



U.S. DEPARTMENT OF
ENERGY



Draft Environmental Impact Statement for the Disposal of Greater-Than-Class C Low-Level Radioactive Waste and GTCC-Like Waste

Office of Disposal Operations
Office of Environmental Management



EM *Environmental Management*

safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Presentation Overview

- Proposed action, purpose, and need
- GTCC waste inventory
 - GTCC LLRW
 - GTCC-Like Waste
- Proposed disposal methods and locations
- Alternatives evaluated
- Draft EIS analysis and potential impacts
- Considerations for development of a preferred alternative(s)
- Next steps

The Draft EIS does not identify a preferred alternative because DOE does not have a preference at this time. A preferred alternative will be included in the Final EIS.



Proposed Action, Purpose, and Need

Proposed Action: Construct and operate a new facility or facilities or use an existing facility for the disposal of GTCC waste

Purpose and Need:

- No existing disposal facility for GTCC waste
- Required by Congressional mandate
 - Low-Level Radioactive Waste Policy Amendments Act of 1985
 - Energy Policy Act of 2005
- Responsive to National Security Concerns: disused sealed sources
- Supports U.S. Programs: medical isotope production, clean energy, deep space exploration, and other programs
- Implements Environmental Stewardship: DOE and commercial cleanup commitments



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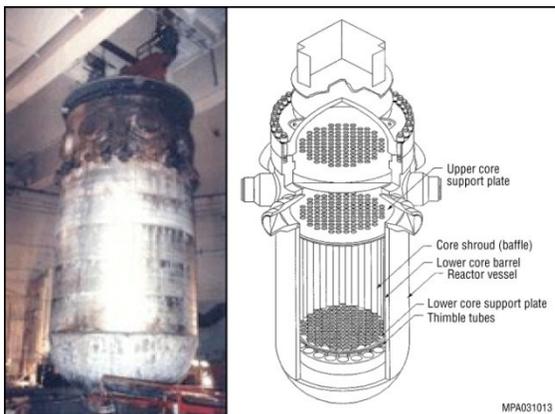
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GTCC Waste Inventory

- GTCC Low-Level Radioactive Waste (LLRW): Most hazardous of the four U.S. Nuclear Regulatory Commission (NRC) classes of commercial LLRW
- GTCC-like Waste: DOE generated or owned LLRW or transuranic waste with characteristics similar to GTCC LLRW and no identified path for disposal
- Approximately 12,000 cubic meters (m³) with 160 million curies (MCi)
 - Relatively small volume but high activity
 - Less than 10 percent of total volume currently in storage; most waste will not be generated for several decades
 - Sealed sources present national security concern and therefore have a near-term disposal need (comprised 24 percent of total volume)
- Three Waste Types
 - Activated metals: 2,000 m³ with 160 MCi
 - Sealed sources: 2,900 m³ with 2.0 MCi
 - Other Waste: 6,700 m³ with 1.3 MCi



GTCC Waste Inventory (continued)



Activated Metals

(Largely generated from the decommissioning of nuclear reactors.)



Sealed Sources

(Widely used in equipment to diagnose and treat illnesses (particularly cancer), sterilize medical devices, irradiate blood for transplant patients, nondestructively test structures and industrial equipment, and explore geologic formations to find oil and gas.)



Other Waste

(Other Waste primarily includes contaminated equipment, debris, scrap metal, filters, resins, soil, and solidified sludges. These wastes are associated with the production of molybdenum-99, production of radioisotope power systems, and environmental cleanup. Photo shows GTCC contaminated glove boxes.)



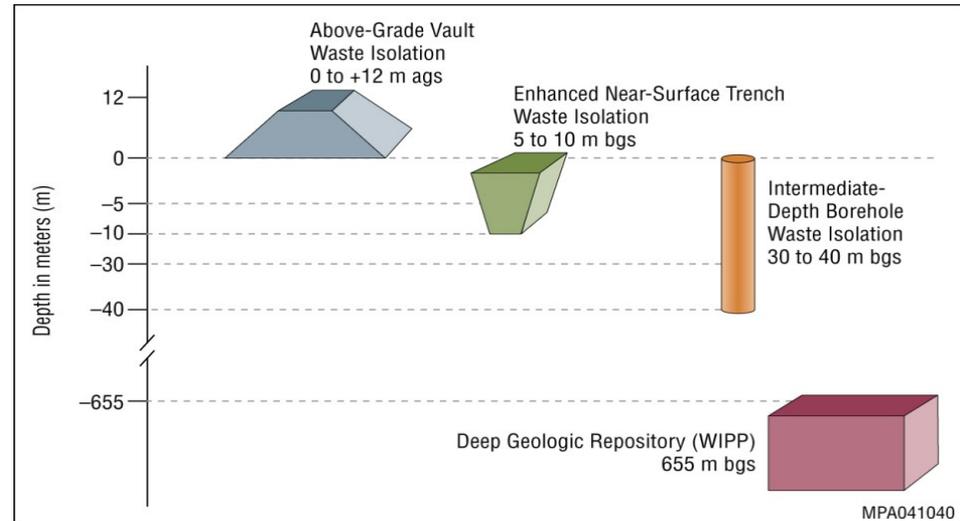
GTCC Generator and Storage Locations

- GTCC LLRW
 - Activated metals: primarily from nuclear power plants, most of which are located in eastern and midwestern states
 - Sealed sources: throughout the U.S. (e.g., hospitals and universities)
 - Other Waste: Missouri, New York, Texas, and Virginia
- DOE GTCC-like Waste:
 - West Valley Site, New York
 - Babcock and Wilcox facility, Virginia
 - Idaho National Laboratory, Idaho
 - Oak Ridge Reservation, Tennessee



Proposed Disposal Methods

- Geologic repository-Waste Isolation Pilot Plant (WIPP) (≤ 26 new rooms)
- Intermediate depth borehole (≤ 110 acres)
- Enhanced near surface trench (≤ 50 acres)
- Above grade vault (≤ 60 acres)



Disposal Method Considerations in Draft GTCC EIS

- NRC requires disposal in a geologic repository, but allows for alternative land disposal methods to be considered
- Draft EIS assumes protection of the inadvertent human intruder by institutional controls, disposal depth, control of waste concentrations, waste form stabilization, and intruder barriers



