath these facilities in need of excavation. Along with reducing site footprints, our communities will have land returned to them for reuse.

ARRA money has also helped to build a stronger, more highly skilled work force which is greatly needed to address the technical complexities of radioactive waste handling. At some of our sites we have seen them move seamlessly from waste site to waste site, accomplishing removal, treatment and disposal of thousands of cubic yards of soil and debris. The program has had great rewards for DOE and its stakeholders across the country.

As we move beyond 2011—when ARRA money for additional scopes of cleanup will essentially cease—we have concerns. The EM SSAB Chairs believe that DOE/EM should ensure that the momentum of cleanup at our sites through activities funded by ARRA dollars does not cease.

We urge DOE/EM to request base program budgets for 2012 and beyond that are compliant with meeting negotiated cleanup levels and timelines and takes advantage of the skilled workforce now in place at each of our respective sites. In light of any anticipated budget constraints, the EM SSAB Chairs encourage DOE/EM to apply the lessons learned under the ARRA program to implement productivity improvements to

ensure that no momentum is lost with planned projects. This will assure the continued momentum of cleanup and provide a stable workforce in our local communities.

We do not want to see any of the 2012 and beyond base program funds for remediation reduced or diverted away from DOE/EM. We, the EM SSAB Chairs, encourage DOE/EM to request, at a minimum, continued base program funding for all planned projects. In maintaining base program funding, DOE/EM will continue to reduce risks to human health and the environment – a benefit to all citizens.

We applaud all of the DOE/EM cleanup successes of the past couple of years and look forward to a continued, determined effort focused on maximizing cleanup efforts across the EM complex. The EM SSAB Chairs invite DOE/EM to discuss this issue at the fall 2010 Chairs' meeting.



Susan Leckband, Chair
Hanford Advisory Board



R. D. Maynard, Chair
Idaho National Laboratory
Site EM Citizens Advisory
Board



Ralph Phelps, Chair
Northern New Mexico
Citizens' Advisory Board



Ron Murphree, Chair
Oak Ridge SSAB
Advisory Board



Judy Clayton, Chair
Paducah Citizens



Val Francis, Co-Chair
Portsmouth SSAB



Richard Snyder, Co-Chair
Portsmouth SSAB



Manuel Bettencourt, Chair
Savannah River Site
Citizens Advisory Board

cc: Melissa Nielson, EM-42
Catherine Brennan, EM-42



Department of Energy

Washington, DC 20585

November 1, 2010

Mr. Manuel Bettencourt, Chair
Savannah River Site Citizens' Advisory Board
47 Hickory Forest Drive
Hilton Head Island, South Carolina 29926

Dear Mr. Bettencourt:

Thank you for your September 2, 2010, letter providing your support for the continued momentum of cleanup activities and a stable workforce in our communities that were funded by the American Recovery and Reinvestment Act (ARRA). Coordinated efforts are underway within the Office of Environmental Management (EM) to capitalize on productivity improvements established under ARRA for application to the base program to maximize the effective use of these funds.

Regarding fiscal year (FY) 2012, the Administration requested that federal agencies identify programs, equal to five percent of their discretionary funding, for potential reduction that have the lowest impact on the agency's mission. In response, EM planning for FY 2012 supports risk reduction and greatest overall environmental benefit while addressing regulatory compliance commitments as required by Executive Order 12088.

We remain committed to working with the Environmental Management Site-Specific Advisory Board to focus on safe, cost-effective risk reduction, and cleanup progress. If you have any questions, please contact Ms. Catherine A. Brennan, EM SSAB Designated Federal Officer, at (202) 586-7711.

Sincerely,

A handwritten signature in black ink that reads "Inés R. Triay".

Inés R. Triay
Assistant Secretary for
Environmental Management

cc: C. Anderson, 3.1
F. Marcinowski, EM-40
M. Nielson, EM-42
C. Brennan, EM-42
J. Luczak, EM-60
C. Flohr, EM-61



Nevada Site Specific Advisory Board
Environmental Management Site Specific Advisory Board

OPERATING PROCEDURES

I. MISSION

The mission of the Nevada Site Specific Advisory Board (the Board or NSSAB) is to provide meaningful opportunities for collaborative dialogue among the diverse multicultural communities of Nevada, U.S. Department of Energy (DOE) Environmental Management (EM), and the DOE Nevada Site Office (NSO).

