Nevada National Security Site

Proud Past, Exciting Future

NNSA
National Nuclear Security Administration

Nevada National Security Site
Pre-Proposal Meeting
November 19, 2015
Agenda

- 8:30 am Welcome
- 9:00 am Overview of NNSS and NFO
- 10:00 am Break
- 10:30 am NNSS Video
- 11:00 am Questions
- 11:30 am Lunch
- 1:00 pm Solicitation Overview
- 2:15 pm Break
- 2:45 pm Questions
- 4:00 pm Conclusion

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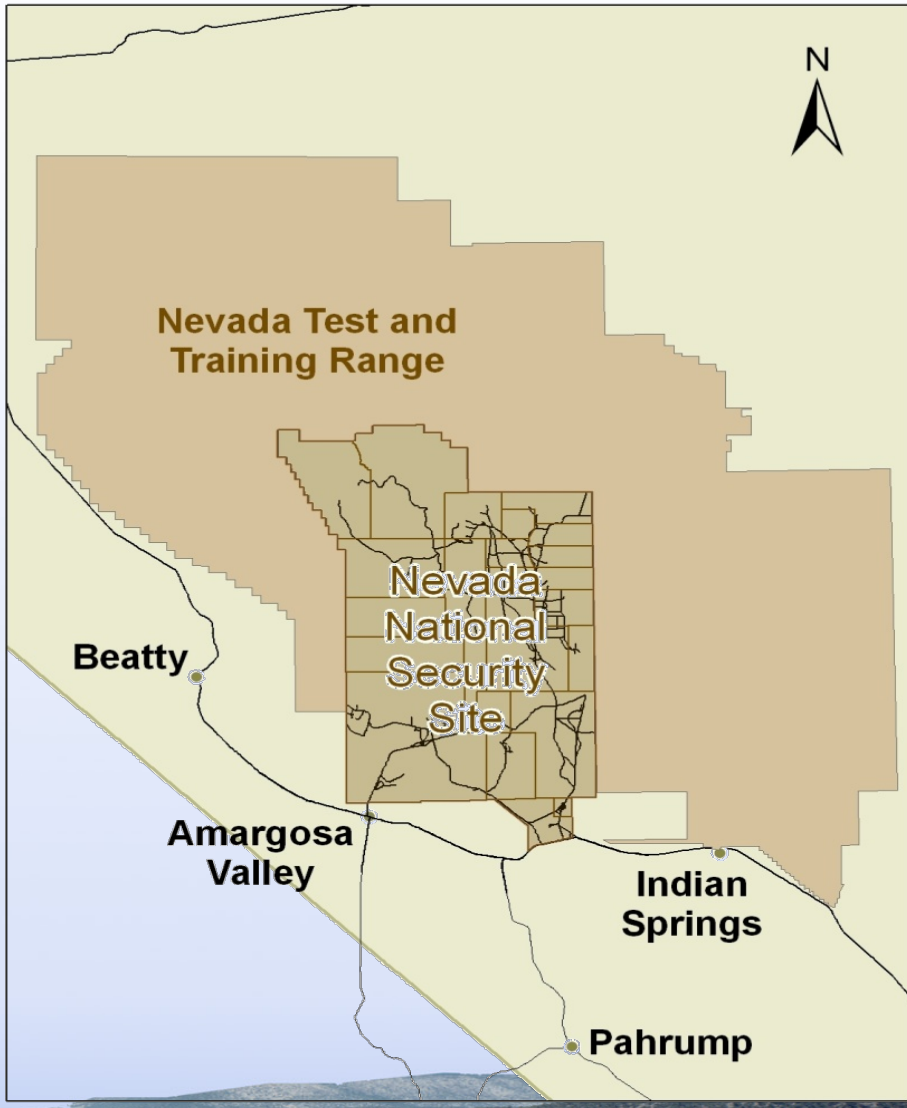
The Nevada National Security Site

- Large geographically diverse outdoor laboratory
  - 1,360 square miles of federally owned and controlled land
  - Surrounded by 4,500 square miles of federally owned and operated land
  - Free from encroachment
  - 65-miles northwest of Las Vegas, NV



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Nevada National Security Site
Mercury, Nevada

Nevada Field Office
Las Vegas, Nevada

Remote Sensing Laboratory - Nellis
Nellis AFB, Nevada

Livermore Operations
Livermore, California

Special Technologies Laboratory
Santa Barbara, California

Los Alamos Operations/Sandia Operations
Los Alamos, New Mexico/Albuquerque, New Mexico