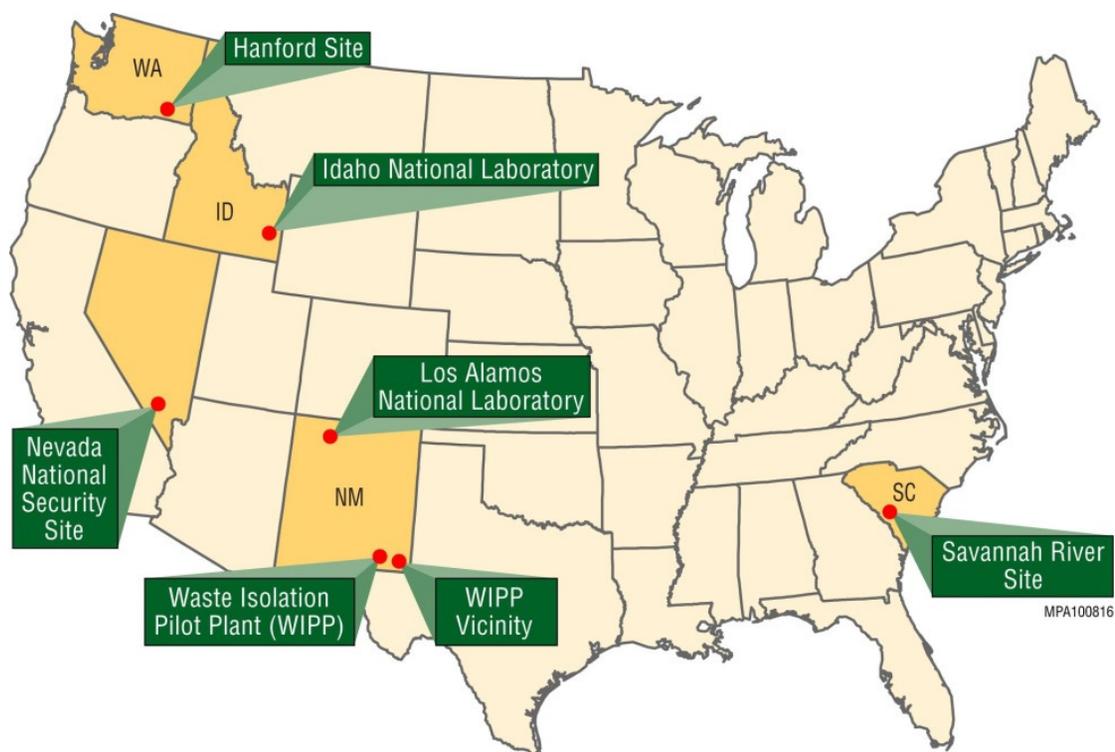
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Proposed Disposal Locations

- Six DOE sites with existing radioactive waste disposal operations and federal land in the WIPP vicinity
- Generic commercial facilities in four NRC regions across the U.S. (Region I-Northeast, Region II-Southeast, Region III-Midwest, and Region IV-West)



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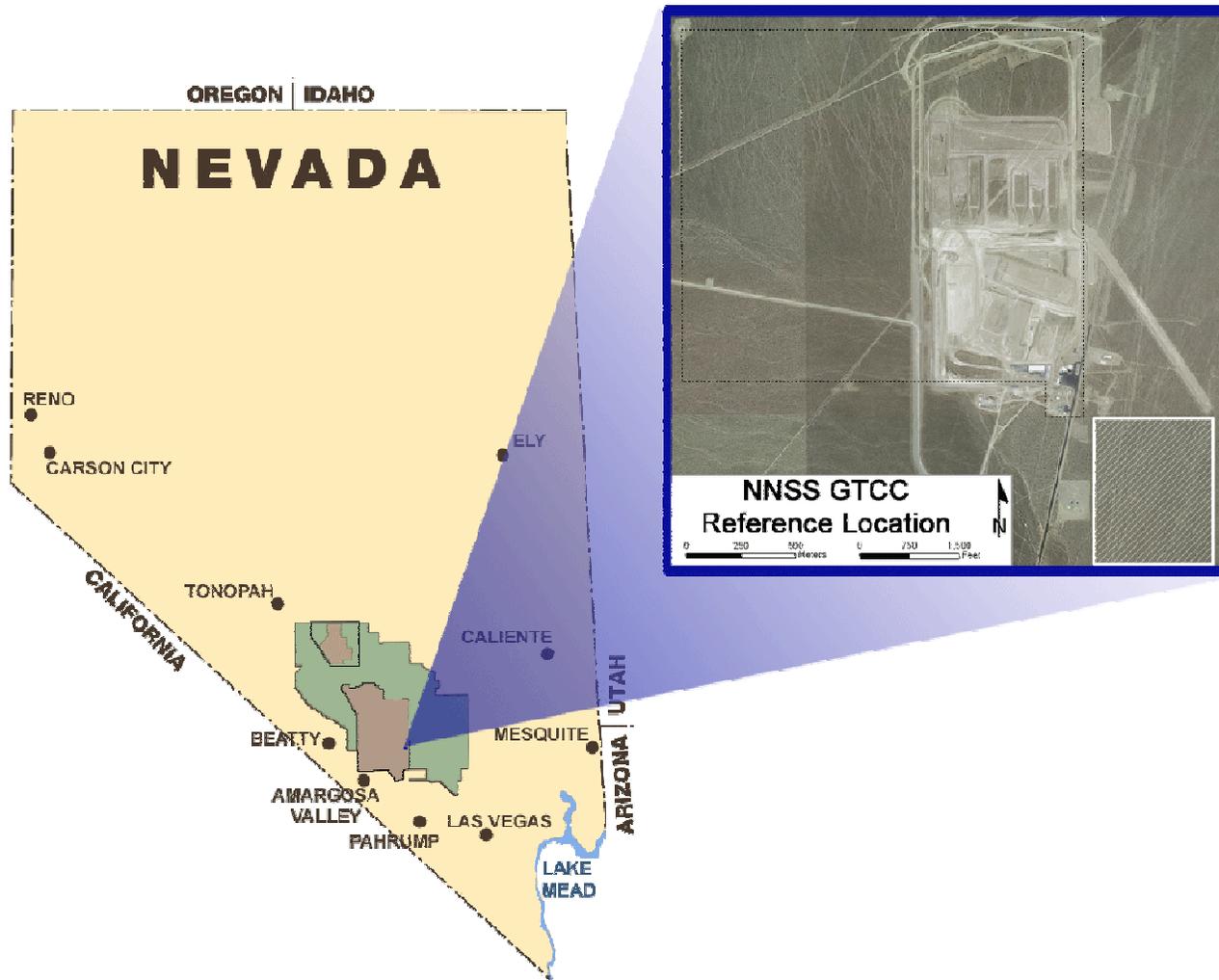
Reference Locations for Borehole, Trench, and Vault Facilities

The evaluation of reference locations serve as a starting point for each of the sites being considered. DOE would conduct further studies as appropriate to optimize facility location at the selected site or sites.

- **Hanford Site:** south of 200 East Area in central portion of Hanford Site
- **Idaho National Laboratory (INL):** southwest of the Advanced Test Reactor Complex in the south central portion of INL
- **Los Alamos National Laboratory (LANL):** within Technical Area-54
- **Nevada National Security Site (NNSS):** within Area 5
- **Savannah River Site (SRS):** northeast of Z-Area
- **WIPP Vicinity:** section 27 inside WIPP Land Withdrawal Boundary (LWB) and section 35 just outside the WIPP LWB to the southeast



NNSS GTCC Reference Location



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Alternatives Evaluated

1. No Action (continue current storage practices)
2. Geologic Repository at WIPP
3. Borehole at Hanford, INL, LANL, NNSS, WIPP Vicinity, and generic commercial Region IV
4. Trench at Hanford, INL, LANL, NNSS, SRS, WIPP Vicinity and generic commercial Regions II and IV
5. Vault at Hanford, INL, LANL, NNSS, SRS, WIPP Vicinity, and generic commercial Regions I-IV

DOE Does Not Have A Preferred Alternative

- Preferred alternative(s) to be developed for Final EIS in consideration of public comments on Draft EIS
- Combination of alternatives might be appropriate



