



U.S. DEPARTMENT OF ENERGY | **OFFICE OF ENVIRONMENTAL MANAGEMENT**

Disposal of Low-Level Waste (LLW) at the Nevada National Security Site (NNSS)

2014 Annual Meeting of the National Transportation
Stakeholders Forum

May 14, 2014

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History of NNSS

- NNSS has a long history of supporting national security
- President Truman officially established the Nevada Proving Grounds, now the Nevada National Security Site, on December 18, 1950
- 100 atmospheric tests conducted from January 1951 through July 1962 to study weapons-related effects, as safety experiments, and to study peaceful effects of nuclear explosions
- Atmospheric testing ended in October 1963 when U.S. agreed to observe Limited Test Ban Treaty
- 828 underground tests conducted until moratorium went into effect after the last test on September 23, 1992

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NNSS Site Security and Missions

- Secured 24/7 by a professional security force protecting all national security assets, facilities and land
- Supports DOE, National Nuclear Security Administration, Department of Defense, Homeland Security, and other federal agencies to meet national security missions and requirements
- Ongoing Environmental Management activities to address the effects of historic nuclear testing (www.nv.energy.gov/envmgt)
 - Radioactive waste disposal ongoing since 1961
- NNSS will remain secured and withdrawn from public use for the foreseeable future

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Environmental Management

- Identifying, characterizing, and completing work at sites contaminated by historic nuclear activities
 - Groundwater affected by underground nuclear testing
 - Land and facilities used in support of nuclear testing
 - Surface soils contamination from atmospheric nuclear tests and other experiments and tests
 - Nearly 70% of sites closed in accordance with legal agreement with State of Nevada

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Environmental Management (continued)

- Disposing LLW/mixed LLW generated by national security missions and cleanup of legacy nuclear contamination
- Geologic and hydrologic conditions at NNSS provide protective disposal capacity for wastes from the NNSS and other DOE sites
- Safety of operations confirmed through comprehensive ongoing monitoring and adherence to strict nuclear operations procedures



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LLW Disposal Facility

- Located in Frenchman Flat, near the first atmospheric nuclear test in Nevada
- Arid and isolated disposal facility with no groundwater pathway and deep groundwater
- Annually, NNSS receives approximately 5% of the waste produced by the DOE complex Supports ongoing cleanup activities at NNSS
- Can safely dispose of classified waste that requires additional security

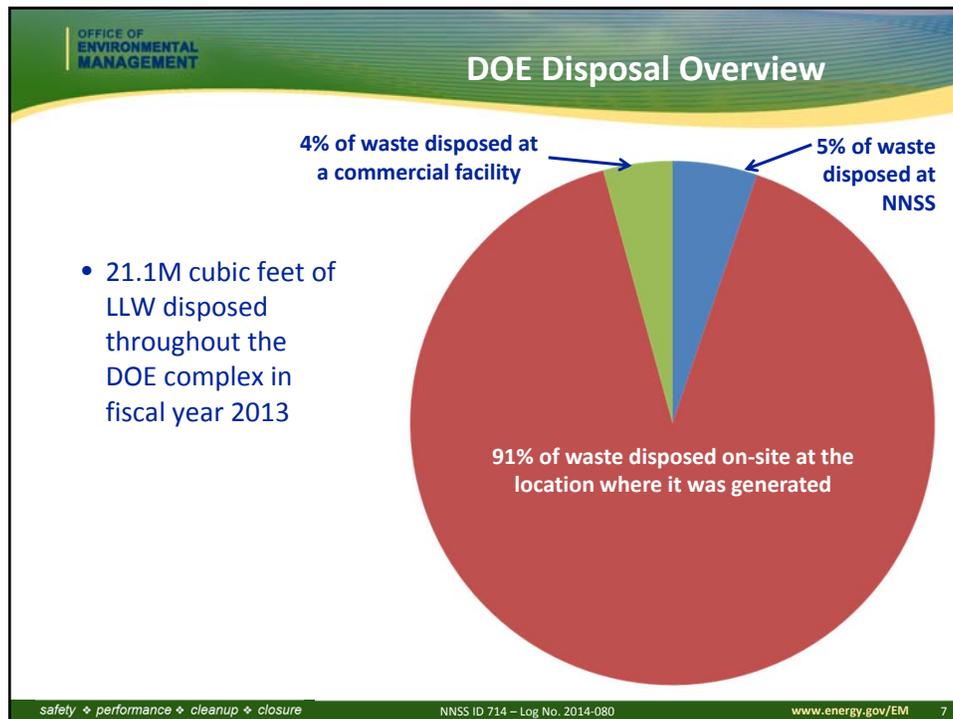


NNSS Area 5 Radioactive Waste Management Site

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Transporting Waste to NNSS

- In accordance with U.S. Department of Transportation (DOT) regulations
- Routing within Nevada region includes preferences established for travel during summer and winter months, and blackout dates during specific holiday events
 - All highway, no rail access – surrounded by U.S. Air Force land
- All LLW/mixed LLW shipments to/from NNSS are reported quarterly
 - Available on the Nevada Field Office website at www.nv.energy.gov/radwastetrans
 - Includes maps depicting routes taken



LLW Receipt at the NNSS

- All LLW received for disposal at the NNSS undergoes the following prior to acceptance:
 - Verification of shipping documentation against previously approved and transmitted paperwork
 - Radiological surveys of each truck and trailer



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In Summary...

- Waste acceptance, transportation and disposal at the NNSA is conducted responsibly and safely to protect workers, the public and environment
- NNSA infrastructure provides long-term protection of disposed waste
- DOE is committed to providing stakeholders as much unclassified information about the disposal of waste at the NNSA
 - Active volunteer advisory board comprised of community members who meet regularly (open to public) and provide recommendations to the U.S. Department of Energy (www.nv.energy.gov/nssab)



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Information Links/Contact

- Find out more information on-line at www.nv.energy.gov
- Join us on social media via www.facebook.com/NNSANevada and www.twitter.com/NNSANevada
- Learn more about the Nevada Site Specific Advisory Board by visiting www.nv.energy.gov/nssab
- Read/download transportation reports at www.nv.energy.gov/radwastetrans
- E-mail envmgt@nnsa.doe.gov
- Call 702-295-3521



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