Nevada Site Specific Advisory Board
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Full Board Meeting Handouts for
Wednesday, January 17, 2018

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NSSAB FULL BOARD MEETING ATTENDANCE

October 2017 through September 2018 (FY 2018)

Name	11/8/17	1/17/18	3/14/18	5/16/18	7/18/18	9/19/18	Max Terms
MEMBERS							
Michael Anderson	E						2020
Amina Anderson	√	√					2020
Arcadio Bolanos	√	E					2022
Francis Bonesteel	√	√					2022
Michael D'Alessio	E	E					2020
Pennie Edmond	√	√					2020
Karen Eastman	√	√	E				2022
Raymond Elgin	√	√					2022
Charles Fullen	√	√					2022
Richard Gardner	√	√					2022
Donald Neill	√	√					2020
Autumn Pietras	√	E					2022
Edward Rosemark	E	√					2018
Steve Rosenbaum	√	√					2020
William Sears	E	E					2018
Cecilia Flores Snyder	√	E					2020
Richard Stephans	√	√					2022
Jack Sypolt	√	√					2018
Richard Twiddy	√	√					2022
Dina Williamson-Erdag	√	√	E				2022
LIAISONS							
Clark County	E	E					
Consolidated Group of Tribes & Organizations	√	√					
Esmeralda County Commission	√	U					
Lincoln County Commission		E					
Nye County Commission	U	√	E				
Nye County Emergency Management	√	√					
Nye Co. Nuclear Waste Repository Project Office	E	√					
State of NV Division of Env Protection	√	√					
U.S. Natl Park Service	√	√					
White Pine County Commission	E	E					

KEY: √ - Present E - Excused V - Vacant U - Unexcused

Overview of U.S. Department of Energy Office of Legacy Management

Mark Kautsky, Site Manager
U.S. Department of Energy (DOE)
Office of Legacy Management (LM)

January 17, 2018

Presentation for the Nevada Site Specific Advisory Board

U.S. DEPARTMENT OF ENERGY | Legacy Management

LM Program Goals

- Goal I – Protect human health and the environment
- Goal 2 – Preserve, protect, and share records and information
- Goal 3 – Safeguard former contractor workers' retirement benefits
- Goal 4 – Sustainably manage and optimize the use of land and assets
- Goal 5 – Sustain management excellence
- Goal 6 – Engage the public, governments, and interested parties

U.S. DEPARTMENT OF ENERGY | Legacy Management

LM Origins

- DOE established LM in 2003 to manage legacy sites after completion of remediation
- Sites range in size and complexity from small sites with only records-management responsibilities to sites covering several thousand acres with disposal cells and active groundwater treatment
- LM currently performs inspections, environmental monitoring, and maintenance at legacy sites

Central Nevada Test Area (CNTA)

Shoal, Nevada, Site

LM Sites

- LM has responsibility for 92 sites in 28 states (including 12 sites on or adjacent to Native American tribal nation land) plus Puerto Rico
- By 2021, LM expects to have 107 sites
- Sites are regulated by numerous federal cleanup regulations, including:
  - 1976 Resource Conservation and Recovery Act (RCRA)
  - 1978 Uranium Mill Tailings Radiation Control Act (UMTRCA)
  - 1980 Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
  - 1982 Nuclear Waste Policy Act, and other laws, such as state voluntary cleanup standards and DOE Orders
  - 1996 Federal Facility Agreement and Consent Order and subsequent revisions

Current LM Sites

Sites in LM Requiring LTS&M
(as of March 31, 2017)

CERCLA/RCRA | D&D | UMTRCA Title I
FUSRAP | Other | UMTRCA Title II

Site Category

Category 1 activities typically include records-related activities and stakeholder support

Category 2 activities typically include routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support

Category 3 activities typically include operation and maintenance of active remedial action systems, routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support

D/P = Disposal/Processing DR = Decommissioned Reactor

Planned transfer dates are subject to change.

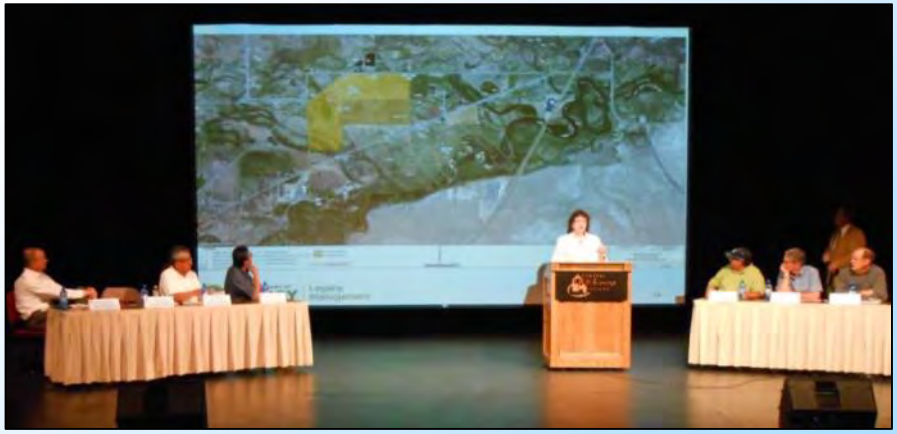
LM Program Responsibilities

- **UMTRCA Title I –** Inactive uranium-ore processing sites in 1978
- **UMTRCA Title II** – Active uranium-ore processing site in 1978
- **CERCLA/RCRA**
- **FUSRAP** – Formerly Utilized Sites Remedial Action Program
- **D&D** – DOE Defense Decontamination and Decommissioning (D&D) Program sites
- **Other** – Nevada Offsites (NVOs) or records-only sites

The LM Mission

- Fulfill DOE post-closure responsibilities and ensure the future protection of human health and the environment at sites contaminated by World War II and Cold War defense-related activities
  - Perform inspections
  - Monitor site conditions
  - Implement and maintain institutional controls (ICs)
  - Conduct operation and maintenance activities
  - Work with stakeholders
  - Maintain legacy records

Sherwood, Washington, Disposal Site



Community meeting in Riverton, Wyoming

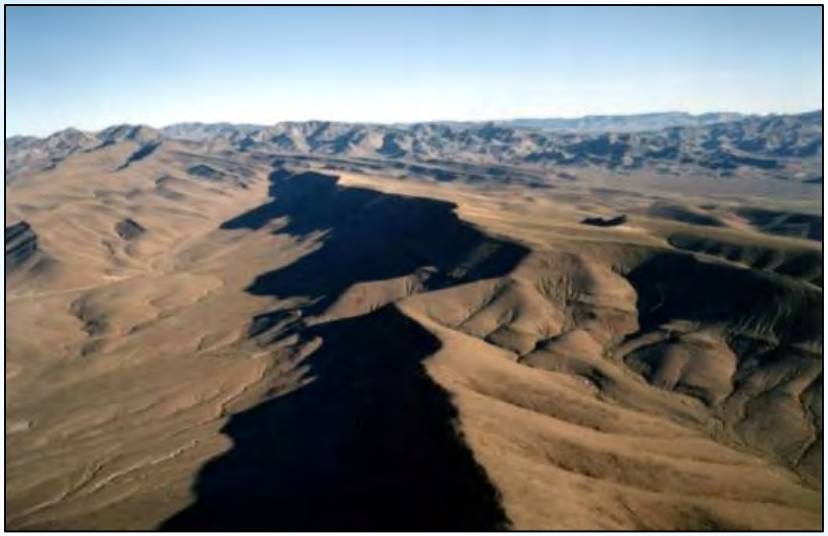
LM Records Responsibilities

- National Archives and Records Administration–certified records storage system
  - State-of-the-art facility in Morgantown, West Virginia
  - Provide support for compensation requests
    - Energy Employees Occupational Injury Compensation Program
    - Radiation Exposure Compensation Program
  - LM maintains 70 years of records