Draft EIS Analysis: Scope

- Evaluated 11 environmental resources areas and potential cumulative impacts
- Potential impacts analyzed for construction, operations, and post-closure phases
- EIS describes models, input parameters, key assumptions, and uncertainties
- For Alternatives 2-5 (geologic repository, borehole, trench, and vault):
 - Analysis assumes that the total waste inventory would be disposed at a single disposal location
 - EIS structured so that decisions on disposal method(s) or location(s) could be by waste type

Resource Areas Evaluated in Draft EIS

1. Climate, Air Quality, and Noise
2. Geology and Soils
3. Water Resources
4. Human Health
5. Ecology
6. Socioeconomics
7. Environmental Justice
8. Land Use
9. Transportation
10. Cultural Resources
11. Waste Management



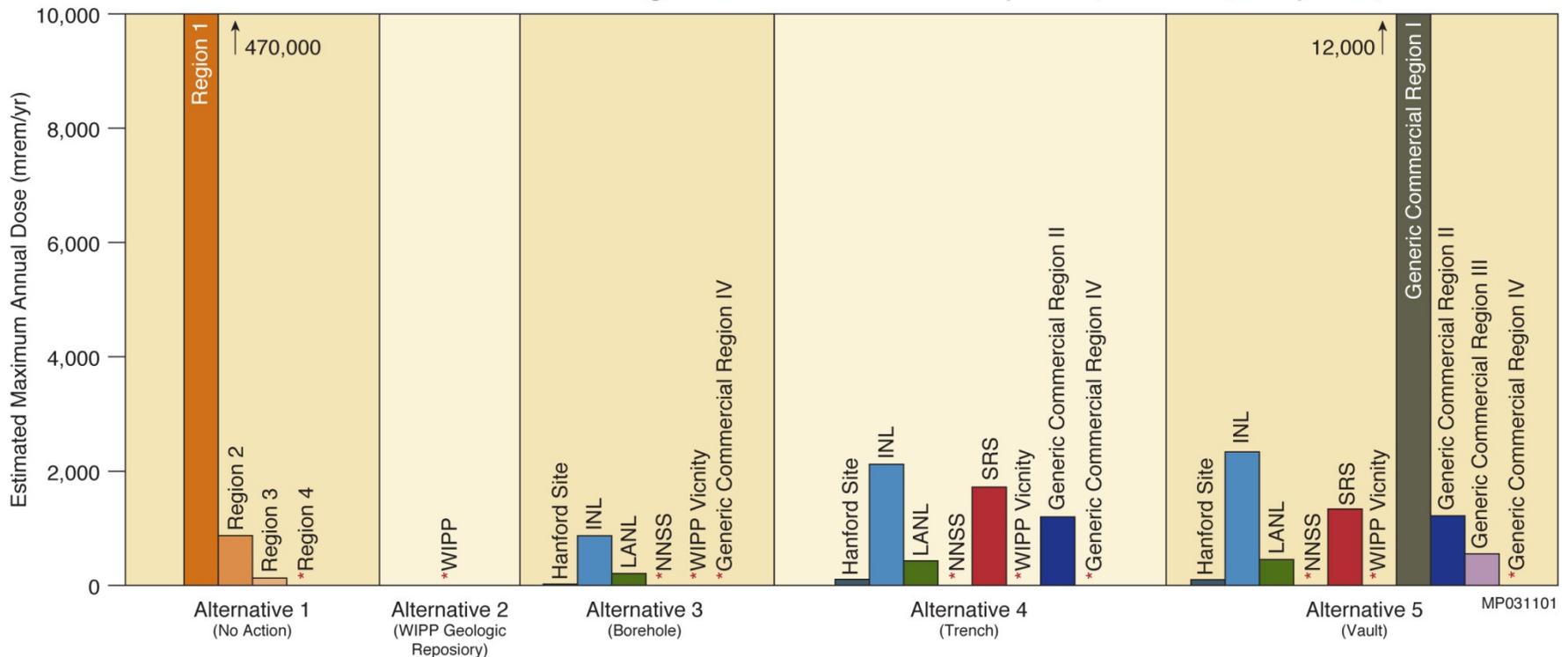
Draft EIS Analysis: Potential Impacts

- **Alternative 1-No Action (continue current storage/management practices):** potential long-term human health impacts; no incremental impact for other resource areas; wastes would not be shipped therefore no transportation was assumed
- **Alternative 2-WIPP:** Impacts would be low for all resource areas
 - Transportation: an estimated 11,800 rail shipments or 33,700 truck shipments over approximately 60 years, which could result in one to two non-radiological accident fatalities
- **Alternative 3, 4, and 5 (borehole, trench, and vault):** Low impacts for all resource areas except potential long-term human health impacts at some sites
 - Environmental Justice: subsequent NEPA analysis would consider unique exposure pathways to tribal and other sensitive populations
 - Cultural Resources: known cultural resources within GTCC reference locations at LANL, NNS, and SRS
 - Cumulative Impacts: potential cumulative human health impacts at Hanford, INL, LANL, and SRS
 - Transportation: an estimated 5,000 rail shipments/ or 12,600 truck shipments approximately 60 years, which could result in one non-radiological accident fatality



Potential Human Health Groundwater Impacts

Maximum Estimated Long-Term Human Health Impacts (within 10,000 years)



*Zero Dose

- Estimates for arid regions are lower than humid regions (INL estimates incorporate fractured basalt assumptions)
- Potential impacts for alternatives should be used in a comparative manner given the simplifying assumptions and uncertainties
- Sensitivity Analysis performed for critical input parameters to address uncertainties



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Considerations for Preferred Alternative(s) for Final EIS

Preferred alternative could be a combination of two or more alternatives, based on the above considerations

- *Public comments on Draft GTCC EIS*
- *Waste type considerations:* radionuclide inventory, waste form stability, physical characteristics (size), and availability for disposal
- *Disposal method considerations:* inadvertent human intrusion, construction and operational experience, post-closure care, and cost
- *Disposal location considerations:* human health impacts (including cumulative impacts); cultural resources and tribal concerns; laws, regulations, and other requirements



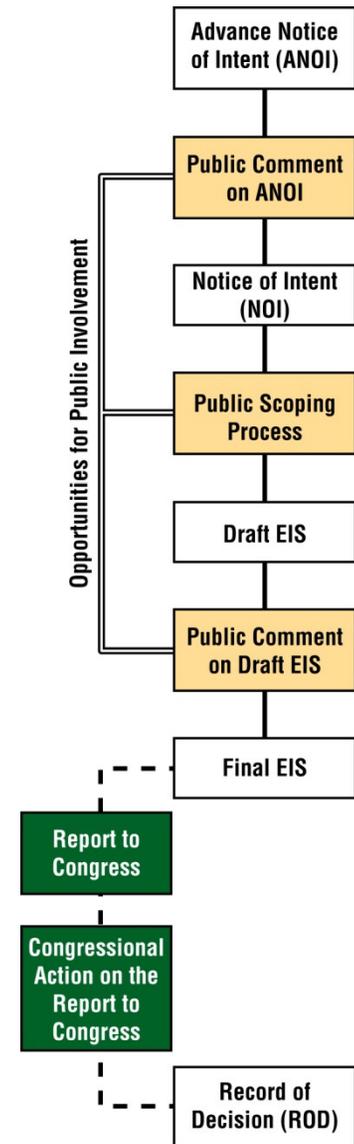
Considerations for Preferred Alternative(s) for Final EIS (continued)