Remote Sensing Laboratory - Andrews
Andrews AFB, Maryland

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Current M/O Employees

	Non- Bargaining FT/PT 30+	Bargaining
Total Authorized Number of Employees	1554	n/a
Total Headcount	1480	453
NLV/Other LV	610/8	30
NNSS	471	411
Livermore Area Office	54	
Los Alamos Area Office	60	
Sandia Area Office	18	
STL – Santa Barbara	79	
RSL-A	53	
RSL-N	121	12
New York	6	

Current as of November 13, 2015

Nuclear Testing Road to the Nevada National Security Site

- U.S. enters World War II in 1941 after Japanese attack Pearl Harbor
- U.S. Manhattan Project begins developing first atomic bomb in 1942 to influence the outcome of the war
- Manhattan Project tests first atomic bomb in New Mexico on July 16, 1945, called “Trinity”
- U.S. drops two atomic bombs on two cities in Japan on August 6 and 9, 1945 – Japan surrenders August 14, 1945
- Nuclear testing begins in the South Pacific Ocean in 1946

NNSS Established in 1950

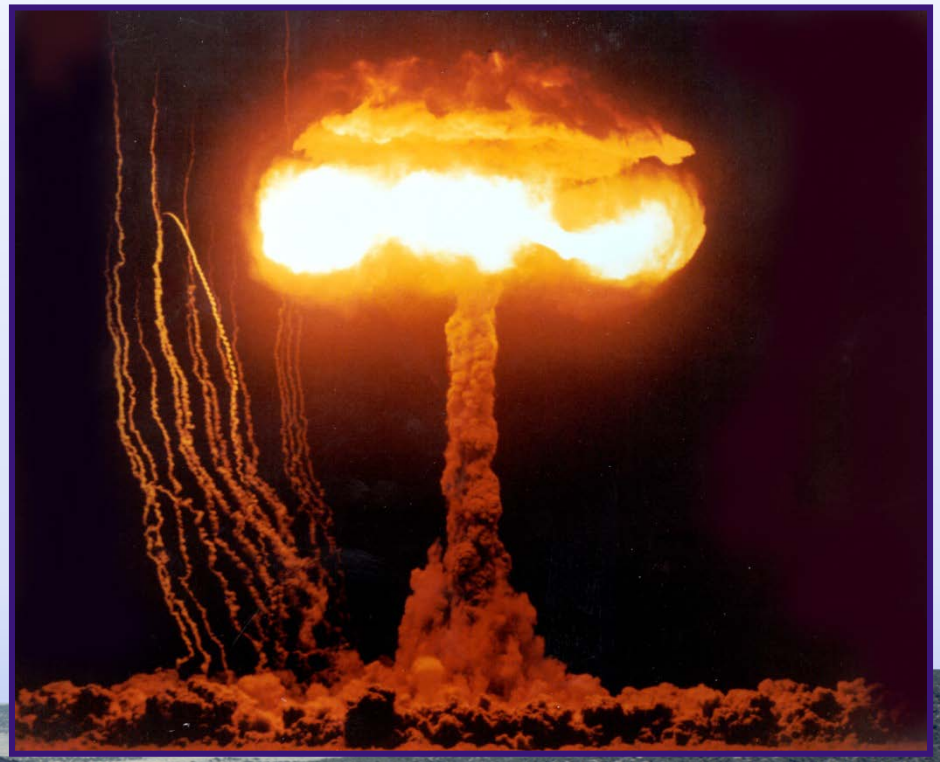
- Atomic testing in the South Pacific presented challenges
  - Logistics
  - Weather
  - Security
  - Safety
- Urgent need for continental test site
  - Top secret feasibility study, code named *Nutmeg*, commenced to search for a continental test site
  - Study concluded arid, southwest section of U.S. as an ideal location
- President Truman officially established Nevada Proving Grounds, now the Nevada National Security Site, on December 18, 1950

Atmospheric Testing at the Nevada National Security Site

- 100 atmospheric tests conducted at the NNSS from January 1951 through July 1962 to study weapons-related effects, as safety experiments, and to study peaceful effects of nuclear explosions

- Conducted aboveground in the atmosphere
  - Tower 42
  - Balloon 24
  - Airdrop 19
  - Surface 11
  - Rocket 3
  - Airburst 1