First truckload of Yucca Mountain Project (YMP) records arrives at the Legacy Management Business Center

LM Records Responsibilities (continued)

- LM preserved YMP records
  - Records Information System
  - Licensing Support Network



Yucca Mountain, Nevada

Reviewing YMP records

Monitoring

- Collecting and analyzing samples of groundwater and surface water is the most common type of monitoring at LM sites:
  - Wells plus surface water monitoring locations at all sites: >2,000
  - Approximately 8,000 samples per year
  - Approximately 19,000 analyses per year

Groundwater sampling

Monitoring (continued)

- Other types of monitoring:
  - Plants to measure vegetation density
  - Erosion effects
  - Cell rock size
  - Subsidence

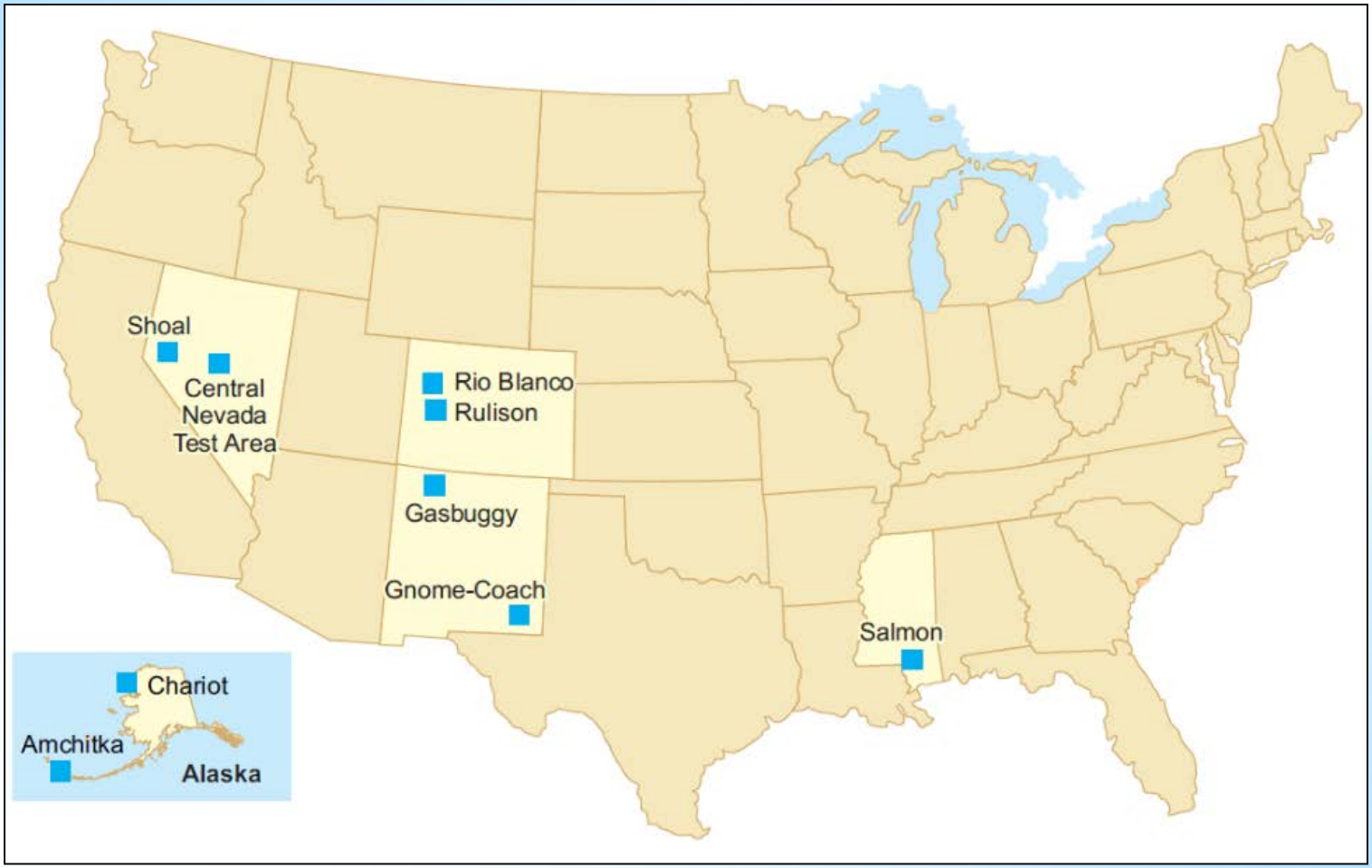
Monitoring vegetation density at CNTA

Institutional Controls

- ICs usually required as part of the remedy to impose restrictions on use or access to land or groundwater to prevent exposure to people or the environment
- DOE Policy 454.1, *Use of Institutional Controls*
  - "DOE policy is to use institutional controls as essential components of defense-in-depth strategy that uses multiple independent layers of safety to protect human health and the environment …"
    - Administrative controls
    - Notices
    - Engineered components and structures

Notice of residual soil impacts at CNTA

Nevada Offsites Program Transitioned to LM in 2006



NVOs program location areas

NVOs Program Overview

Monitoring well at
Salmon, Mississippi, Site

Inspection at
Rio Blanco, Colorado, Site

Environmental sampling project at Amchitka Island, Alaska

Central Nevada Test Area and Shoal, Nevada, Sites Overview

- EM completed surface closures at CNTA and the Shoal site prior to 2006
- LM evaluates and implements subsurface closure strategy

Installing new monitoring well at CNTA

Central Nevada Test Area and Shoal, Nevada, Sites Overview (continued)

- Revised the corrective action strategy (enhanced monitoring network and validation of compliance boundary – monitoring and ICs)
  - CNTA – subsurface closure in 2016
  - Shoal – still working toward subsurface closure

Seismic surveying at the Shoal site

Typical Maintenance Activities

- Erosion repair
- Weed and vegetation control
- Sign replacement
- Groundwater treatment system repair
- Pump replacement
- Fence and gate repairs
- Drill site reclamation

ICs at CNTA

Shoal and CNTA ground-zero markers

Working with Stakeholders and Other State and Federal Agencies

- LM achieves its mission with input from state and local governments, affected tribes, and stakeholders
- In Nevada
  - LM is a party to the Federal Facility Agreement and Consent Order
  - LM works with the Nevada Division of Environmental Protection (NDEP) to implement closure and post-closure activities at the CNTA and Shoal sites
  - Technical support from Desert Research Institute (DRI)

NDEP and DRI scientists visit the Shoal site

Questions and Discussion

Path Forward for Closed Environmental Restoration Sites on the Tonopah Test Range ~ Work Plan Item 1