- Draft EIS identifies laws, regulations, and other requirements that could impact implementation of the Draft EIS alternatives
- Examples:
 - Hanford: DOE decision to not ship GTCC LLRW to Hanford at least until the Waste Treatment Plant is operational (74 FR 67189, December 18, 2009); 2004 DOE Record of Decision regarding disposal facility liners and limits on the amount of off-site LLRW and mixed LLRW received at Hanford
 - INL: Idaho Settlement Agreement of 1995
 - WIPP: Land Withdrawal Act, Resource Conservation and Recovery Act permit, and State/DOE Agreement for Consultation and Cooperation
 - WIPP Vicinity: WIPP Land Withdrawal Act for section 27 and Bureau of Land Management land withdrawal for section 25



Next Steps

- Develop Final EIS in consideration of public comments on Draft EIS
- Issue Final EIS
- Issue Report to Congress and await Congressional action
- Issue Record of Decision
- Implement selected alternative or alternatives
 - Some alternatives may require new or modification to existing federal legislation for implementation



MPA110906



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For Further Information

- Arnold Edelman
GTCC EIS Document Manager
Office of Disposal Operations (EM-43)
Email: gtcceis.anl.gov
- You can continue to stay informed
by visiting the GTCC EIS website at:
<http://gtcceis.anl.gov>



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Industrial Sites FY 2013 Outlook



Kevin Cabble
Federal Sub-Project Director
Environmental Restoration Project
Briefing to Nevada Site Specific Advisory Board (NSSAB)
March 16, 2011



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Baseline Planned Cost

- FY 2012 \$3.3 M
- FY 2013 \$0.5 M



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Planned Activities – FY 2013

- Surveillance and maintenance at the Nevada National Security Site (NNSS) and the Tonopah Test Range (TTR)
- Post-closure monitoring at the NNSS and at the TTR



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FY 2013 – *What if...*

Industrial Sites received a 25% decrease in funding?

- Negotiate with State of Nevada Division of Environmental Protection to do less surveillance and monitoring and post-closure inspections at the NNSS and TTR



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FY 2013 – *What if...*

Industrial Sites received a 25% increase in funding?

- Accelerate pre-field work for the remediation and demolition of CAU 114, Area 25 Engine Maintenance Assembly and Disassembly (EMAD) Facility



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Soils FY 2013 Outlook



Kevin Cabble
Federal Sub-Project Director
Environmental Restoration Project
Briefing to Nevada Site Specific Advisory Board (NSSAB)
March 16, 2011



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Baseline Planned Cost

- FY 2012 \$4.8 M
- FY 2013 \$6.5 M



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Planned Activities – FY 2013

- Complete the Closure Report (CR) for Corrective Action Unit (CAU) 366, Area 11 Plutonium Valley Dispersion Site
- Complete the Corrective Action Plans (CAP) for:
 - CAU 365, Baneberry Contamination Area
 - CAU 104, Area 7 Yucca Flat Atmospheric Test Sites
 - CAU 106, Area 5, 11 Frenchman Flat Sites
- Complete the Corrective Action Decision Documents (CADD) for:
 - CAU 569, Area 3 Yucca Flat Atmospheric Test Sites
 - CAU 105, Area 2 Yucca Flat Atmospheric Test Sites
 - CAU 550, Smoky Contamination Area



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South Yucca Flat Atmospheric Sites



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Planned Activities – FY 2013

(continued)

- Complete the Corrective Action Investigation Plans (CAIP) for:
 - CAU 541, Small Boy
 - CAU 570, Area 9 Yucca Flat Atmospheric Test Sites
 - CAU 571, Area 9 Yucca Flat Plutonium Dispersion Sites
- Conduct fire monitoring and soil erosion studies at the Mojave Desert Burn Site
- Conduct Air Monitoring at Tonopah Test Range, Project 57, and Timber Mountain



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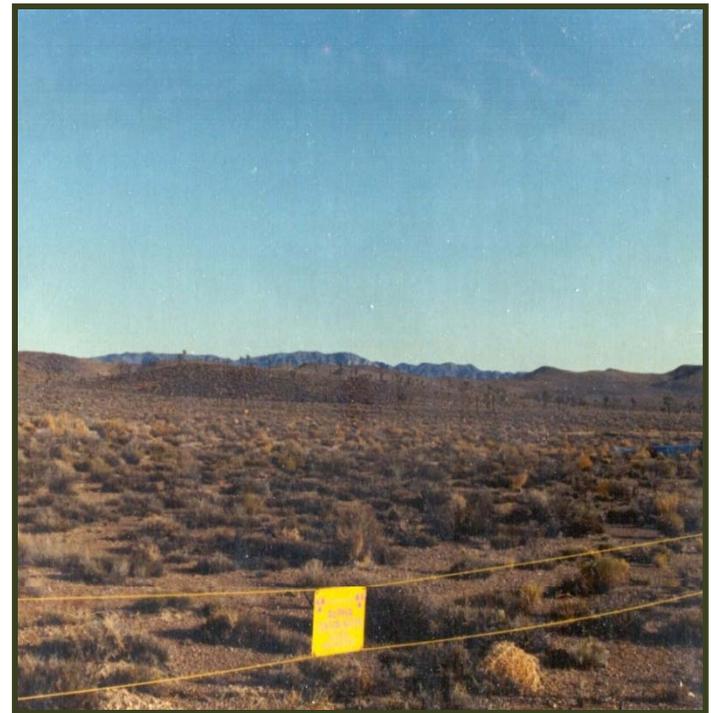
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FY 2013 – *What if...*

the Soils activities received a 25% decrease in funding?

- Postpone CR for CAU 366
- Postpone CAP for CAU 104
- Postpone CADD for CAU 105
- Postpone CAIP for:
 - CAU 541
 - CAU 570
 - CAU 571



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FY 2013 – *What if...*

the Soils activities received a 25% increase in funding?

- Accelerate CAIP for:
 - CAU 568, Area 3 Plutonium Dispersion
 - CAU 567, Miscellaneous Soil Sites
 - CAU 413, Clean Slate II Plutonium Dispersion
- Accelerate CAIP and initiate CADD for CAU 465, Hydronuclear
- Accelerate evaluation of closure documentation for CAUs 411, Double Track Plutonium Dispersion, and 412, Clean Slate I Plutonium Dispersion



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Low-Level Waste Activities FY 2013 Outlook



Jhon Carilli
Federal Sub-Project Director
Briefing to Nevada Site Specific Advisory Board (NSSAB)
March 16, 2011



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Baseline Planned Cost

- FY 2012 \$37.0 M
- FY 2013 \$29.4 M



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Planned Activities – FY 2013

- Safely dispose U.S. Department of Energy (DOE) low-level waste (LLW)
 - LLW Forecast = 1,164,287 ft³
 - MLLW Forecast = 522,212 ft³ (included in LLW total)
- Continue Radioactive Waste Acceptance Program facility evaluations of Generators PER THE Nevada National Security Site Waste Acceptance Criteria
- Continue environmental monitoring activities at the Area 5 Radioactive Waste Management Complex (RWMC)
- Maintain Performance Assessment and Composite Analysis to dispose waste



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FY 2013 – *What if...*

the LLW activities receive a 25% decrease in funding?