II. CHARTER

The Board is chartered under the EM Site-Specific Advisory Board Federal Charter. At the request of the Assistant Secretary or the Assistant Manager for Environmental Management, the Board may provide advice and recommendations concerning EM site-specific issues.

III. FUNCTIONS, SCOPE, AND ACCOUNTABILITY

A. Functions: At the specific request of EM, the Board will provide independent advice and recommendations to the Assistant Secretary for Environmental Management or NSO EM personnel. The Board will provide advice and recommendations in response to requests issued by EM.

B. Scope: The scope of the Board's duties includes:

1. The opportunity for the Board to discuss with EM their proposals and plans for such matters as EM facility expansions and closings, environmental projects, and the impact of environmental regulations.
2. Any aspects of EM issues related to clean-up standards and environmental restoration; waste management and disposition; stabilization and disposition of non stockpile nuclear materials; excess facilities; future land use and long term stewardship; risk assessment and management; and clean-up science and technology activities.
3. The Board may also be asked to provide advice and recommendations on any other EM project or issue. The Board ensures early, ongoing community access to information (and its interpretation and implications) and dialogue that improves the quality of the decision making process of EM.

C. Accountability: The Board interacts with the appropriate EM decision makers and NSSAB Liaisons to provide advice on matters it is charged with, on behalf of the citizens of Nevada.

1. The Board seeks a free and open two-way exchange of information and views between Board members and EM, where all are invited to speak and to listen.
2. Board members may request access to independent technical advice, staff, and training.
3. The Board will conduct business according to these specific operating procedures and undergo requisite training (any training necessary for participation in NSSAB activities, including Orientation) to ensure all members will hear a wide range of views and use constructive methods for resolving conflict, making decisions, and dealing with the differing viewpoints.
4. The Board will always remain accountable to the public and EM, and seek to promote diverse community involvement. The Board will develop culturally appropriate procedures to invite public participation in EM's decision-making processes.
5. In compliance with the Federal Advisory Committee Act (FACA), Board meetings will be open to the public. Meetings of the Full Board will be published in the Federal Register to provide a minimum of 15-days advance notice. In addition, notification of any committee meetings (including ad-hoc), work groups, and any other NSSAB-sponsored function will be posted on the NSSAB website (www.nv.doe.gov/ntscab) no later than five days in advance of the activity to ensure stakeholder awareness. Board meetings will be held at regular times in publicly accessible locations to encourage maximum public and Board participation.
6. The Board is part of the Environmental Management Site-Specific Advisory Board chartered pursuant to the Federal Advisory Committee Act. The Board is thereby subject to the requirements of the Environmental Management Site Specific Advisory Board Charter, the Federal Advisory Committee Act (5 USC Appendix), and Federal Advisory Committee Management requirements (41 CFR 101-6).

IV. MEMBERSHIP

A. SSAB Member Appointment / Removal: Pursuant to delegated authority, the Assistant Secretary for Environmental Management is authorized to appoint and remove EM SSAB members.

1. The standard term for Board members is two years, and members are to serve no more than three two-year terms for a total of six years. In areas where the member pool is limited, a request for an exception may be made by

the Assistant Manager for Environmental Management to the Assistant Secretary.

2. In addition, membership appointments are usually staggered so that at least one-third of the Board is retained for continuity.
3. Board membership shall reflect a full diversity of viewpoints in the affected community and region and will strive to be composed primarily of people who are directly affected by DOE site clean-up activities.
4. Members may include, but are not limited to, interested stakeholders from local governments; tribal nations; environmental, civic, and religious groups; labor organizations; ethnic minorities; academia; women's groups; and other interested individuals.
5. Selection and nomination of Board members shall be accomplished using procedures designed to ensure a diverse Board membership and a balance of representative viewpoints.
6. The Board will typically consist of 10 to 20 members. Total membership may fluctuate during recruitment activity periods due to transition and orientation time for incoming/outgoing members.
7. Members serve at the pleasure of the Assistant Secretary. The Assistant Secretary is authorized to appoint and remove members at any time.
8. The Assistant Secretary or Assistant Manager for Environmental Management may request other federal, state, local entities or tribal organizations name liaisons to the local Boards to provide information and represent their agency's interests at local Board meetings. These liaisons may participate in discussions but shall have no vote and shall not be included in the quorum count.