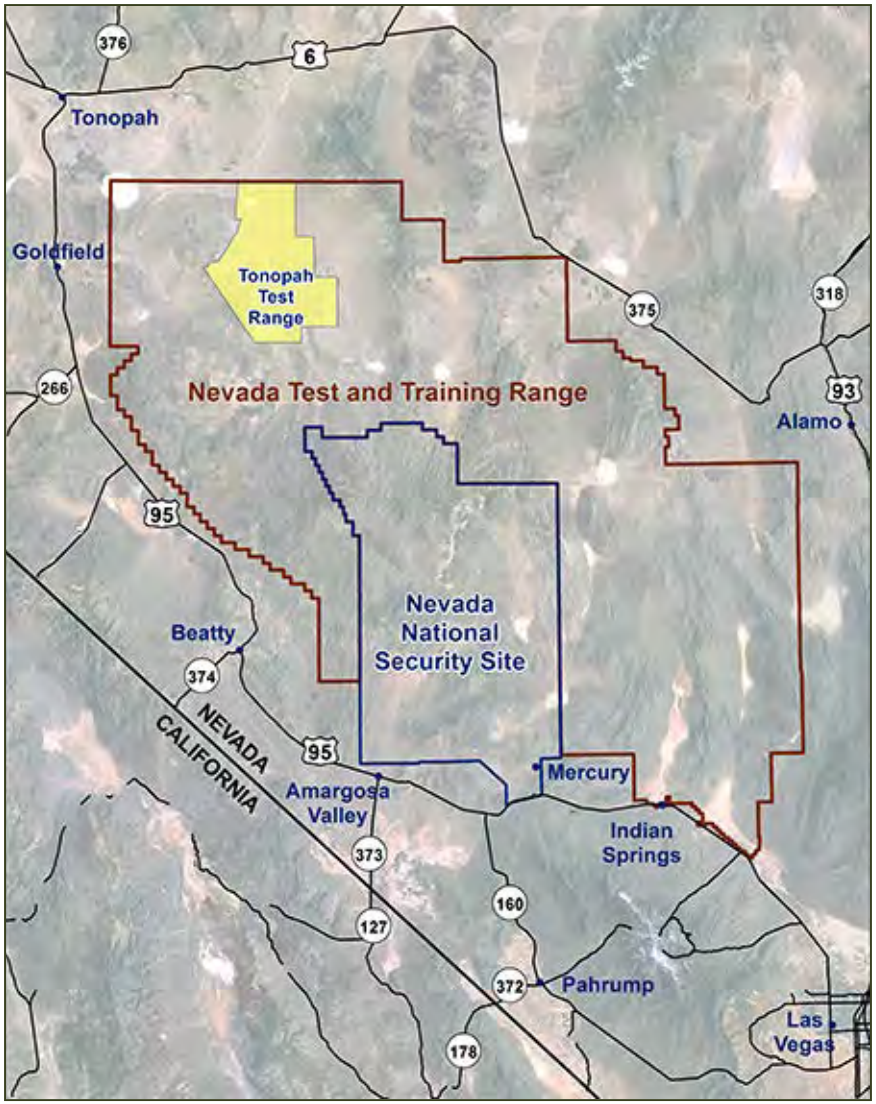
Tiffany Lantow
Long-Term Monitoring Activity Lead
Environmental Management (EM) Nevada Program
Nevada Site Specific Advisory Board (NSSAB)
January 17, 2018

NSSAB Work Plan Item #1

From a community perspective, the NSSAB will provide a recommendation on its preferred path forward for the Environmental Restoration sites at the Tonopah Test Range (TTR)

Background

- Federal Facility Agreement and Consent Order (FFACO) sites that have been closed in place or clean closed and revegetated have requirements for annual inspections and/or maintenance
  - Requirements vary by site



Background
(continued)

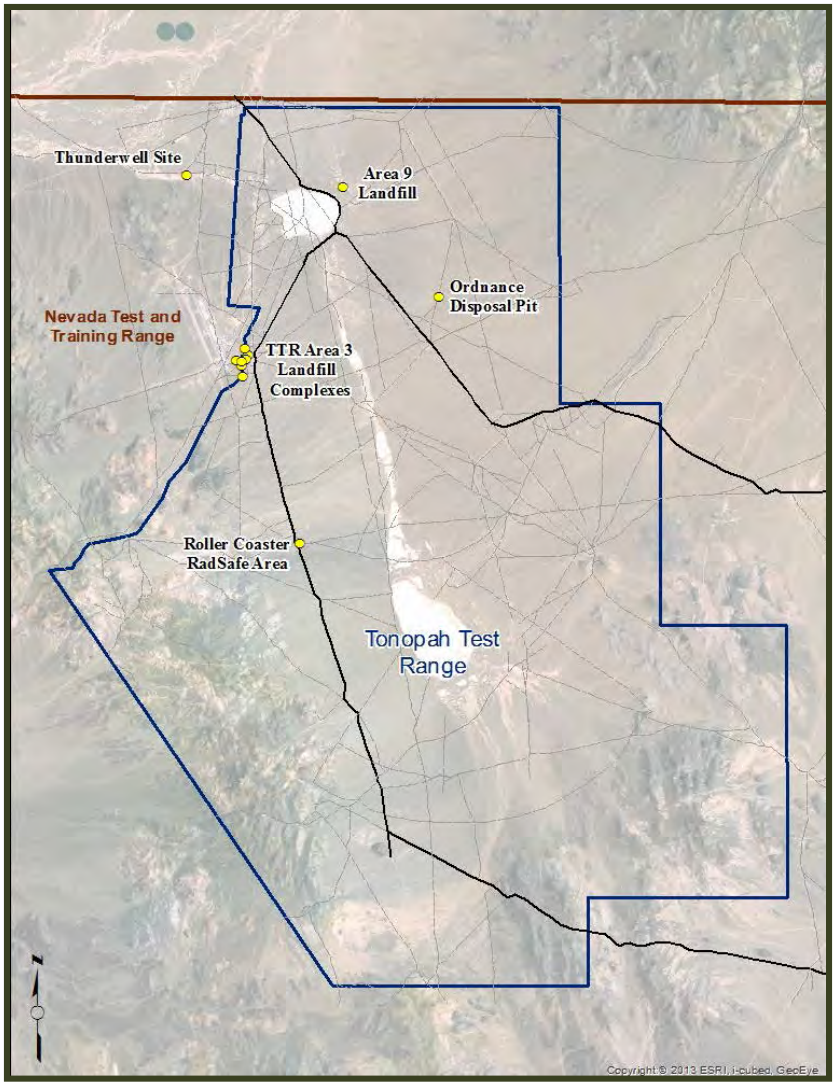
- How best to manage EM Nevada TTR sites when all are closed (expected by fiscal year [FY] 2021)?
  - Explore transfer of long-term management of sites to United States Air Force (USAF) or National Nuclear Security Administration (NNSA)
  - Transfer sites to U.S. Department of Energy's (DOE's) Office of Legacy Management (OLM)
  - EM Nevada continues to manage sites until FY 2030 (end of EM Nevada baseline) and postpone long-term management decision until a later date

List of Closed TTR Corrective Action Sites (CASs) with Monitoring Requirements

- CAS TA-19-001-05PT: Ordnance Disposal Pit
- CAS TA-23-001-TARC: Roller Coaster RadSafe Area
- CAS 03-08-001-A301: Landfill Cell A3-1
- CAS 03-08-002-A302: Landfill Cell A3-2
- CAS 03-08-002-A303: Landfill Cell A3-3
- CAS 03-08-002-A304: Landfill Cell A3-4
- CAS 03-08-002-A305: Landfill Cell A3-5
- CAS 03-08-002-A306: Landfill Cell A3-6
- CAS 03-08-002-A308: Landfill Cell A3-8
- CAS 09-55-001-0952: TTR Area 9 Landfill
- CAS RG-26-001-RGRV: Thunderwell Site

Map of Closed TTR CASs with Monitoring Requirements

- TTR is a secure government facility designated for military activities
- Not publicly accessible



Ordnance Disposal Pit
(CAS TA-19-001-05PT)

- Typically referred to as Five Points Landfill
- Historically used for weapons testing debris
- Completed activities:
  all debris was removed and disposed properly
- Monitoring requirements:
  annual inspection
- Site condition: fenced to protect vegetation, not posted