Climax – an airdrop test at the NNSS on June 4, 1953



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The End of Atmospheric Testing

- U.S. agreed to observe Limited Test Ban Treaty in October 1963, effectively ending atmospheric testing

Little Feller I
Test location today after the last atmospheric test detonated July 17, 1962

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Underground Testing at the Nevada National Security Site

- First underground nuclear test was *Uncle* on November 29, 1951 (*Rainier* 1st contained test 9/19/1957)
- Last underground nuclear test, *Divider*, detonated on September 23, 1992
- Underground nuclear testing occurred at depths of 600 to 5,000 feet
- 828 underground nuclear tests conducted at NNSS

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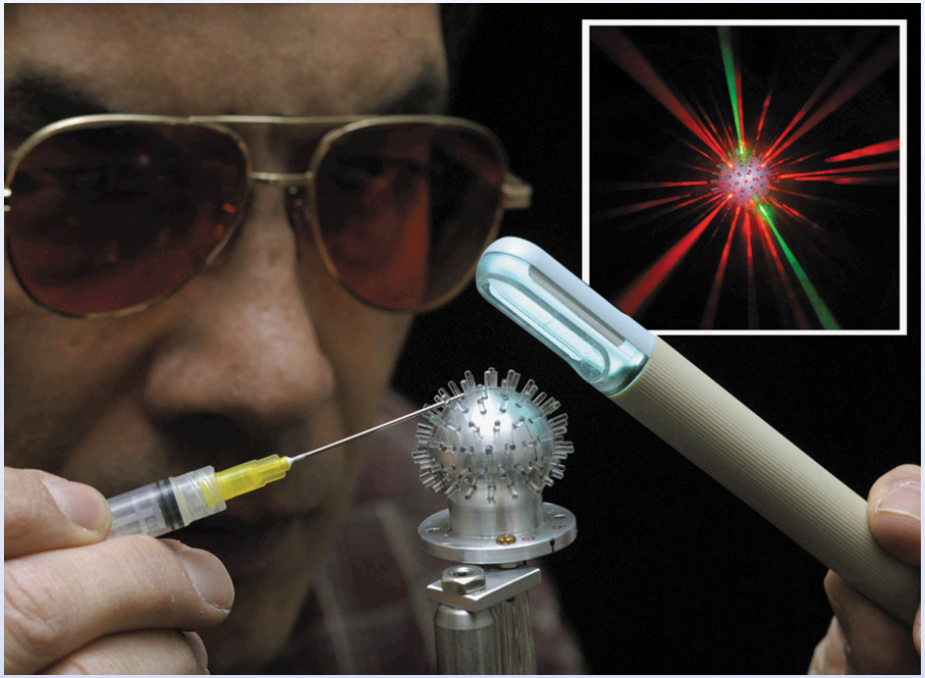
Today and Beyond

- Today and Beyond
  - National Security
  - Non-Proliferation
  - Environmental Management

Defense Experimentation and Stockpile Stewardship



- Primary mission is to ensure nation's nuclear weapons remain safe, secure and reliable.
  - Scientists and engineers use breakthrough scientific experiments, high tech computer simulations, and world-class diagnostic measurement systems.
  - Unique facilities and capabilities directly contribute to the continued certification of the nuclear deterrent.

Device Assembly Facility

- Ability to work on special nuclear material, radiation test objects and high-explosives.
- Poised to perform nuclear weapons operations
- Secure, state-of-the-art security systems and people