B. Vacancies: The Board may recommend to the Deputy Designated Federal Official (DDFO) individuals to fill vacancies on the Board and may participate in interviews as requested by the DDFO. The DDFO shall interview nominees and forward recommendations, as appropriate, to the Assistant Manager for Environmental Management. After review and approval, the Assistant Manager will formally propose the slate of members to the Office of Environmental Management at DOE Headquarters.

V. MEMBERSHIP RESPONSIBILITIES

A. Board Commitments: Board members make the following commitments:

1. To attend regular meetings and receive training, as necessary;

2. To review and comment on EM and other documents within their purview that come before the Board, and submit timely recommendations to EM;
3. To be available for Committee work between Board meetings, and to participate fully in the affairs of the Board;
4. To work collaboratively and respectfully with other Board members and liaisons in the best interests of both the Board and the public;
5. To represent accurately all matters before the Board;
6. To handle, in a responsible manner, information and materials provided by the agencies, particularly drafts developed for an agency's in-house use, that might have significant future revisions as part of the agency's working practices;
7. To share all written communication about or for Board activities with the Board as a whole and with the DDFO;
8. To act for the Board or as its representative only with the majority vote of the Board;
9. To abide by the terms and conditions of the EM-SSAB Charter and these operating procedures;
10. Any member who fails to attend two (2) full board meetings without an excused absence, or does not attend a minimum of 50% of the regularly scheduled meetings in any one-year period (regardless of excused or unexcused status), shall be removed from the Board. An absence is excused if notice is provided to the NSSAB administrative support personnel prior to the scheduled meeting. This notice of absence must be provided each month that an excused absence is needed. A member must attend at least two-thirds of any meeting in order to be considered present for that meeting.

B. Liaison Commitments: The Board requests that liaisons make the following commitments:

1. To define and communicate clearly to the Board the respective decision making processes of the entities they represent;
2. To provide timely access to information pertinent to EM and associated environmental issues and related decision making;
3. To inform the Board in a timely and proactive manner of entity processes, programs, projects, and activities pertinent to the Board's mission and purpose.

VI. BOARD STRUCTURE

A. Chair and Vice Chair: The Board will elect by majority vote, a Chair and Vice Chair, who will ensure that a diversity of viewpoints are considered in all Board discussions. The Chair will support the Board in a balanced and unbiased manner, irrespective of any personal views on a particular issue and see that all Board members have the opportunity to express their views.

1. The election for Chair and Vice Chair will be held before September 30 of each year. The terms of the Chair and Vice Chair will be one year beginning October 1.
2. The Chair certifies to the accuracy of all Board minutes within 45 days.
3. The Chair signs Board recommendations passed by consensus/majority. If consensus/majority is not reached, the Chair may refer the matter back to a committee or sign and send to DOE both the majority and minority reports.
4. The Chair serves between regular meetings of the Board as contact for EM, interest groups, and the general public.
5. The Vice Chair serves as Chair in the absence or incapacity of the Chair.
6. The Chair and Vice Chair will have other duties, consistent with applicable statutes, regulations, charters, and operating procedures, as assigned by the Board.
7. In the absence of the Chair and Vice Chair, the immediate past Chair, if that person still serves on the Board, shall serve as Chair of the board meeting. In the absence of the immediate past Chair, the immediate past Vice Chair, if that person still serves on the Board, shall serve as Chair of the Board meeting. If none of these persons is present, those Board members present shall select, with the approval of the DDFO, a chair for the meeting.

B. Committees: The Board will establish its Committees prior to the beginning of each fiscal year to reflect the Board's approved work plan for that year. The Board may establish additional Committees as necessary throughout the fiscal year to address changes or adjustments to the approved work plan for that year.

C. Structure of Committees:

1. Membership on committees will be on a volunteer basis.
2. Committees shall be made up of at least four Board members. Non-Board members may serve on committees with the concurrence of the DDFO. Non-Board and liaison committee members may vote in committee but may not hold committee leadership positions.
3. Liaisons will not constitute a majority of the committee.