Five Points Landfill

Roller Coaster RadSafe Area

(CAS TA-23-001-TARC)

- Historically used to bury contaminated concrete from nuclear testing
- Completed activities: bulk of concrete was removed and disposed properly, but some plutonium-contaminated concrete pieces remain closed in place, buried under an engineered cap
- Monitoring requirements: annual inspections, vegetation monitoring as needed
- Site condition: use-restricted, fenced, and posted


Roller Coaster RadSafe Area

TTR Area 3 Landfill Complexes

(CAS 03-08-001-A301, -A302, -A303, -A304, -A305, -A306, and -A308)

- Consists of seven construction landfills
- Completed activities: partial excavation performed, but total petroleum hydrocarbons (TPH) contamination remains at depth and closed in place in the landfills
- Monitoring requirements: annual inspections
- Site condition: use-restricted, posted monuments

TTR Area 9 Landfill

(CAS 09-55-001-0952)

- Waste trenches used for solid waste and ordnance disposal
- Completed activities: soil cover repaired; fencing, monuments, and signs installed
- Monitoring requirements: annual inspections
- Site condition: use-restricted, fenced with a locked gate, and posted

Thunderwell Site
(CAS RG-26-001-RGRV)

- Historic location for buried construction debris associated with the Thunderwell tests
- Completed activities: characterized site, no contaminants found, subsurface debris left in place, monuments installed
- Monitoring requirements: annual inspection of postings
- Site condition: use-restricted and posted monuments


Thunderwell Site A8


Thunderwell Site A17

Long-term Stewardship

- Sites are expected to need long-term stewardship (monitoring and maintenance) for the foreseeable future as there is no current end date for termination of inspection requirements for FFACO use-restricted sites
- NNSA is the current landlord of the Nevada National Security Site (NNSS), and closed sites on the NNSS may potentially remain under its purview and sites on the TTR could be included
- USAF is the current landlord of the Nevada Test and Training Range that surrounds the TTR
- Previous FFACO-closed sites not located on the NNSS have been transferred to the DOE's OLM as the long-term stewardship

Long-term Stewardship
(continued)

- EM Nevada will continue to manage closed sites on the NNSS until approximately FY 2030
- Should the TTR sites requiring long-term monitoring and maintenance:
  - Transfer to NNSA or USAF?
  - Transfer to OLM?
  - Remain under EM Nevada purview for now?

Evaluation of Options

Option	Pros	Cons
Explore transfer of TTR sites to USAF or NNSA	EM Nevada Program will continue to monitor sites on NNSS until all sites are closed in FY 2030; fairly easy to continue to monitor the TTR sites in conjunction with NNSS sites until then	EM and NNSA do not control the TTR; the USAF does EM will continue to bear liability and costs for sites on the TTR until eventual transfer to NNSA or USAF Both entities have indicated they do not want long-term responsibility for the sites State of Nevada Division of Environmental Protection's (NDEP's) agreement would be required to make a change to management of FFACO-closed sites Will require agreement between NNSA, USAF, and EM Nevada Program
Explore transfer of TTR sites to OLM	OLM's mission focus is long-term surveillance and maintenance OLM has experience managing FFACO-closed sites Consistent with the Nevada Offsites already managed by OLM Reduce EM liability and costs	NDEP's agreement would be required to make a change to management of FFACO-closed sites Will require agreement between USAF, OLM, and EM Nevada Program
TTR sites remain under EM Nevada until 2030	EM Nevada Program will continue to monitor sites on NNSS until all sites are closed in FY 2030; fairly easy to continue to monitor the TTR sites in conjunction with NNSS sites until then	EM will continue to bear liability and costs for sites on the TTR until eventual transfer to NNSA or USAF EM Nevada Program may not have the same relationships with other agencies that promote such an agreement at a later date

NSSAB Recommendation

Work Plan Item	Options	NSSAB Recommendation
From a community perspective, the NSSAB will provide a recommendation on its preferred path forward for the Environmental Restoration sites at the TTR	1. Explore transfer of TTR sites to USAF or NNSA	
	2. Explore transfer of TTR sites to OLM	
	3. TTR sites remain under EM Nevada Program management until FY 2030	

U.S. Department of Energy (DOE) Environmental Management (EM) Nevada Program Overview

Rob Boehlecke, EM NV Program Manager

Environmental Program Services Contract
Community Event
January 17, 2018

New EM Nevada EPS Contract

- Current EM Nevada Environmental Program Services (EPS) contract expires on 1/31/2020.
- EM Nevada and the EMCBC are currently in the acquisition planning phase for a new follow-on contract.
- A Request For Information (RFI) was released on 1/9/2018.
- A procurement website has been created to post all acquisition related information and documents. The website can be viewed here: https://www.emcbc.doe.gov/SEB/emnevadaeps/
- DOE encourages stakeholder feedback and engagement on the acquisition process.
- Questions regarding the new acquisition can be submitted here: EMNevadaEPS@emcbc.doe.gov

Nevada National Security Site and Nevada Test and Training Range Overview

- NNSS is approximately 1,360 square miles of federally owned and controlled land located 65 miles northwest of Las Vegas
- Historic mission of the NNSS was nuclear and conventional explosives testing
- Historic field testing was conducted on the NTTR and TTR

Mission Overview

Two federal entities responsible for current activities

- The National Nuclear Security Administration oversees the national security mission and overarching management of the NNSS
- The DOE EM NV Program is responsible for remediating sites on the NNSS and portions of the NTTR that were contaminated during nuclear testing operations and for operating the Area 3/Area 5 radioactive waste management facilities

EM Nevada Program Activities

- Underground Test Area
- Decontamination and demolition
- Soils
- Post-closure surveillance and maintenance
- Integration support

- Classified Components, Low-Level and Mixed Low-Level Waste Disposal*
- Radioactive Waste Acceptance Program

*Waste disposal activities are performed by the NNSS M&O and are outside the scope of this RFI.

Regulatory Framework

EM NV Program work is performed in accordance with applicable federal regulations and agreements including:

- Resource Conservation and Recovery Act
- Clean Air Act, Clean Water Act, and Atomic Energy Act
- DOE Orders, and applicable Nevada specific laws, codes and acts
- Agreements in Principle
- Federal Facility Agreement and Consent Order (FFACO) (1996, as amended)

FFACO

- Agreed to by the State of Nevada, DOE EM, the U.S. Department of Defense (Defense Threat Reduction Agency [DTRA]), and DOE Office of Legacy Management
- Governs the process for identifying, characterizing, and providing corrective actions for historical sites within the state of Nevada related to the development, testing, and production of nuclear weapons
- Encompasses enforceable agreement milestones which, if missed, can result in fines
- State of Nevada Division of Environmental Protection (NDEP) approves FFACO documents as the regulator

How the FFACO Regulates the Work We Do Today

- All sites identified in initial inventory were incorporated into the FFACO in 1996 and overlooked sites can be added
  - Number of original sites ~2,577 (1,945 EM)
  - Number of current sites 2,997 (2,153 EM)
- NDEP participates throughout the investigation/closure process for all sites and oversees ongoing long-term monitoring activities for sites where contamination was closed in place
- All documents written for the cleanup of sites are produced using NDEP-approved FFACO outlines