- Reduce staffing and disposal activities
- Delay construction of new disposal cell
- Delay new equipment purchases and/or facility upgrades



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FY 2013 – *What if...*

the LLW activities received a 25% increase in funding?

- Plan, design, and construct a flood protection berm around the western half of the Area 5 RWMC and/or
- Plan, design, and construct closure cap on operationally closed disposal cells in the expanded area of the Area 5 RWMC and/or
- Plan, design, and construct a treatment facility at the Area 5 RWMC



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Underground Test Area (UGTA) FY 2013 Outlook



Bimal Mukhopadhyay, PhD, CPG, CGWP

UGTA Task Manager

Briefing to Nevada Site Specific Advisory Board (NSSAB)

March 16, 2011



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Baseline Information

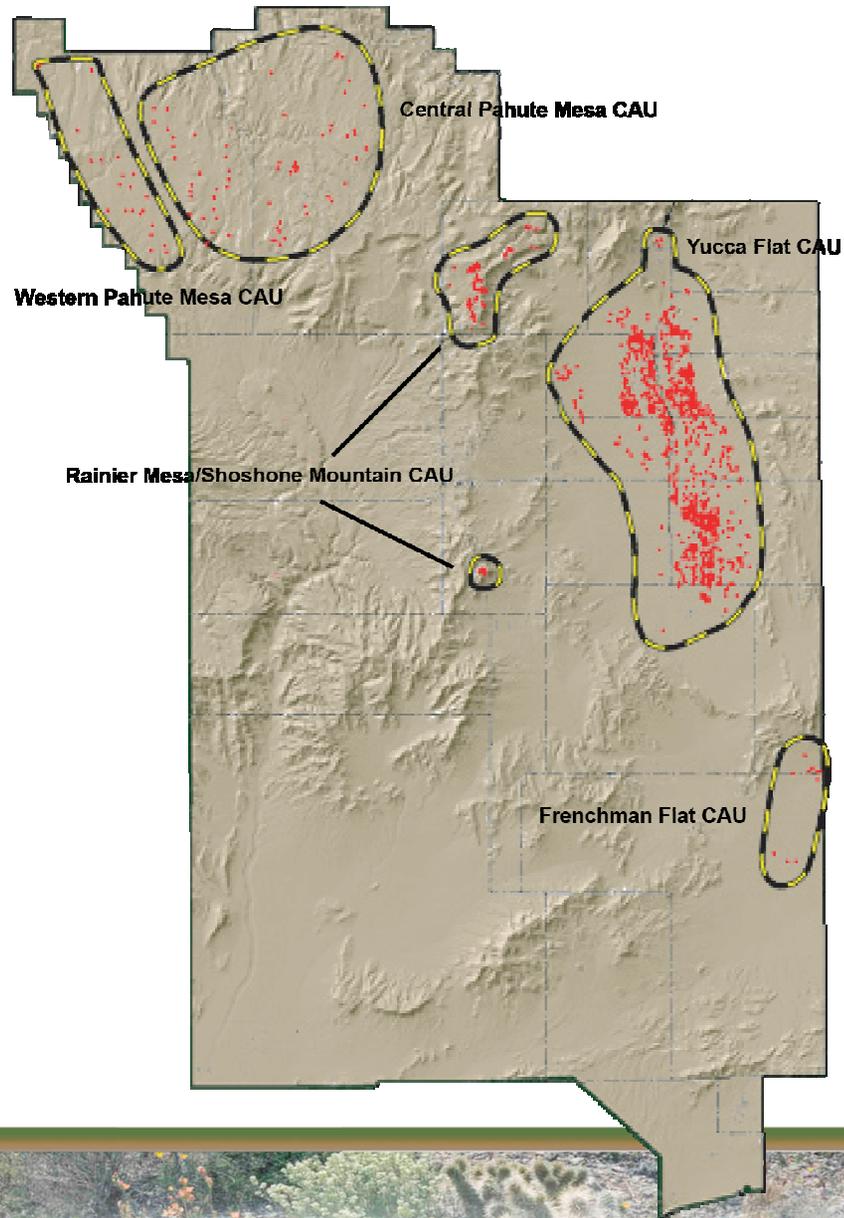
- FY 2012 \$37.6 M
- FY 2013 \$39.2 M



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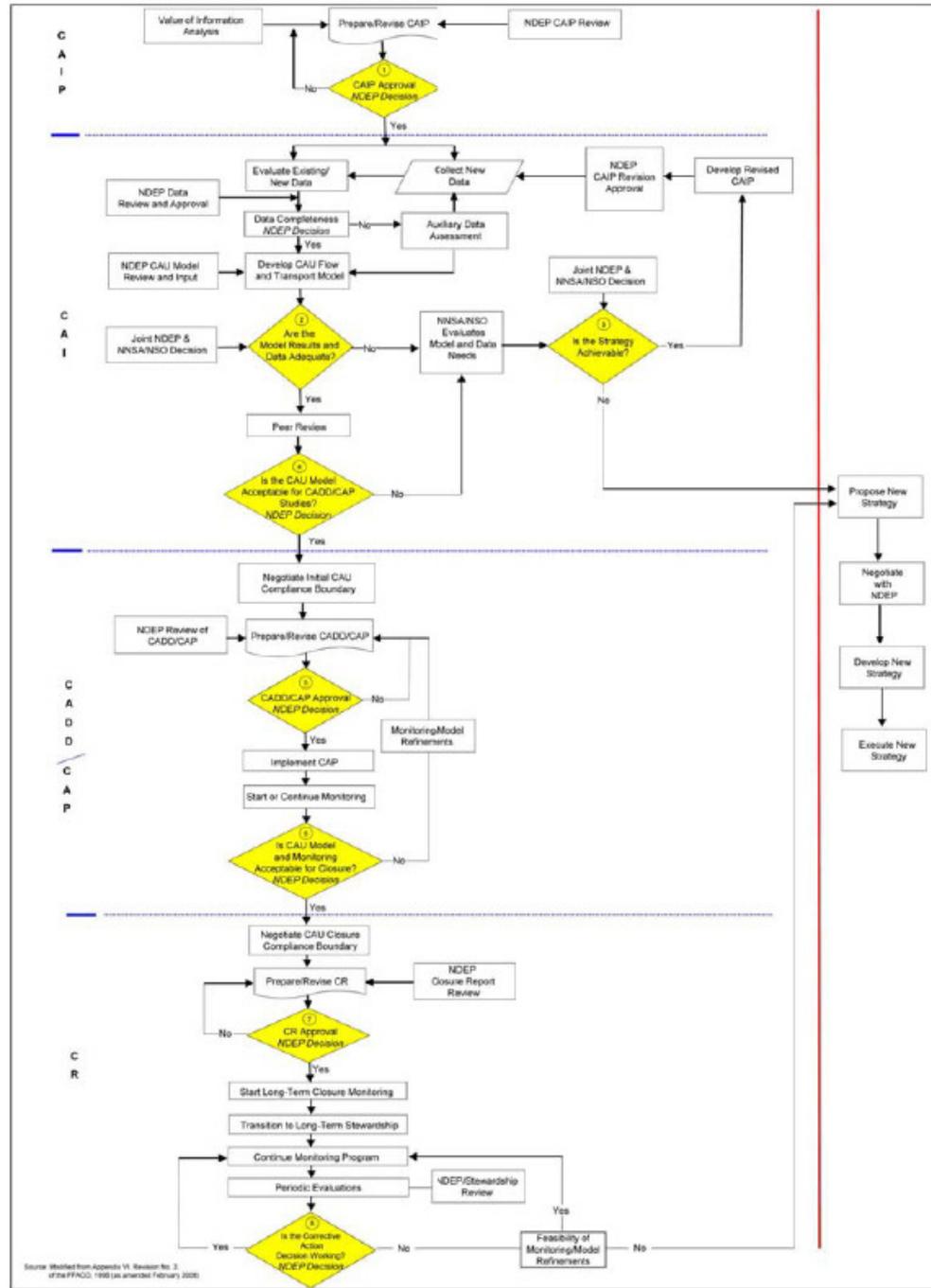
UGTA Corrective Action Units