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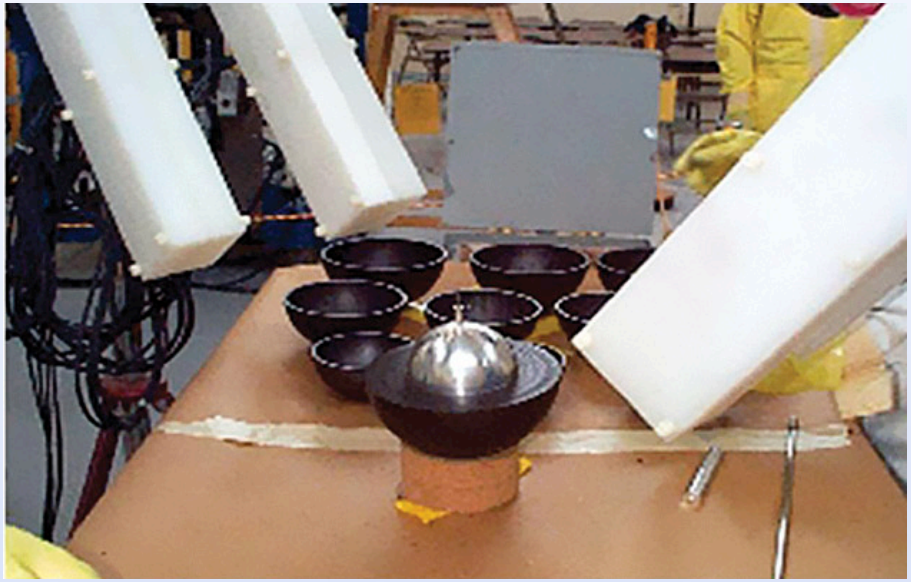
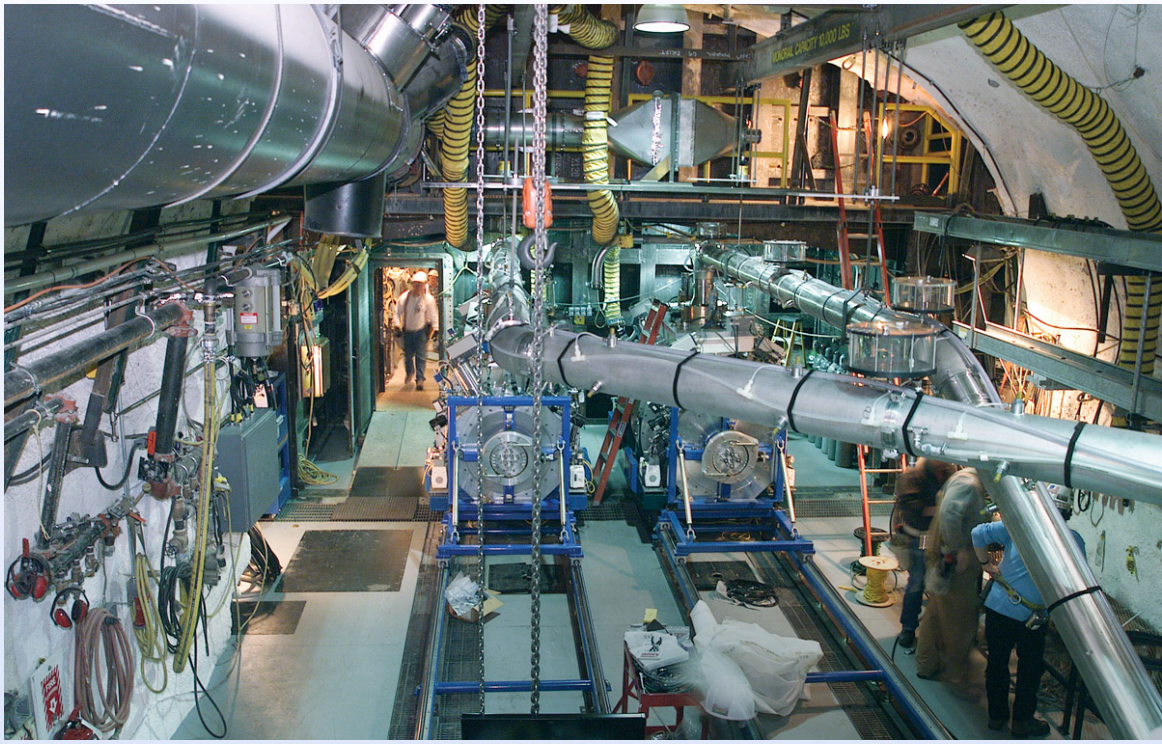
National Criticality Experimental Research Facility



- Contained within the Device Assembly Facility
- Innovative methods to develop treaty verification technologies.
- Train personnel in nuclear materials management and criticality safety
- Applications to: emergency response to terrorism; nuclear nonproliferation; nuclear criticality for stockpile; maintain and advance expertise within the nuclear materials community

U1a Complex

- Underground laboratory and tunnel complex
- Provides ability to measure the properties of plutonium under weapons-like conditions to state-of-the-art diagnostic development and X-ray radiography.