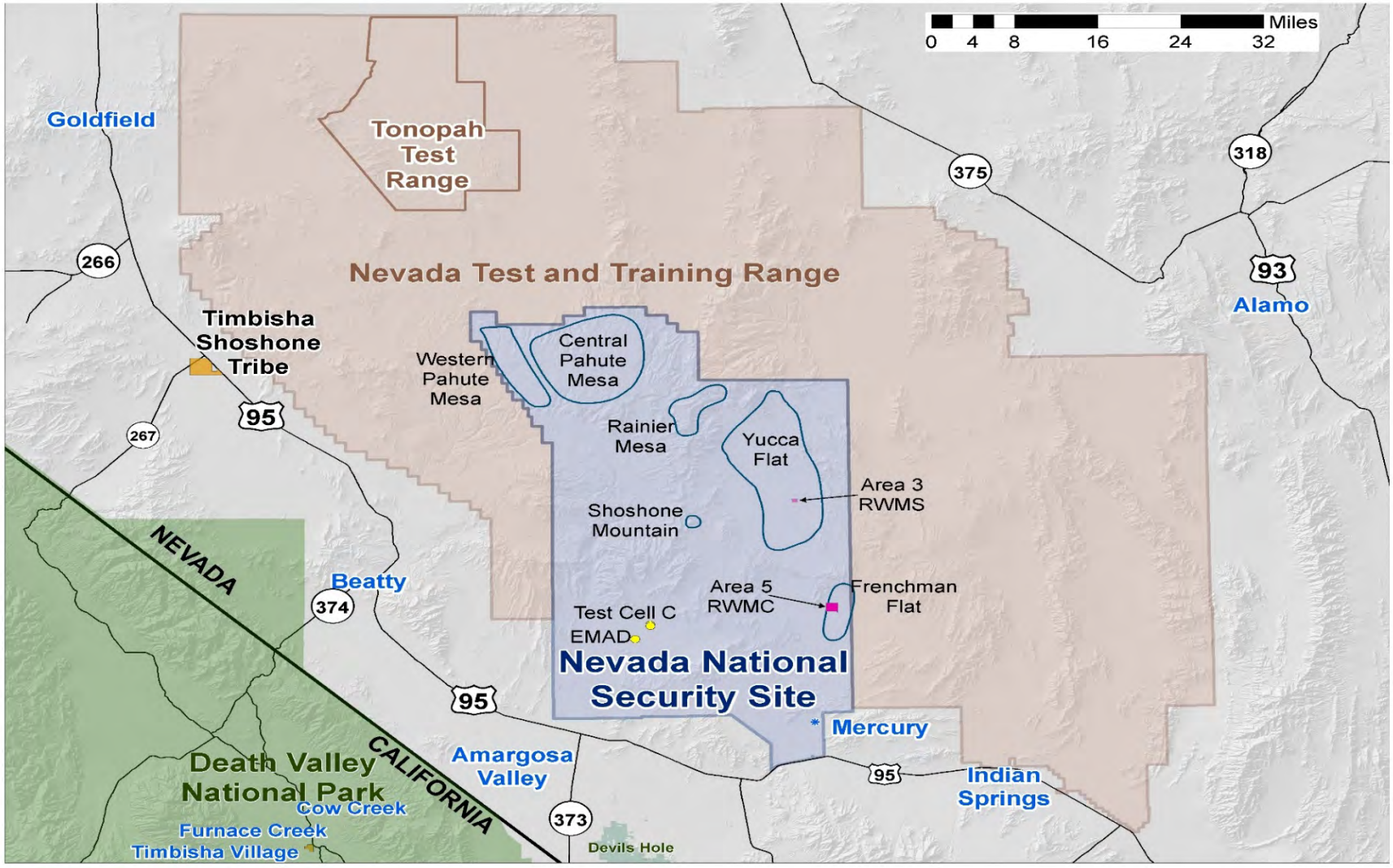
Proposed Funding Profile ($M)

	Total	FY 20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
Total Proposed EPS Contract	247.5	16.3	25.8	29.2	27.6	29.6	32.9	29.6	22.2	11.7	11.4	11.2

Major Elements of Scope

- Underground Test Area
- Soils Remediation
- Soils and Industrial Type Post-Closure Surveillance and Maintenance
- Decontamination and Demolition
- Radioactive Waste Acceptance Program
- EM Integration

Locations of Major Scope Elements



Underground Test Area

Historic Nuclear Testing Impacts on the Groundwater

- 828 underground nuclear tests conducted at the NNSS from 1951 to 1992
- Underground tests conducted at depths ranging from approximately 90 to 4,800 feet below the ground surface
- One-third of these tests occurred near, below, or in the water table
- Some radioactive contamination detected in groundwater on the NNSS and the Nevada Test and Training Range

NNSS Groundwater Program Objectives

- Due to significant worker safety concerns and cost associated with any type of active remediation, the Department of Energy, in consultation with the NDEP, has selected monitored natural attenuation with access controls as the end state.
- Monitoring locations will be determined through investigation and modeling of the nature and extent of contamination.
- This decision is documented in the Federal Facility Agreement and Consent Order.

NNSS Groundwater Program Objectives (continued)

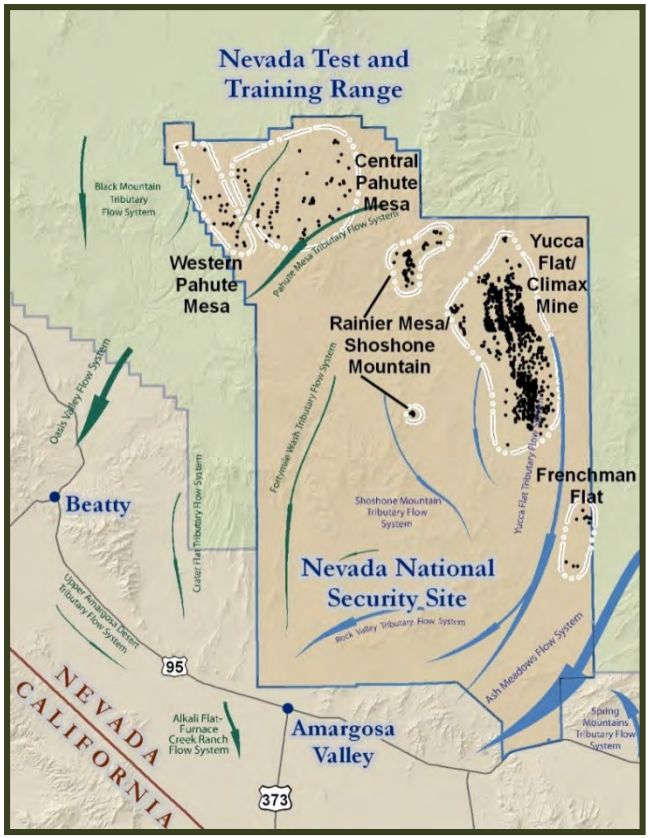
- This strategy is supported with the activities described below:
  - Using investigative methods, such as drilling wells to study the hydrology and geology
  - Sampling wells, analyzing samples, and building computer models from gathered data
  - Implementing controls to prevent access to contaminated groundwater
  - Ongoing monitoring of wells on and off the NNSS establishing a comprehensive long-term monitoring network to ensure public protection
  - Staying up-to-date on water right applications to monitor future access or inadvertent migration of contaminated groundwater

Corrective Action Unit (CAU) Status

Five CAUs make up the UGTA activity:

– *Yucca Flat/Climax Mine (CAU 97)*

- Current: CADD/CAP being finalized
- Forecasted: Preparing Closure Report
- Remaining scope: Complete Closure Report, perform evaluation well sampling and monitoring, installation of monitoring wells, well development and testing, and post-closure monitoring