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UGTA Strategy Flowchart



Planned Activities – FY 2013

- Yucca Flat
 - Acquire State of Nevada Division of Environmental Protection (NDEP) approval of Phase II Corrective Action Investigation Plan (CAIP)
 - Phase II drilling/data collection
- Central and Western Pahute Mesa
 - Complete Phase II data collection
 - Complete well development, testing, and sampling (WDTS)
 - Begin aquifer testing



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Planned Activities – FY 2013

(continued)

- Frenchman Flat
 - Begin drilling and developing the remaining model-evaluation wells
 - Complete analyses of model-evaluation data
 - Begin drafting Closure Report (CR); plan for CR approval from NDEP by end of fiscal year
 - Begin implementing CR
- Rainier Mesa
 - Prepare draft Phase II CAIP
 - Acquire NDEP approval of CAIP



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FY 2013 – *What if...*

UGTA received a 25% decrease in funding?

- Reduce data collection activities
- Reduce Corrective Action Unit modeling



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FY 2013 – *What if...*

UGTA received a 25% increase in funding?

- Accelerate data collection activities
- Accelerate CAU modeling activities



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Nevada Site Specific Advisory Board

March 17, 2011

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Michael Voegelé, PhD
James Weeks

Walter Wegst, PhD, Chair

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Clark County
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U.S. Department of Energy,
Nevada Site Office
U.S. National Park Service

Administration

Denise Rupp, Administrator
*Navarro Research
& Engineering, Inc.*
Kelly Snyder, DDFO
*U.S. Department of Energy,
Nevada Site Office*

Mr. Scott Wade
Assistant Manager for Environmental Management
U.S. Department of Energy, Nevada Site Office
P. O. Box 98510
Las Vegas, NV 89193-8518

SUBJECT: Nevada Site Specific Advisory Board (NSSAB) Recommendations
for Fiscal Year (FY) 2013 Budget Prioritizations

Dear Mr. Wade:

The NSSAB has completed its annual review and prioritization of the U.S. Department of Energy Nevada Site Office (DOE NSO) Environmental Management (EM) projects for the FY 2013 budget submittal.

Last year the Board reviewed and prioritized four EM technical sub-projects. The Board continues to place the highest priority on the [\(insert project\)](#). This ranking reflects our commitment to working with EM to ensure budget dollars are available for [\(insert specifics\)](#).

Following is the NSSAB's recommended FY 2013 budget ranking with the reasons for its ranking. A variety of factors were considered including: health and safety risks, regulatory requirements and completion schedules. We also considered any significant changes in sub-project areas from last year and applied that information to arrive at our current recommendations.

1. [\(insert sub-project\)](#)
 - [\(insert reason\)](#)
 - [\(insert reason\)](#)
 - [\(insert reason\)](#)

2. [\(insert sub-project\)](#)
 - [\(insert reason\)](#)
 - [\(insert reason\)](#)
 - [\(insert reason\)](#)

3. [\(insert sub-project\)](#)
 - [\(insert reason\)](#)
 - [\(insert reason\)](#)
 - [\(insert reason\)](#)

Recommendation on FY13 Budget Prioritizations

March 17, 2011

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4. (insert sub-project)
 - (insert reason)
 - (insert reason)
 - (insert reason)

Thank you for the opportunity to participate in the annual budget prioritization and for the assistance provided by the EM staff. The federal staff took the time to meet with the NSSAB and provided detailed information. We sincerely appreciate this support and look forward to your response regarding this year's budget submittal.

Sincerely,

Walter F. Wegst, Chair

cc: M. Nielson, DOE/HQ (EM-13) FORS
C. Alexander Brennan, DOE/HQ (EM-13) FORS
A. Clark, DOE/HQ (EM-13) FORS
K. Snyder, PSG, NNSA/NSO, Las Vegas, NV
C. Lockwood, PSG, NNSA/NSO, Las Vegas, NV
D. Rupp, NREI, Las Vegas, NV
NSSAB Members and Liaisons
NNSA/NSO Read File



Nevada Site Specific Advisory Board

January 13, 2011

Mr. Rob Boehlecke,
Environmental Restoration Project Director
U.S. Department of Energy, Nevada Site Office
P. O. Box 98518
Las Vegas, NV 89193-8518

SUBJECT: Review of Revised Draft Federal Facility Agreement
and Consent Order (FFACO) Soils Strategy
(Chapter 4, Appendix VI)

Dear Mr. Boehlecke,

The Nevada Site Specific Advisory Board (NSSAB) has reviewed the
FFACO Soils Strategy, Chapter 4, Appendix VI and has no comments or
suggestions for the document.

The NSSAB wishes to thank Environmental Management for the
opportunity to review the strategy and recommends the Department of
energy proceed with the revision as intended.

Sincerely,

Walter F. Wegst,
Chair

cc: M. Nielson, DOE/HQ (EM-13) FORS
C. Alexander Brennan, DOE/HQ (EM-13) FORS
A. Clark, DOE/HQ (EM-13) FORS
K. Snyder, PSG, NNSA/NSO, Las Vegas, NV
C. Lockwood, PSG, NNSA/NSO, Las Vegas, NV
D. Rupp, NREI, Las Vegas, NV
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Walter Wegst, PhD, Chair

Liaisons

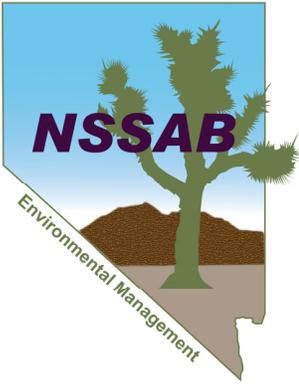
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U.S. Department of Energy,
Nevada Site Office
U.S. National Park Service

Administration

Denise Rupp, Administrator
Navarro Research
& Engineering, Inc.
Kelly Snyder, DDFO
U.S. Department of Energy,
Nevada Site Office

DRAFT

Walter F. Wept



Nevada Site Specific Advisory Board

March 17, 2011

Ms. Kelly Snyder, DDFO
U.S. Department of Energy, Nevada Site Office
P. O. Box 98518
Las Vegas, NV 89193-8518

SUBJECT: Membership Candidates

Dear Ms. Snyder,

After preparation and review, the Nevada Site Specific Advisory Board would like to recommend the following candidates for membership (listed by application number):

11-001	11-005
11-002	11-006
11-003	11-007
11-004	11-013

While we realize the final decision regarding membership lies with the Assistant Secretary of Environmental Management, we appreciate the opportunity to participate in the recruitment/interview process. We look forward to welcoming new members to the Board in the coming year thus ensuring continued stakeholder involvement in the Environmental Management activities at the Nevada Test Site.