4. Committees will meet independently of the Board.
5. Committees may not directly submit recommendations to EM. They are solely responsible for producing draft proposals, recommendations, or information for the full Board. Before presenting a recommendation to the Board, the committee should have passed the recommendation by majority vote of the members attending the meeting.
6. Committee Chairs will be elected by majority vote of the committee at the beginning of each fiscal year, or as necessitated by vacancies. Committees may, at their discretion, internally select, elect, appoint, or remove committee Co-Chair or Vice-Chair (either title bearing the same intended meaning), from among only the properly appointed Board members of the committee. Co-Chairs or Vice-Chairs shall serve and act in the temporary absence of the committee Chair.
7. Committee Chairs shall notify the Board Chair and the DDFO of the selection, election, appointment, or removal of any committee Co-Chair or Vice-Chair.

D. Work Sessions: Work sessions are defined as meetings of the Board at which no official action or decision may be taken. They must, however, be formally posted on the NSSAB website.

E. Closed Session: Upon approval of the Assistant Secretary for Environmental Management, the Board shall announce fifteen days in advance of the meeting a Closed Session for matters concerning litigation or private personnel matters. Given the sensitivity associated with convening a Closed Session, the Board will explore all alternatives within its discussion and decision-making framework to resolve issues before requesting a Closed Session.

F. Removal of Board Officers: An officer of the Board (Chair, Vice Chair, or Committee Chair, Vice-Chair or Co-Chair), may be removed from their office for misconduct or neglect of duty by a two-thirds (2/3) vote of the Board. Recommendation for removal can be made, the DDFO, or as a duly authorized motion tendered by a Board member at a regularly scheduled Board meeting.

G. Replacement of Officers

1. A Board office vacancy (Chair, Vice-Chair) that comes into existence will be announced at a regularly scheduled Board Meeting.
2. An election by majority vote of the entire Board will be held at the next regularly scheduled Board meeting after the meeting at which the vacancy was announced. In the event of a removed, resigned, or abandoned vacancy in the Chair or Vice-Chair, the term of office of any interim replacement for the

Chair or Vice Chair shall expire on September 30 and the regularly scheduled annual election shall be held as provided in Section VI.A.1.

3. If both the Chair and Vice-Chair become vacant at or near the same time, the Board shall elect, by majority vote, a Chair and Vice-Chair at the meeting at which the vacancy is announced, to serve the remainder of the term. To prevent delay in Board work, and in the absence of a timely interim election, the Board shall appoint, subject to DDFO approval, an Acting Chair and Vice Chair (if Vice Chair is needed) by electronic vote from among the voting members of the Board to serve until the next regularly scheduled Board meeting.

VII. DECISION MAKING

A. Quorum: A quorum of the Board consists of a majority (51%) of the voting members of the Board.

B. Rules of Order:

1. The current edition of "Robert's Rules of Order" governs the Board.
2. All decisions, other than changes to the Operating Procedures (Section XIV) and administrative decisions, are made at valid full Board meetings (see Section IX.A.2) by a majority vote of those members present and voting.

C. Requirements for Recommendations to EM:

1. Recommendations shall be approved by consensus/majority at a Board meeting; if consensus/majority cannot be reached, a majority and a minority report(s) shall be written. These reports may be submitted to EM, but must be clearly marked as representing two (or more) points of view.
2. When an issue comes before the Board, the Chair may refer the issue to the appropriate Committee or create an Ad-hoc Committee for that issue. The Committee or Ad-hoc Committee will report progress to the Board at the next meeting.
3. Recommendations to be considered by the Board shall be processed in the following manner:
 - a) Full Board (Committee of the Whole): Information and perspectives are discussed and exchanged by the full Board. In the process, the Board may hear from outside technical experts, DOE staff, Environmental groups, academia, and representatives from other public agencies, or other stakeholders. Recommendations are then prepared and voted on by the full Board as a Committee of the Whole. In the event consensus is not achieved, a minority position paper may be included.

b) Committees: Meetings are held, information and perspectives are discussed and exchanged, and draft recommendations are prepared and approved for review by the full Board. In the process, the Committee may hear from outside technical experts, DOE staff, environmental groups, academia, and representatives from other public agencies, or other stakeholders. In the event consensus is not achieved, a minority position paper may be included with the Committee recommendation. Committee recommendations are presented by the Committee Chairperson or designated committee member to the full Board for further action and consideration as a formal NSSAB recommendation, if appropriate, to EM.