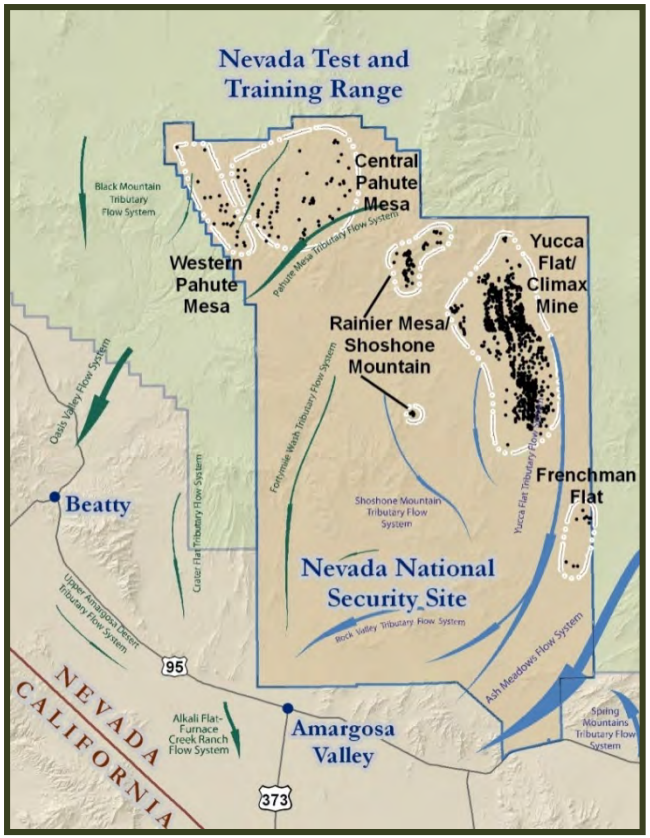
CAU Status (continued)

– *Frenchman Flat (CAU 98)*

- Current & forecasted: In closure
- Remaining scope: Post-closure monitoring

– *Rainier Mesa/Shoshone Mountain (CAU 99)*

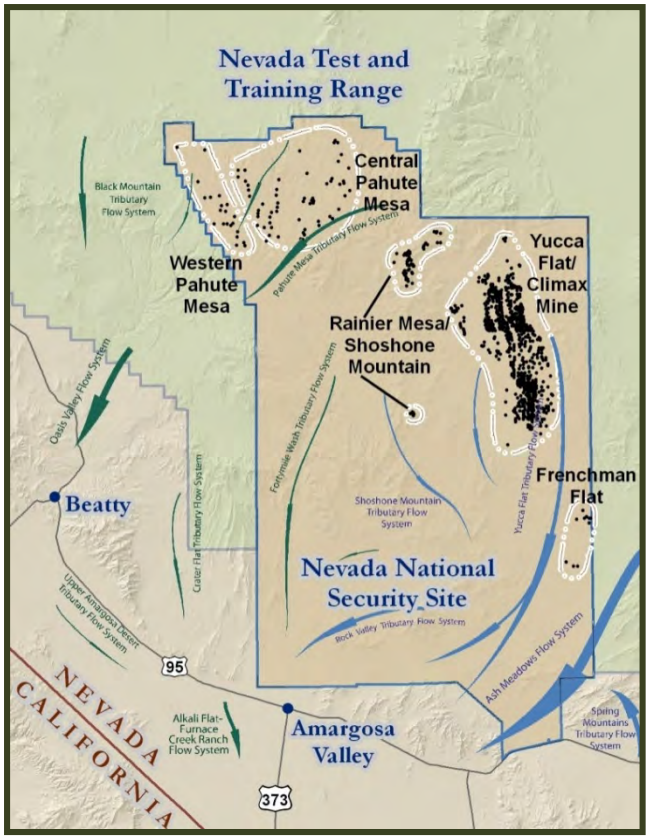
- Current: Conducting modeling under Alternative Modeling Strategy
- Forecasted: In closure
- Remaining scope: Installation of monitoring wells, well development and testing, and post-closure monitoring



CAU Status (continued)

– *Central Pahute Mesa (CAU 101) and Western Pahute Mesa* (CAU 102)*

- Current & forecasted: Conducting Phase II Corrective Action Investigation
- Remaining scope: Installation of evaluation wells, well development and testing of evaluation wells, characterization/evaluation sampling and monitoring, characterization data analysis, flow and transport model development, completion of the CADD/CAP document, model evaluation, and completion of the Closure Report



**Western and Central Pahute Mesa are managed as one entity*

Soils Remediation

Soils Sites

- Atmospheric nuclear weapons tests, nuclear safety experiments, and evaluation tests for peaceful uses of nuclear explosives conducted at the NNSS and NTTR (operated by the U.S. Air Force) resulted in radioactive contamination of surface and near surface soils.
- The Soils activity includes the characterization and remediation of surface and near surface soil contamination resulting from atmospheric nuclear testing.
- All 148 Soils sites are projected to be in closure by the end of 2019.
- The anticipated remaining scope consists of soils studies to enhance knowledge of fate and transport of contaminants during post closure monitoring.

Soils and Industrial Type Post-Closure Surveillance & Maintenance

Post-Closure Surveillance & Maintenance

- Approximately 150 closed sites on the NNSS and NTTR require post-closure surveillance and maintenance.
- Monitoring reports documenting post-closure inspections are submitted to NDEP.

Decontamination and Demolition (D&D)

D&D Overview

- The remaining D&D sites are grouped into two CAUs:
  - Engine Maintenance Assembly and Disassembly (EMAD) Facility
  - Test Cell C Ancillary Structures and Buildings
- Facilities originally supported Nuclear Rocket Development Station activities on the NNSS.
- End state is anticipated to be demolition to slab and disposal of all wastes.

EMAD Facility

- An approximately 165,000-square-foot, four-story building that is 80 feet high with walls constructed of either concrete, asbestos-coated corrugated steel, or concrete block.

EMAD Facility

- Building interior is divided among the following functional areas: (1) Hot Bay Complex, (2) Operating Galleries and Master Control Room, (3) Cold Bay Complex, (4) Machine and Repair Shops, and (5) Facility Support areas.
- Includes two train cars.

Test Cell C

- Includes support buildings such as an Equipment Building, Motor Drive Building, Pump House, Cryogenic Evaluation Lab, and Engine Transport System Maintenance Building.
- Includes ancillary structures such as Reactor Cooling Station, Water Tank, Tower Water Tank, Hydrogen Tanks, Water Process Tank, and Liquid Hydrogen Tanks

Ancillary structures at Test Cell C

Radioactive Waste Acceptance Program

Radioactive Waste Disposal Overview

- The NNSS has served as a vital waste disposal resource in the nation-wide cleanup of former nuclear research and testing facilities and for ongoing missions.
- The NNSS management and operating contractor performs low-level radioactive waste (LLW), mixed LLW, and classified waste disposal operations which are outside the scope of this Request for Information.
- The Radioactive Waste Acceptance Program (RWAP) ensures waste disposed at the NNSS meets the requirements established in the NNSS Waste Acceptance Criteria (WAC).
  - The NNSS WAC is available at http://www.nnss.gov/docs/docs_RWM/NNSSWAC_Nov%202016.pdf