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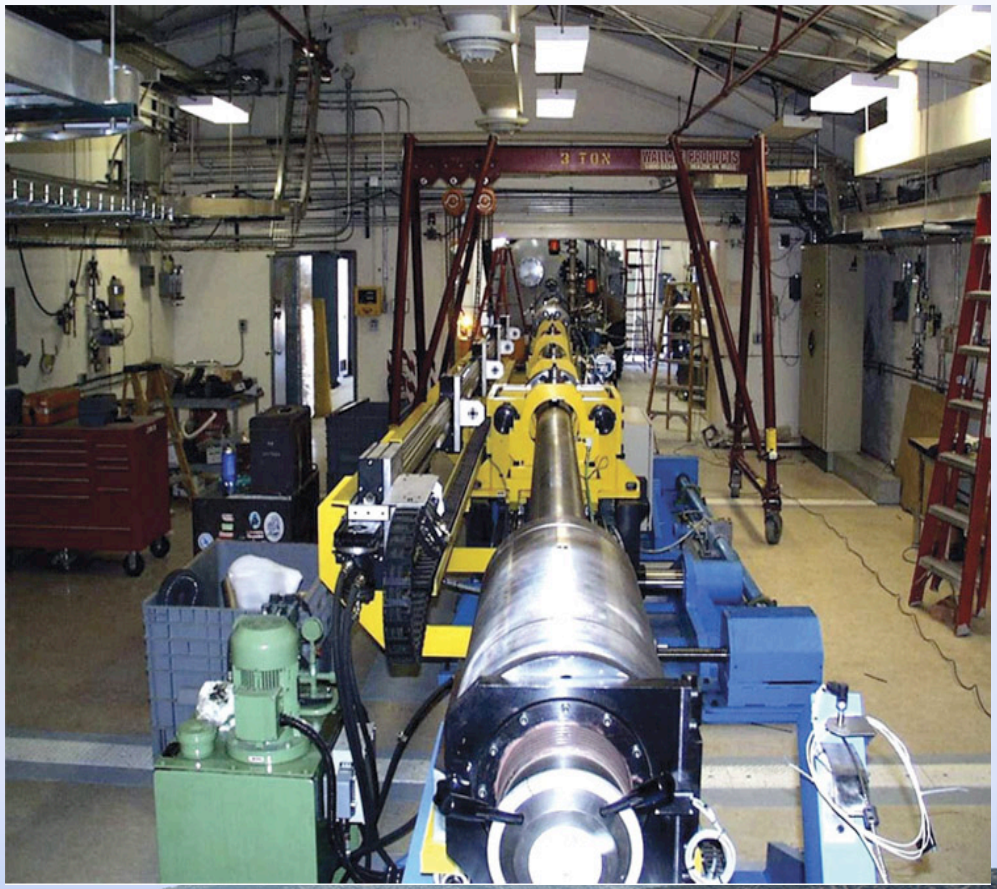
U1a Complex

- Subcritical experiments collect data from plutonium when it is subjected to high pressures and shocks, mimicking conditions in a nuclear explosion.
- 963 feet underground --- major safety and security advantage.

Joint Actinide Shock Physics Experimental Research

- Two-Stage light-gas gun used to study plutonium and other materials under high pressures, strain rates and temperatures.
- Provides insight on the behavior of materials at high pressures to predict weapon performance.
- Shoots projectiles up to 8 kilometers per second.
- Precise measurements to calibrate nuclear weapons design and analysis codes.



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Big Explosives Experiment Facility

- High-explosive testing facility that supports Stockpile Stewardship and other national security programs.
- Control Bunker, camera bunker, gravel firing pad, and control and diagnostic systems.
- 10-acre fenced compound certified for up to 78,000 pounds of high explosives.

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Global Security Programs

- National experts in detecting and locating “dirty bombs”, “loose nukes”, and radiological sources.
- Characterize environment, produce specialized radiological/nuclear detection equipment, train personnel on the equipment and it operations, tests and evaluates equipment, and develops high-tech equipment to defeat terrorism.

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Remote Sensing Laboratory at Nellis AFB

- Creates advanced technologies for emergency response operations, counterterrorism, and radiological incident response.
- On-Call to deploy to nuclear threats involving release of radioactive material.
  - Nuclear power plant accidents,
  - Nuclear terrorist incidents,
  - NASA launches, and
  - Transportation accidents.