Sincerely,

Walter F. Wegst, Chair

cc: C. Lockwood, PSG, NNSA/NSO, Las Vegas, NV
D. Rupp, NREI, Las Vegas, NV
M. Nielson, DOE/HQ (EM-13) FORS
C. Brennan, DOE/HQ (EM-13) FORS
A. Clark, DOE/HQ (EM-13) FORS
NSSAB Members and Liaisons
NNSA/ NSO Read File

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- Robert Johnson
- John M. McGrail, P.E.
- Gregory Minden
- Michael Moore
- Harold Sullivan
- Michael Voegelé, PhD
- James Weeks
- Walter Wegst, PhD, Chair**

Liaisons

- Nye County
- Clark County
- State of Nevada Division of Environmental Protection
- U.S. Department of Energy, Nevada Site Office
- U.S. National Park Service

Administration

- Denise Rupp, Administrator
- Navarro Research & Engineering, Inc.
- Kelly Snyder, DDFO
- U.S. Department of Energy, Nevada Site Office

EM SSAB CHAIRS
Spring 2011

Options for Top 3 Submittal

1. FY2011 Recommendations (*Accomplishment*)
 - The NSSAB FY2011 Work Plan includes nine tasks with 12 recommendations requested by Department of Energy (DOE) Environmental Management (EM) Nevada
 - The NSSAB has made eight recommendations in the first six months of the year
2. Student Liaisons (*Accomplishment*)
 - The NSSAB continues to work with Environmental Management (EM) in securing the appointment of two student liaisons from West Career and Technical Academy (WCTA), a new magnet high school in Las Vegas
 - NSSAB looks forward to the appointment of two student liaisons in the fall of 2011
 - In March, the NSSAB and EM staff made presentations to 65 ninth and tenth grade engineering students at WCTA
 - Two WCTA students attended the April 12 EM SSAB tour of the Nevada National Security Site
3. Committee of the Whole (*Accomplishment*)
 - The decision to address Work Plan items by using a mix of subject-specific committees and acting as a Committee of the Whole has proven to be effective
 - The Board has worked well together in developing recommendations
 - The combined approach has worked to increase member awareness of all Board activities
4. EM SSAB Meeting Preparation (*Accomplishment*)
5. Membership Drive (*Accomplishment*)
 - NSSAB membership recruitment was conducted in January and February
 - 12 applications were received along with 9 inquiries
 - 11 interviews conducted (one application was withdrawn)
 - Eight candidates recommended to DOE EM Nevada
6. Disposition (*Issue*)
 - Lack of a funding mechanism within DOE to allow disposition of “waste” by recycling or donation to museums
 - No funding available for preservation of buildings or items of historic value
 - Policy that DOE will pay for burial, but not for transport of non-contaminated items to interested parties
7. Other suggested issues ??

Environmental Management Nevada Site Office 2016 Cleanup Vision



Scott Wade
Assistant Manager for Environmental Management
March 16, 2011



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safety ❖ performance ❖ cleanup ❖ closure

www.em.doe.gov

Nevada's 2016 Cleanup Vision

Building on the ARRA momentum, the Nevada team will:

- ✓ Complete closure of all 1,054 industrial contamination sites
- ✓ Complete closure of all 126 contaminated soil sites
- ✓ Demolish all decontamination and decommissioning (D&D) facilities
- ✓ Close the first of five contaminated groundwater regions on the Nevada National Security Site (NNSS)
 - 69 groundwater wells completed; regional flow model completed
 - Frenchman Flat region (completed); Pahute Mesa, Yucca Flat (under closure) and Rainier Mesa by 2024



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Nevada's 2016 Cleanup Vision

(continued)

Building on the ARRA momentum, the Nevada team will:

- ✓ Dispose 6.2M cubic feet of LL/MLLW from DOE Complex at NNSS
 - Maintain capability to receive average of 1.5 million cubic feet of low-level and mixed low-level waste per year
 - Provide disposal capability for unique or difficult to dispose waste streams
 - Complete closure of the original 92-acre waste disposal site in Area 5 of the NNSS



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Key Cleanup Accomplishments

Cleanup Scope	Accomplishments To Date*	By FY 2016
Industrial Sites Closed	1,045 of 1,054 closed	All 1,054 closed (Completed)
Contaminated Soil Sites Closed	18 of 126 closed	All 126 closed (Completed)
D&D of Facilities	6 of 8 facilities	All 8 facilities (Completed)
Groundwater Wells Drilled	43 of 53 characterization wells completed	53 characterization wells Completed 16 monitoring wells completed
Groundwater Modeling/Corrective Actions	Characterization model developed	Frenchman Flat Region (closure completed)
LLW and MLLW Disposal Operations	Disposed 22 million cubic feet -21.1 million DOE complex waste - 0.9 million NNSS waste	Dispose approx. 28.2M cubic feet Complete closure of the original 92-acre waste disposal site
TRU Waste Dispositioned	Completed in 2009	Completed



FY 2010

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Nevada is a Sound Investment

- Addressing the 40 year legacy of nuclear testing at the NNSS (1,360 sq. mile site)
- Current groundwater/soil strategies have avoided \$4.4B in cost
- Additional funding of \$15M per year over 5 years starting in FY 2012 will allow Nevada to complete all contaminated soil sites and facility demolition activities by 2016
- Additional funding of \$10M per year over 4 years starting in FY 2013 will allow Nevada to accelerate well completion and advance groundwater project completion to 2024
- Supporting the DOE Complex in low-level waste management and disposal solutions



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FY 2012 Budget Roll Out



Scott Wade

Assistant Manager for Environmental Management
Briefing for the Nevada Site Specific Advisory Board
March 16, 2011



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Environmental Management... a National Responsibility

- We reduce risks and protect our workers, our communities and the environment through cleanup
- Our work is essential to the health and economic vitality of our communities, positions our sites for future missions and use including national security, stockpile stewardship, and counterterrorism operations
- Our mission is not discretionary - it is a federal obligation to address the cold war environmental legacy cleanup and honor our regulatory commitments



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Environmental Management...

a National Responsibility

(continued)

- We have demonstrated value for the American taxpayer by delivering significant progress in the past several years in reducing risks and the overall liability - but our work is not done
- The Environmental Management portfolio is one of our nation's largest liabilities - we have a responsibility to relieve future generations of this environmental and financial liability
- Time is not on our side – costs and risks increase over time



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Baseline and Congressional Budgets (\$K)