RWAP Elements

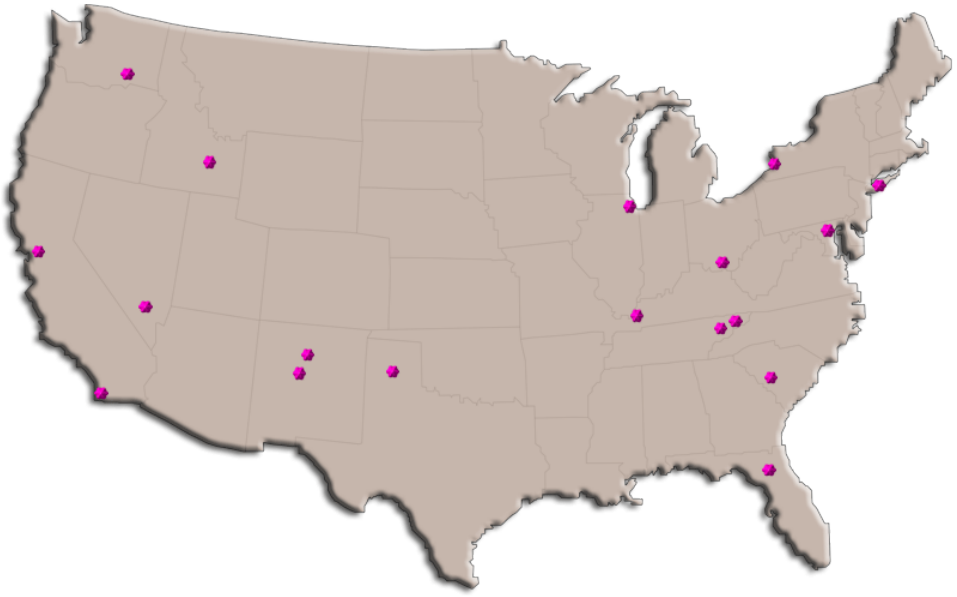
- Waste Acceptance Coordination
- Facility Evaluations/Verifications
- Waste Acceptance Review Panel
- Waste Acceptance Support

Waste Acceptance Coordination

- Coordination of all RWAP activities between generators, the management and operating contractor, and federal staff
- Maintaining interfaces with waste certification officials at generator sites
- Sharing of information and lessons learned amongst the waste generator community
- Coordinating an annual waste generator workshop

Facility Evaluations/Verifications

- Approved generators undergo an initial audit to ensure their waste program conforms to NNSS requirements
- After a waste generator obtains approval, periodic assessments and facility evaluations of the generator's waste program are conducted to verify continued compliance with the NNSS WAC



Approved Waste Generators

Waste Verification

- Verification Types
  - Physical
    - Visual inspection
    - Real-time-radiography
  - Chemical
    - Field chemical screen
    - Split sample

Waste Acceptance Review Panel

- Review waste streams for compliance with NNSS WAC
- Waste Acceptance Review Panel consists of the following:
  - Radioactive Waste Acceptance Program staff
  - State of Nevada Division of Environmental Protection (Resource Conservation and Recovery Act [RCRA] and Joint Oversight)
  - Operations
  - Performance Assessment
  - Safety Basis Team
  - Nuclear Criticality Team

Waste Assistance and Technical Support

– Performs site visits to generators

– Assists generators to be compliant with NNSS WAC

EM Integration

EM Integration

- Environmental Management Information System and FFACO support
- Public Involvement and Strategic Communication support
- Classification support
- Closeout and transfer to Legacy Management or NNSA
- Other services such as property management, records management, safety and health, quality assurance, information technology etc.

Community Analysis Committee Plan for Work Plan #7

Introduction and Background – The Community Analysis Committee within the NSSAB was formed during the November 2017 meeting, has met on November 29 and January 8 to discuss the EM desires for community outreach and input in order to better perform their communication responsibilities. The Committee is subordinate to the NSSAB and is made-up of Board members and others who represent communities nearby the NNSS.

Work Plan #7

Requirement – From a community perspective, develop a plan for gathering information from fellow community members regarding their EM interests and to gauge their level of concern regarding EM activities. The requirement is also to provide a recommendation for how the EM NV Program could shape its outreach based on the results of the community feedback.

Plan – For each of the communities, the designated representatives (Community Analysis Committee members) will:

- Contribute to the plan development to include a letter and/or other form of communication to the community, survey, and implementation methodology.
- Advertise the outreach effort.
- Conduct 1-on-1 interviews.
- Issue and collect communication surveys.
- Compile data.
- Report to the committee.

The committee will then provide a report with the results and recommendation(s) to the NSSAB Board and to the EM NV Program.

Schedule

Presentation to the Board in January

Submittal to EM NV Program in January

Approval by EM NV Program by Mid-February

Implementation

- Letter to community February - March
- 1-on-1 meetings (respondents and others to include Fire Chief, CofC, Rotary, others) March - May
- Complete Surveys May -June (Note: SurveyMonkey will be available as an online option to the 1-on-1 sessions)
- Compile in June
- Report to Full Board and EM in July

Attachments

1. Community Outreach letter example
2. Survey
3. Compilation Form
4. Procedure

Attachment 1 Outreach Letter Example

To Editor, Boulder Review

Community Opinions about Test Site Environmental Matters

As a member of the community advisory board to the Department of Energy's Environmental Management office at the former Nevada Test Site, I've been asked to seek opinions from Boulder City residents related to the environmental clean-up activities at the test site, now known as the Nevada National Security Site. The collected opinions will help the EM office understand the level of interest and any concerns that nearby residents have and guide the office in making their decisions. In order to gather inputs and answer your questions, during the next 3 weeks, on Tuesdays, I'll be at the Boulder City Library on Adams from 4-5:30pm. Please stop by so we can discuss any concerns or suggestions. Alternatively, contact me at rstephans@aol.com.

Dick Stephans

Attachment 2 Survey

Environmental Management (EM) Survey/Questionnaire (2018)

Introduction: Please enter your responses to the questions after reviewing the various missions of the Department of Energy's Environmental Management (EM) at the Nevada National Security Site (NNSS), formerly known as the Nevada Test Site. Provide your response back to the volunteer interviewer. The questionnaire will be used to improve community outreach activities.

EM Mission: For almost 30 years, the Department of Energy has been **i**dentifying and addressing areas impacted by historical nuclear research, development, and testing at the Nevada National Security Site.

- **Industrial facilities** – inactive facilities on the NNSS that are contaminated as a result of activities conducted in support of nuclear testing. Of the 1,970 contaminated facilities, all but 12 have been formally remediated and obtained State of Nevada closure approval.
- **Soil contamination** – surface and shallow subsurface soils were contaminated by historical testing activities on the NNSS and adjacent U.S. Air Force land. Of the 148 contaminated locations, all but 9 have been formally remediated and obtained State of Nevada closure approval.
- **Groundwater** – study groundwater and conduct analysis at the Nevada National Security Site in order to understand the effects of historic underground nuclear testing. Current research shows contaminated groundwater will not reach public water supplies. The public water supply is safe from the impacts of historic underground nuclear testing.
- **Radioactive waste transportation and disposal** - The low-level radioactive waste disposed at the NNSS is generated by cleanup activities at the NNSS and other U.S. Department of Energy and U.S. Department of Defense sites across the country. Examples of this waste include contaminated construction debris, scrap metal, soil, and equipment. Some of this waste includes hazardous materials. Waste is systematically disposed in engineered cells excavated to various depths. Continuous monitoring of air, groundwater, and soil is performed.

For additional information on EM activities at the NNSS, please visit the website at http://www.nnss.gov/pages/programs/em/Environmental.html

Are you aware of both the historic and contemporary activities at the Nevada National Security Site? If so, please explain.