4. Upon passage by the Board, all recommendations will be signed by the Chair and conveyed to EM in writing within fifteen (15) calendar days.

5. The Board requests EM provide timely response to Board recommendations and explain the basis for EM's decision and implementation of accepted recommendations.

6. Consideration of recommendations from other EM SSABs or conferences will be handled in the manner described above.

D. Administrative Decision Making:

1. Administrative functions of the Board may be delegated to the Chair who may assign actions to the support staff.

2. If the Board finds a need to review or affirm specific decisions made under the authority delegated to the Chair such affirmation will be expressed by a majority vote of the Board at the next meeting.

VIII. ROLE OF THE FACILITATOR

A professional facilitator may be hired with the concurrence of the DDFO to help the Board organize its work, prepare an agenda based on consultations with the Board and the Chair, facilitate the Board meetings, and work with the staff to prepare the minutes of the meetings.

IX. FORMAT AND CONDUCT OF MEETINGS

A. Meeting Format:

1. Public notices will be printed in the Federal Register at least fifteen (15) days before full Board meetings. Announcements may be made via radio, television, local newspapers, or the NSSAB website.

2. A quorum of voting Board members is required to constitute a valid meeting.
3. The Board will meet as needed, with the length of meetings determined by the agenda.
4. The Chair, DDFO and support staff will develop draft agendas, meeting minutes and other required/requested services. Meeting agendas must be approved by the DDFO.
5. Meetings will be open to the public; a section of the meeting room will be set aside for observers, and public comment is invited at appropriate times during a meeting.
 - a) There will be a fixed agenda time for public comment. A non-recused Board member may not address the Board during the time set aside for public comment. The public comment period may be extended by the Chair or by consensus of the Board members in attendance.
 - b) If required, at the discretion of the Chair, the fixed time will be divided equally among the members of the public who request to speak.
 - c) Before a decision on a recommendation is made, the Chair may invite members of the public to offer their input. The Board will determine in advance how much time they will allocate for public input.
 - d) Members of the public may offer their comments in writing and give them to the DDFO.
 - e) Time will be set aside for Board member comments during each meeting.
6. Any meeting will be set up in terms of both the physical arrangements and the agenda to facilitate hearing and discussion.
7. Minutes of the meetings will be kept by support staff, distributed to the Board/Committee members for their review and made available to the public.
 - a) The Chair and DDFO must certify the accuracy of the Board minutes within 45 calendar days of the meeting to which they relate. In the absence of the Chair, the Vice-Chair must make such certification.
 - b) Committee minutes must be certified by the Committee Chair within 30 days of the meeting to which they relate.

8. Any product of the Board such as policies, positions, reports, advice or recommendations given to DOE must be reviewed by the Board in final decision form before distribution.

9. The Board may utilize a neutral third party facilitator to assist it in accomplishing its mission; in all instances the facilitator will operate in a completely neutral, balanced, and fair manner;

10. Board members will show respect to each other, EM, liaisons, and the public.

X. TRAVEL

The NSSAB Chair, Vice-Chair or designee is expected to attend national Site-Specific Advisory Board meetings and/or workshops. Any additional slots available (as determined by the DDFO) shall be offered to a member whose work is most closely related to the meeting topic.

A travel report shall be given to the Board at the next full Board meeting following completion of travel.

XI. BUDGET

A. Authority: The DDFO retains the fiscal responsibility for the Board.

B. Compensation: Board members will serve without compensation but may receive reimbursement for direct expenses related to the work of the Board and meeting attendance.

C. Travel Expense: Board members are required to follow applicable federal travel regulations. All travel expenses must be submitted to the appropriate support staff responsible for travel reimbursement according to Federal guidelines.

1. Travel to out-of-town meetings (other than those at which the Chair is expected to attend) shall be offered to those NSSAB members (as determined by the DDFO) who are specifically engaged in topics pertinent to the meeting subject.

2. Travel for "official" NSSAB business is conducted under U.S. Government travel order procedures and rules. Thus, certain hotel rates, airline, car rental, and per diem expense restrictions will apply. Travel costs will be reimbursed according to U.S. Government Joint Travel Regulations.