Activity Description	Baseline	Congressional Budget*
Soils	4,822	5,051
UGTA	37,590	37,533
Industrial Sites	3,250	3,250
Low-Level Waste	38,550	4,508**
Program Integration	13,229	13,038
Agreements and Grants	2,620	2,620
TOTAL	100,061	66,000

* Per the February 14, 2011, Budget Roll-out

** Does not include generator fees



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FY 2012 Key Accomplishments

- Continue operations of the low-level waste disposal cell and the RCRA mixed low-level waste disposal cell
- Continue characterization and investigation activities, in preparation for closure of approximately 1180 soil and industrial facility sites and five groundwater regions
- Continue waste acceptance audits and reviews to ensure waste generators fully meet Nevada National Security Site waste acceptance criteria



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Back Up Information



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FY 2102 FFACO Milestone

- Soils
 - Submit Corrective Action Unit (CAU) 366 Corrective Action Investigation Plan
 - Submit CAU 366 Corrective Action Decision Document
 - Submit CAU 365 Corrective Action Decision Document (American Recovery and Reinvestment Act)
- Industrial Sites
 - Submit CAU 547 Closure Report



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FY 2102 FFACO Milestone

(continued)

- UGTA
 - CAU 98 Monitoring Well Drilling Presentation #1
 - CAU 101/102 Phase II Drilling Operations Presentation #3
 - Submit CAU 101/102 Final Well Completion Report
 - Submit CAU 97 CAIP Addendum, Rev 0
 - CAU 99 Phase I Flow and Transport Model Presentation #2



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



March 16, 2011

Nevada Site Specific Advisory Board
232 Energy Way, M/S 505
North Las Vegas, NV 89030

FEBRUARY 17, 2011, NEVADA SITE SPECIFIC ADVISORY BOARD (NSSAB) LETTER OF SUPPORT FOR MIXED LOW-LEVEL WASTE (MLLW) TREATMENT PERMIT APPLICATION

We received your February 17, 2011, letter of support for the MLLW treatment permit application. We appreciate the NSSAB's thorough review of the Department of Energy's need for a treatment facility and your support of DOE applying for a treatment permit application with the State of Nevada Division of Environmental Protection. We will keep the NSSAB informed of the application status and look forward to receiving NSSAB input as we move forward through this endeavor.

Should you have any questions, please contact Kelly Snyder at (702) 295-2836.

E. Frank DiSanza
Federal Project Director
Waste Management Project

WMP:7322.KS

cc via e-mail:

M. A. Nielson, DOE/HQ (EM-13) FORS
Catherine Alexander Brennan, DOE/HQ
(EM-13) FORS
A. E. Clark, DOE/HQ (EM-13) FORS
D. M. Rupp, NREI, Las Vegas, NV
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FEB 22 2011

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)
02-16-11 LETTER RE: RECOMMENDATION ON CLOSURE OF CORRECTIVE ACTION
UNIT (CAU) 374

The U.S. Department of Energy, National Nuclear Security Administration Nevada Site Office (NNSA/NSO) appreciates the NSSAB's efforts in reviewing the closure options for CAU 374, Area 20 Schooner Unit Craters. Based on the evaluation of the closure options for this CAU, discussions with the NSSAB, and discussions with the State of Nevada Division of Environmental Protection (NDEP), NNSA/NSO is proceeding with a recommendation of Closure in Place with use restrictions under the Remote Work Area exposure scenario, as recommended by the NSSAB. The Federal Facility Agreement and Consent Order process requires us to present a formal recommendation to the NDEP, respond to comments, and receive formal acceptance of our approach prior to implementation.

The closure recommendation will be finalized and documented in a Corrective Action Decision Document/Closure Report (CADD/CR). The CADD/CR will include specific information on any posting, fencing, or other physical and administrative controls to be included in the closure recommendation. The current milestone with NDEP for completion of the CADD/CR is July 29, 2011.

The Nevada Site Office Environmental Restoration Project appreciates the interest of the NSSAB in this activity and the efforts made to review the closure options. We will continue to keep the NSSAB informed on this activity.

If you have any further questions, please contact Kelly K. Snyder at (702) 295-2836.

Robert F. Boehlecke
Federal Project Director
Environmental Restoration Project

PSG:7270.KKS

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

NSSAB Members and Liaisons

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K. J. Cabbie, ERP, NNSA/NSO, 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

February 24, 2011

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.

Southern Nevada Public Reading Facility

c/o Nuclear Testing Archive

775 East Flamingo Road

Las Vegas, NV 89119

Northern Nevada Public Reading Facility

Nevada State Library and Archives

100 N. Stewart Street

Carson City, NV 89701-4285

The following is a list of all documents submitted to the Public Reading Facilities during February 2011. Attached is the Executive Summary from the document listed below.

CAU Number	CAU Description	Document
111	Area 5 WMD (Waste Management Disposal) Retired Mixed Waste Pits	CADD/CAP Rev 1

Executive Summary for CAU 111 CADD/CAP

This Corrective Action Decision Document/Corrective Action Plan (CADD/CAP) has been prepared for the 92-Acre Area, the southeast quadrant of the Radioactive Waste Management Site, located in Area 5 of the Nevada National Security Site (NNSS). The 92-Acre Area includes Corrective Action Unit (CAU) 111, “Area 5 WMD Retired Mixed Waste Pits.”

Data Quality Objectives (DQOs) were developed for the 92-Acre Area, which includes CAU 111. The result of the DQO process was that the 92-Acre Area is sufficiently characterized to provide the input data necessary to evaluate corrective action alternatives (CAAs) without the collection of additional data. The DQOs are included as Appendix A of this document.

This CADD/CAP identifies and provides the rationale for the recommended CAA for the 92-Acre Area, provides the plan for implementing the CAA, and details the post-closure plan.

When approved, this CADD/CAP will supersede the existing Pit 3 (P03) Closure Plan, which was developed in accordance with Title 40 Code of Federal Regulations (CFR) Part 265, “Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.” This document will also serve as the Closure Plan and the Post-Closure Plan, which are required by 40 CFR 265, for the 92-Acre Area. After closure activities are complete, a request for the modification of the *Resource Conservation and Recovery Act* Permit that governs waste management activities at the NNSS will be submitted to the Nevada Division of Environmental Protection to incorporate the requirements for post-closure monitoring.

Four CAAs, ranging from No Further Action to Clean Closure, were evaluated for the 92-Acre Area. The CAAs were evaluated on technical merit focusing on performance, reliability, feasibility, safety, and cost. Based on the evaluation of the data used to develop the conceptual site model; a review of past, current, and future operations at the site; and the detailed and comparative analysis of the potential CAAs, Closure in Place with Administrative Controls is the preferred CAA for the 92-Acre Area.

Closure activities will include the following:

- Constructing an engineered evapotranspiration cover over the 92-Acre Area
- Installing use restriction (UR) warning signs, concrete monuments, and subsidence survey monuments
- Establishing vegetation on the cover
- Implementing a UR
- Implementing post-closure inspections and monitoring

The Closure in Place with Administrative Controls alternative meets all requirements for the technical components evaluated, fulfills all applicable federal and state regulations for closure of the site, and will minimize potential future exposure pathways to the buried waste at the site.