T-1 Training Area

- 10-acre facility with more than 20 separate training venues.
- First responders learn how to take immediate, decisive action to prevent or mitigate terrorist use of radiological or nuclear devices.
- More than 180,000 first responders from across the United States have trained in Nevada.

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Nonproliferation Test and Evaluation Complex

- Open air testing of hazardous materials and biological simulants.
- Provides independent field testing and evaluation of emerging sensor technologies to improve our country's ability to find improvised explosive devices and to detect the proliferation of weapons of mass destruction.
- Facility is used to perform tests, experiments, or training for any technology that requires the release of chemicals or biological simulants into the environment.

Radiological/Nuclear Countermeasures Test and Evaluation Complex

- Multi-use test and evaluation facility that serves U.S. homeland security missions.
- Established to support federal agencies to develop, acquire and deploy domestic nuclear detection systems to prevent any attempt to import or transport a nuclear explosive device, fissile material, or radiological material.

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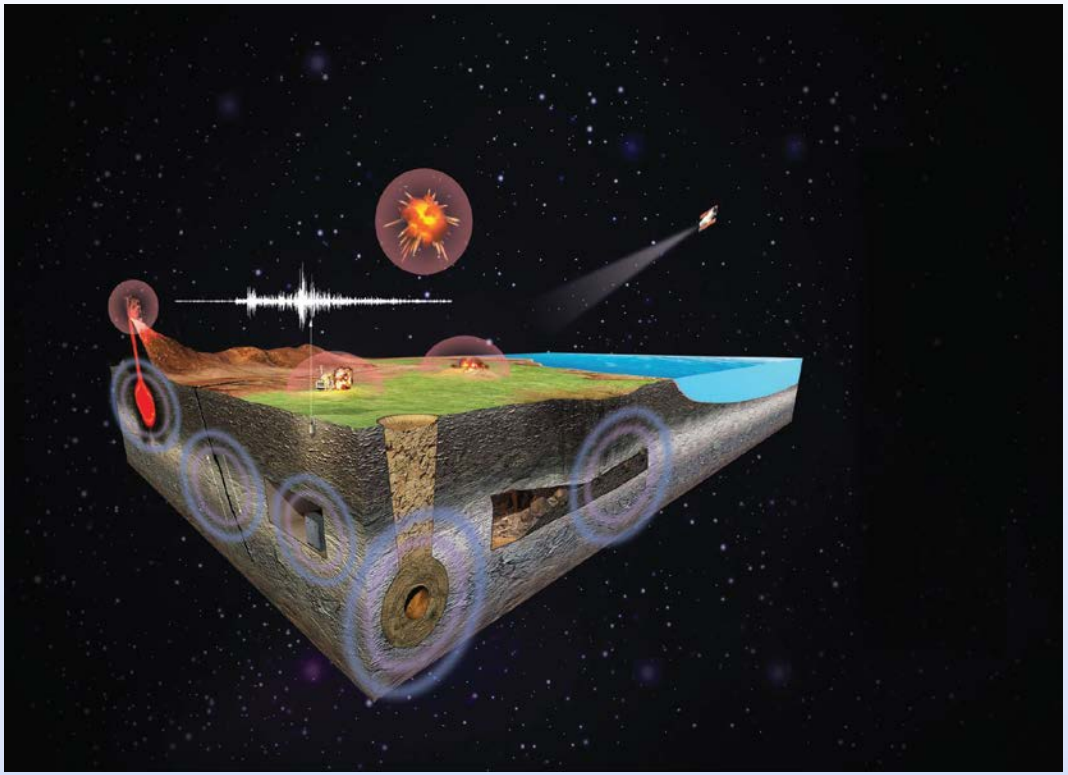
National Center for Nuclear Security



- Unique nonproliferation and arms control treaty verification test bed.
- Aim is to develop and test new generations of arms control verification technologies, and provide future treaty negotiators with solid data on verification and inspection regimes.
- The tools for treaty verification must be more accurate and reliable and must work at stand-off distances.

Environmental Management

- Program addresses environmental legacy from historic nuclear weapons-related activities while ensuring the health and safety of workers, the public and the environment.
- Environmental protection, compliance and monitoring of the air, water, plants, animals and cultural resources at the site.

Environmental Management
Mixed-/Low-Level Waste Disposal

- Permanent disposal of low-level and mixed-low-level radioactive waste generated by cleanup activities at the site and other DOE and DOD sites historically involved with nuclear weapons research, development, and testing.