3. Requests for travel shall be submitted to the NSSAB office in writing or via email. Board members must submit receipts for lodging, transportation (or actual mileage for personal vehicle), and incidental expenses to the appropriate support staff person within 10 days of completion of travel.

XII. EVALUATION

The Board shall direct the Administrative support staff to prepare an annual fiscal-year evaluation to assess how adequately it is representing stakeholder interests and completing work plans for review of the Board. The Board may also evaluate the responsiveness of EM. After Board review, discussion, and approval, but no later than October 15, the report will be submitted to the DDFO.

XIII. CONFLICT OF INTEREST

A. Definition: Board members are prohibited from personally and substantially participating, as a Board member, in any particular matter in which the Board member or the Board member's spouse, minor child, organization in which he or she is serving as an officer, director, trustee, general partner, or employee has a financial interest. This restriction also applies if the Board member is negotiating or has any arrangement concerning prospective employment with any person or organization that has a financial interest in any particular matter before the Board.

B. Enforcement of Conflict of Interest Policy: Questions concerning conflict of interest shall be referred to the DDFO, who will seek the advice of legal counsel, for resolution, as required.

C. Recusal: If a Board member is aware of a conflict of interest, as defined above, the member shall immediately inform the DDFO and the Board of the interest and shall refrain from participating in discussions and recommendations in which a conflict or potential for conflict of interest exists.

D. Principles of Conduct: Board members shall abide by the following conflict of interest principles:

1. Members shall refrain from any use of their membership, which is or gives the appearance of being motivated by the desire for private gain;
2. Members shall not use, either directly or indirectly for private gain, any inside information obtained as a result of Board or Committee service;
3. Members shall not use their positions in any way to coerce, or give the appearance of coercing, another person to provide a financial benefit to the member or any person with whom the member has family, business, or financial ties;
4. Members shall not knowingly receive or solicit from persons having business with the DOE anything of value as a gift, gratuity, loan, or favor while serving on the Board or in connection with such service.

a) **Exceptions:** Members may receive an unsolicited gift from persons having business with or an interest in DOE if:

(1) The gift has an aggregate market value of \$20 or less per occasion, provided that the aggregate market value of the individual gift received from any one person under the authority of this paragraph shall not exceed \$50 in a calendar year;

(2) The gift is motivated by a family relationship or personal friendship rather than a member's position; and

(3) The gift results from the business or employment relationship of a member's spouse or the outside business or employment activities of a member when it is clear that such gifts are not enhanced because of the member's position.

XIV. AMENDING THE OPERATING PROCEDURES

A. Policy

The Board shall have the power to alter, amend, and repeal these operating procedures in ways consistent with the Amended Charter of the Environmental Management Site Specific Advisory Board, and other applicable laws, regulations and guidelines.

1. Any member of the Board, the Designated Federal Official (DFO), or the public may propose an amendment to the operating procedures. However, an amendment proposed by a member of the public must be sponsored by a Board member.
2. The Board may consider and take action on the amendment to the operating procedures 30 days after electronic notice of proposed amendment.
3. Voting will be conducted by electronic ballot, duly submitted by electronic means, annotated and dated by the member.
4. Amendments require the affirmative vote of two-thirds majority of the membership of the Board.
5. All amendments to these operating procedures must have concurrence of the DFO in consultation with the Office of General Counsel.

B. Electronic Voting Prohibition

Except as provided in Section XIII.B above, nothing in this section shall be construed to permit or authorize electronic voting by any Board member on any other Board or committee action.

XV. ADOPTION OF THE OPERATING PROCEDURES

These operating procedures will be effective:

- upon the affirmative vote of a two-third majority of the Board membership
- execution by the Chair
- review and concurrence by the DOE Office of General Counsel
- approval of the EM SSAB DFO
- All previous bylaws or procedures are hereby rescinded.

XVI. SUBORDINATION AND SEVERABILITY OF THE OPERATING PROCEDURES

If a conflict arises with respect to any provision of these Operating Procedures, Federal law or regulation shall control. In the event that any provision of these operating procedures is invalid, such invalidity shall not affect the remaining provisions that shall continue in full force and effect.

APPROVED as AMENDED on: