



U.S. Department of Energy National Nuclear Security Administration

Overview on DOE Headquarters Actions Related to Long-Term Stewardship

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Associate Administrator
for Safety, Infrastructure, and Operations

NNSA Missions and Crosscutting Capabilities

Nuclear Weapons Stockpile



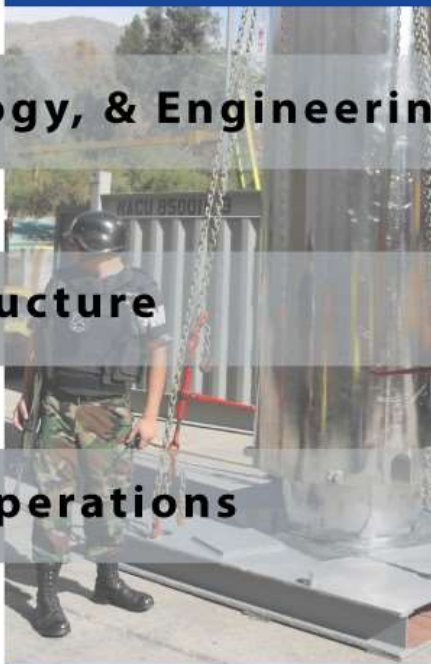
Science, Technology, & Engineering

People & Infrastructure

Management & Operations

Maintaining the safety,
security, and effectiveness
of the nuclear deterrent.

Nuclear Threat Reduction



Preventing, countering, and
responding to proliferation
and terrorism threats.

Naval Reactors



Providing operational support
for naval nuclear
propulsion plants.



A Key Part of the Deterrent is a Responsive Nuclear Security Enterprise



LLNL

- **Weapon Design (Nuclear)**
- Design agency for the W80, W87, and B83
- **High explosive R&D** Center of Excellence

NNSS

- Nuclear material and other **experiments**

LANL

- **Weapon Design (Nuclear)**
- Design agency for the B61, W76, W78, and W88
- Pit production
- **Plutonium** sustainment

SNL

- Systems engineering
- **Neutron generator** design and production
- **Weapon Design (Non-nuclear)**

Pantex

- **Weapons assembly/disassembly**
- **High explosive production** Center of Excellence

SRS

- **Tritium** operations
- TPBAR extraction
- Reservoir change-out

KCNSC

- **Nonnuclear** component manufacturing / procurement

Y-12 NSC

- **Uranium** component and sub-assembly production
- **Lithium** Processing



Over 50% of NNSA Infrastructure is more than 40 Years Old

NNSA SAFETY, INFRASTRUCTURE & OPERATIONS

MAKING THE RIGHT THINGS HAPPEN



A VAST AND COMPLEX ENTERPRISE

AGE OF INFRASTRUCTURE



EXCESS FACILITIES



CONDITION OF INFRASTRUCTURE



41,000

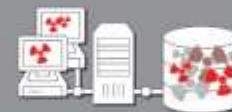
LABORATORY, PLANT & SITE EMPLOYEES

2,000
miles of roads

NEARLY THE DRIVING DISTANCE FROM DC TO LOS ALAMOS



TRACK **400,000**
METRIC TONS OF
NUCLEAR MATERIAL
TRANSACTIONS



safety for **400**
nuclear
and hazardous
facilities



2,100
square miles
of land area



ABOUT THE
LAND AREA
OF DELAWARE

36 MILLION
SQUARE FEET OF
ACTIVE FACILITY SPACE



(~six Pentagons worth)

NNSA packages
ship over
500,000
miles per year



Enough to travel to
the moon and back



8.4 Trillion BTUs
ANNUAL ENERGY CONSUMPTION



enough to
power
~ 237,000
homes for
one year

Vision

We contribute to national security now and in the future by managing the complex NNSA risks of safety, infrastructure, materials, and the environment.

Mission

Enable safe operations, ensure effective infrastructure, and provide enterprise services to meet National Nuclear Security Administration needs.



NNSA LTS Program



- The NNSA LTS Program supports the ongoing mission by:
 - Protecting human health and the environment, and;
 - Ensuring safe working conditions by reducing exposure to hazardous and radioactive legacy contamination.
- LTS meets federal and state environmental regulatory requirements to ensure required safe cleanup levels are met.
- NNSA LTS annual budget for four sites is approximately \$55M.



Closure for the Seventh Generation



Closure for the Seventh Generation

A report from the State and Tribal Government Working Group's Long-Term Stewardship Committee | 2017 Edition

Stewardship of the U.S. Department of Energy Nuclear Weapons Complex and Legacy Waste Sites



STGWG

State and Tribal Government Working Group



NCSL

- NNSA supports the 2017 *Closure for the Seventh Generation* report.
- A collaborative effort between states, tribes, DOE Field Offices, and Headquarters
- A framework for ongoing dialogue and cooperative action.



NNSA LTS Program: Four Sites





Regulatory Framework



- The Lawrence Livermore National Laboratory's Main Site (including Site 300), and the Pantex Plant are Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or "Superfund" sites on the National Priorities List, subject to EPA CERCLA authority.
- Sandia National Laboratories and the former Bannister Federal Complex are subject to State Resource Conservation and Recovery Act authorities.
- Complex regulatory document submissions are often required, such as Five-Year Remedy Effectiveness Reviews and new remedy alternatives analyses.

All stakeholders have the opportunity to participate in the regulatory review processes, in accordance with state and federal laws, regulations, and policy.



NNSA LTS Strategic Plan



- **NNSA LTS Strategic Plan Development**
 - Addresses the environmental stewardship life-cycle (EM-NNSA LTS-LM).
 - The Final Plan will be a high-level document built upon existing documents and processes that lays out a clear path forward for lasting stewardship of NNSA sites.
 - The target date for completing and publishing the Plan is early 2020.



NNSA LTS Strategic Plan Status and Next Steps



- **Integrated Project Team**
 - Established May 2019 to draft the NNSA LTS Strategic Plan.
 - The draft Plan is currently undergoing internal review.
- **Draft NNSA LTS Strategic Plan**
 - Anticipated FY20, Q2 request for feedback.
 - We value and encourage input from our stakeholders.
 - NNSA will coordinate with DOE to facilitate State, tribal, and other regional stakeholder input on the draft Plan.



Examples of NNSA Collaboration with EM and LM



- **DOE Compliance Community of Practice (CCOP)**
 - NNSA is participating in EM’s quarterly DOE CCOP to collaborate on cleanup and LTS.
- **NNSA/EM Collaboration Meetings**
 - NNSA meets quarterly with EM to discuss various topics of mutual interest to include cleanup/LTS.
- **NNSA Partners with EM and LM on Future Site Transition**
 - “Terms and Conditions” govern transition from EM cleanup completion to LTS.
 - “Site-Specific 10-element” framework governs transition from NNSA LTS to LM.



Conclusion



- We are considering the *Closure for the Seventh Generation* Report findings and recommendations as we develop the NNSA LTS Strategic Plan and look forward to your feedback on the draft Plan.
- Ongoing site level collaboration coupled with STGWWG discussions and continued communications with EM and LM enhances our collective LTS interests now and into the future.

NNSA is committed to effectively fulfilling its environmental stewardship responsibilities and to continued collaboration and engagement with EM, LM, States, Tribes, and other stakeholders.



NA-50 Organization Chart