Please check your level of Interest in the community receiving more information about the following topics:

1. Industrial facilities at the NNSS

	1	2	3	4	5	
Not Interested	○	○	○	○	○	**Very Interested**

2. Soil Contamination at NNSS

Not Interested	○	○	○	○	○	**Very Interested**

3. Contaminated Groundwater Movement on the NNSS

Not Interested	○	○	○	○	○	**Very Interested**

4. Contaminated Groundwater Movement off the NNSS

Not Interested	○	○	○	○	○	**Very Interested**

5. Radioactive waste disposal at NNSS

Not Interested	○	○	○	○	○	**Very Interested**

6. Radioactive waste transportation to NNSS

Not Interested	○	○	○	○	○	**Very Interested**

7. Historic/cultural preservation on the NNSS

Not Interested	○	○	○	○	○	**Very Interested**

8. Public outreach and involvement by the Environmental Management (EM) program

Not Interested	○	○	○	○	○	**Very Interested**

Please check your level of concern/worry on each of the following topics:

1. Industrial facilities at the NNSS

	1	2	3	4	5	
Not Concerned	○	○	○	○	○	**Very Concerned**

2. Soil Contamination at NNSS

Not Concerned	○	○	○	○	○	**Very Concerned**

3. Contaminated Groundwater Movement on the NNSS

Not Concerned	○	○	○	○	○	**Very Concerned**

4. Contaminated Groundwater Movement off the NNSS

Not Concerned	○	○	○	○	○	**Very Concerned**

5. Radioactive waste disposal at NNSS

Not Concerned	○	○	○	○	○	**Very Concerned**

6. Radioactive waste transportation to NNSS

Not Concerned	○	○	○	○	○	**Very Concerned**

7. Historic/cultural preservation on the NNSS

Not Concerned	○	○	○	○	○	**Very Concerned**

8. Public outreach and involvement by the Environmental Management (EM) program

Not Concerned	○	○	○	○	○	**Very Concerned**

Please provide any added comments below, such as, what needs to be told to the public, list any suggestions about the best methods of communication, etc.

Demographic Information (optional)

What local community do you live in/closest to? _____

Are you currently a UNLV, CSN, Nevada State, or other college student?

- o Yes
- o No

Age: What is your age?

- o Under 17 years old
- o 18-30 years old
- o 31-45 years old
- o 45-60 years old
- o 60-74 years old
- o 75 years or older

Gender: What gender do you identify with?

- o Male
- o Female
- o Other

Race/Ethnicity: Ethnic origin (or Race): Please specify your ethnicity.

- White / Caucasian
- Hispanic or Latino
- Black or African American
- Native American or American Indian
- Asian / Pacific Islander
- Multiple
- Other_____

Attachment 3 Compilation Form

Community Survey Consolidation and Results *(1/2/2018)*

Number of Responders: ___ **Community: _____**

Interest Responses:	1	2	3	4	5
Industrial facilities	( )	( )	( )	( )	( )
Soil Contamination	( )	( )	( )	( )	( )
Groundwater on	( )	( )	( )	( )	( )
Groundwater off	( )	( )	( )	( )	( )
RW Disposal	( )	( )	( )	( )	( )
RW Transportation	( )	( )	( )	( )	( )
Preservation	( )	( )	( )	( )	( )
Public Outreach	( )	( )	( )	( )	( )
Totals					

Concern Responses:	1	2	3	4	5
Industrial facilities	( )	( )	( )	( )	( )
Soil Contamination	( )	( )	( )	( )	( )
Groundwater on	( )	( )	( )	( )	( )
Groundwater off	( )	( )	( )	( )	( )
RW Disposal	( )	( )	( )	( )	( )
RW Transportation	( )	( )	( )	( )	( )
Preservation	( )	( )	( )	( )	( )
Public Outreach	( )	( )	( )	( )	( )
Totals					

Optional Demographics other than Community (List results to the right of the respective entry)

Are you currently a UNLV, CSN, Nevada State, or other college student?

- Yes_____
- No _____

Age: What is your age?

- Under 17 years old_____
- 18-30 years old_____
- 31-45 years old_____
- 45-60 years old_____
- 60-74 years old_____
- 75 years or older_____

Gender: What gender do you identify with?

- Male_____
- Female____
- Other_____

Race/Ethnicity: Ethnicity origin (or Race): Please specify your ethnicity.

- White_____
- Hispanic or Latino_____
- Black or African American_____
- Native American or American Indian_____
- Asian / Pacific Islander_____
- Multiple _____
- Other_____

Meaningful Comments relating to communication about topics and methods (continued on back):

Submitted by Community Analysis Committee Member:

Attachment 4 SOP

Standing Operating Procedure for Community Analysis Committee Jan 2018

Each of the committee members representing a particular community will spearhead the effort in their community.

DO NOT START INTERACTION WITH THE PUBLIC UNTIL THE PLAN HAS BEEN COMPLETED AND APPROVED BY EM NEVADA PROGRAM! You will be notified via email when this is accomplished.

The example letter to the community could also be posted at the Credit Union bulletin board; sent to the Chamber of Commerce; the President of the Rotary; and the Fire Chief, etc., prior to 1-on-1 sessions.

A Public Service Announcement (PSAs) could be as follows: "Members of the voluntary Advisory Board to the Environmental Management office at the former Nevada Test Site are conducting a survey of how best the office can focus its community outreach program. The short survey asks about interest and any concerns you may have and you do not provide your name. If interested, please go to www. ….. and follow the instructions"

At the 1-on-1 sessions, several fact sheets about the EM effort are needed to provide to respondents and possibly others. The 2016 Annual EM Report (at least) is suggested. The community member should anticipate questions from the public about the EM effort and the work being done at the NNSS. It's suggested that you take a copy of the Orientation Binder to the 1-on-1 sessions.

The job is to answer questions, issue the survey questionnaire, and collect results.

Talking points for the 1-on-1 sessions need to be developed should start with introductions, what a Board member is and is not, include why the information is needed, answer questions about the test site and the EM mission, and issue a survey. There is flexibility in the way that the 1-on-1 sessions are conducted, but the surveys forms are NOT to be changed by the committee member (interviewer) or the persons completing the survey.

Answers to questions should be sought from EM to any questions that the interviewer may have or are needed going into the interviews. Questions such as, have there been any on-site or off-site LLW Transportation accidents or incidents in the past 20 years (except from the US Ecology site at Beatty) might be asked. Is an EM Annual Report routinely sent to the local Library? Should we specify that EM has no tie to or responsibility for the Yucca Mountain High level Waste Program or the commercial waste storage facility in Beatty NV operated by US Ecology?

If several are in attendance at the 1-on-1 sessions possibly have a small group session or provide the fact sheets and survey to the respondents waiting so they have something to review prior to the session.

If the respondent would prefer to answer the survey questions online, the NSSAB Office will furnish committee contact with a website link to provide the respondent to the survey online. A respondent may answer the survey online as long as they have access to the internet. Separate online surveys with the same questions can be created for each community; so the results can be compiled digitally for each respective community and provided to their committee contact. In the case there are multiple email

addresses, the committee contact may provide the list of emails to the NSSAB Office to email out the online survey.

Allow for anonymity of the respondents as desired by them.

NSSAB Community Analysis Committee

Area Coverage

- Amina Anderson – Beatty
- Anthony Graham – UNLV
- Steve Rosenbaum – Las Vegas and North Las Vegas
- Edward Rosemark – Panaca and nearby locations to include Pioche and Rachel
- Frank Bonesteel -- Pahrump
- Mike Anderson – Goldfield (although Mike is no longer a Board Member, he will be sent information)
- Richard Arnold (liaison advisor) – Consolidated Group of Tribes and Organizations
- Dick Stephans – Boulder City
- Dick Twiddy – Mesquite, he also volunteered at the first meeting to cover tribal, Moapa, and Bunkerville communities

NOTE: Board Members, please let Barb know if you might be interested in providing Surveys in other areas and helping with Las Vegas

On behalf of the Community Analysis Committee, it is requested that the Board vote to approve the Plan, and as approved, the Plan be transmitted to EM Nevada Program for approval and notification back that authorizes implementation.