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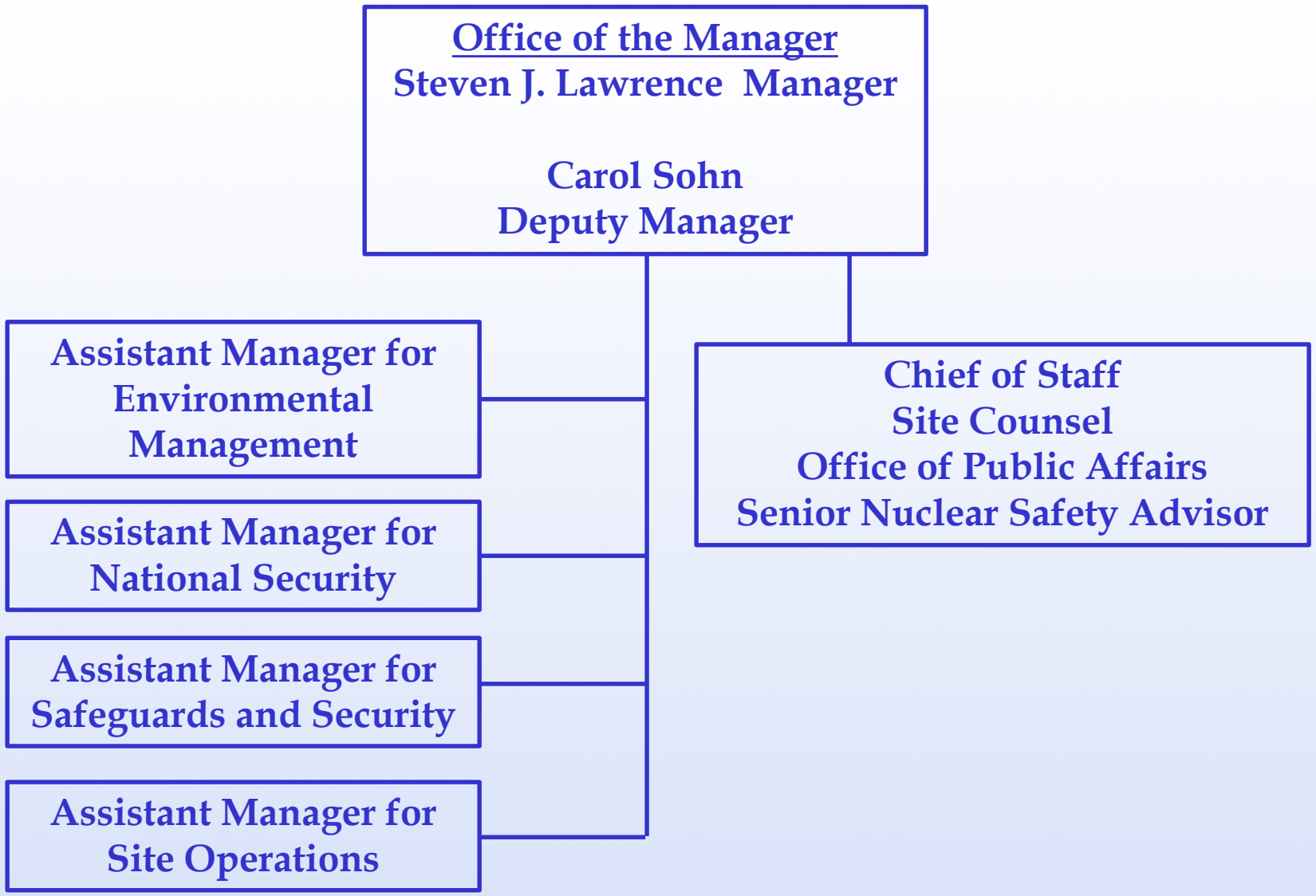
Environmental Management
Environmental Restoration/Groundwater

- Address contaminated groundwater, facilities and soils resulting from historic nuclear research, development and testing.
- Installation of groundwater wells to identify and monitor the extent of groundwater contamination.

Nevada Field Office



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NFO Organization Functions

Office of the Manager

- Legal
- PA
- SNSA
- CoS – T&Q

Assistant Manager for Environmental Management

Programmatic Liaison and Customer Interface (EM)

- HQ Program Interface
- Environmental Restoration Programs
- Waste Management Programs
- EM Project Controls & Integration
- EM Regulatory Engagement (State)

Assistant Manager for National Security

Programmatic Liaison and Customer Interface (NNSA)

- HQ Program Interface
  - NA-10, NA-20, NA-40, NA-50 Infrastructure, NA-70 Infrastructure, NA-80, NA-APM Line Item FPDs
- Non-DOE Customer Interface
- Requirements Validation & Clarification
- Project Oversight/FPD Interface
- National Security Regulatory Engagement (State)

Assistant Manager for Safety & Security

Oversight of High-Hazard Work / Field Operations

- HQ Program Interface
  - NA-40 (Site Emerg Mgt)
  - NA-50 (Nuc Safety)
  - NA-70 (Security)
- FRs/SSOs
- Nuclear Safety & Maintenance
- Readiness
- Quality Assurance
- Nuclear Security
- Emergency Management
- COOP
- Radiation Protection
- High-Hazard Activities

Assistant Manager for Site Operations

Federal Functions / Business/Safety Oversight

- HQ Program Interface
  - NA-50 (Safety)
  - ES&H, IG/GAO/APM
  - Federal/State Site-Wide
- Aviation Safety
- Contract Administration
- Financial Management
- General Safety, NEPA, Regulatory Permits, & IT
- Contractor Performance (PER, PEP)
- Federal Assessment Program
- Directives, Documents
- Human Resources
- ECP, DPO, FEOSH
- Worker Safety & Health

Nevada National Security Site

Proud Past, Exciting Future

https://www.youtube.com/watch?v=0THexsHZ4cY

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Questions?

Nevada National Security Site Solicitation DE-SOL-0008418 Overview

Nevada National Security Site
Solicitation DE-SOL-0008418
Section H Clauses

- Clause H-19: Contractor Multi-Year Strategy For Performance Improvement
- Clause H-20: Management and Operating Contractor (M&O) Subcontractor Reporting
- Clause H-22: Indirect Rate Management
- Clause H-23: Contractor Community Commitments

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Nevada National Security Site Solicitation DE-SOL-0008418 Communication

- Information for this competition will be posted on:
  - FedConnect
  - FedBizOpps
  - NNSS M&O Competition Website

- NA-APM-131 may also send emails from:
  - SEB5@nnsa.doe.gov

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Nevada National Security Site
Solicitation DE-SOL-0008418
Important Dates

- December 2—Questions due
- December 7—PPIFs and Performance Assessments due*
- December 7—List of Terminated Contracts due
- December 22—PPQs due to **SEB5@nnsa.doe.gov**
- December 22—Proposals Due

***Prospective Offerors are encouraged to submit by December 7; however, PPIFs and Performance Assessments shall be submitted no later than December 22**

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Nevada National Security Site Solicitation DE-SOL-0008418 Proposal Evaluation

- Best Value Determination:
  - Technical and Management Criteria, when combined, are significantly more important than the Cost Criterion
  - Government will not make award at a price premium
  - Criterion 1 is more important than Criteria 2 & 3 combined
  - Criterion 2 is more important than Criterion 3
  - As Technical and Management proposals become similar in merit, cost criterion is more likely to be a determining factor

Nevada National Security Site Solicitation DE-SOL-0008418 Proposal Evaluation

- Evaluation Criteria:
  - Criterion 1: Past Performance
  - Criterion 2: Organizational Structure and Qualifications of Key Personnel
  - Criterion 3: Small Business Participation
  - Criterion 4: Cost Criterion

Nevada National Security Site
Solicitation DE-SOL-0008418
Other Information

- Please follow directions in Solicitation regarding page limitations and submission requirements
- FedConnect Support
  - Email: support@fedconnect.net
  - Phone: 1-800-899-6665
- Send emails concerning this solicitation to SEB5@nnsa.doe.gov. **Do not send emails to personal email addresses.**
- Upcoming amendments

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Nevada National Security Site
Solicitation DE-SOL-0008418
Other Information

- The National Atomic Testing Museum
  - Address: 755 E. Flamingo Rd. Las Vegas, NV 89119
  - Phone: 702-794-5151
  - http://nationalatomictestingmuseum.org/
  - Hours:
    - Monday – Friday: 10 am - 5 pm
    - Sunday: 12 pm – 5 pm
  - Admission (Offeror's expense):
    - General $22
    - Group of 10 or more $18

Questions?

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