

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

**SECTION A. Project Title:** Characterize, Package, and Ship Sealed Sources at the Pine Bluff Arsenal to Nevada National Security Site (NNSS) on behalf of DOE/DOD

**SECTION B. Project Description and Purpose:**

Under the proposed action, Battelle Energy Alliance (BEA) will characterize, package, and ship radioactive sealed sources for disposal at the Nevada National Security Site (NNSS) on behalf of the Department of Energy (DOE). The DOE will take ownership of Department of Defense (DOD) LLW from radioactive sealed sources via an Authorization to Transfer/Relinquishment of Ownership/Custody (ATRO) document at the following location:

Pine Bluff Arsenal  
53990 507th Street  
Pine Bluff, AR 71602  
EPA ID #: AR0213820707

BEA Waste Generator Services (WGS) will characterize the sources and develop a disposal path with the NNSS. BEA Packaging and Transportation (P&T) will classify the waste, complete shipping papers, and ship the waste. Army personnel at Pine Bluff Arsenal will package the sources into shipping container(s) with WGS and P&T oversight. The containers will be closed in accordance with manufacturer's instructions.

All waste would meet the Nuclear Regulatory Commission's (NRC's) LLW categorization and NNSS waste acceptance criteria. In 2017, INL will ship 34 m3 of LLW from the Pine Bluff Arsenal to NNSS. There is a potential for future shipments over the next five years, and the total amount of waste INL will ship from Pine Bluff to NNSS will not exceed 170 m3.

The 1997 Final Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste (WM PEIS) (DOE/EIS-0200-F 1997) analyzed the impacts of packaging, transporting, treating, and disposing of waste within the Department of Energy (DOE) complex, including the four basic types of waste: hazardous waste, LLW, MLLW, and transuranic (TRU) waste. Under WM PEIS INL would ship 105,000 m3 of LLW at the INL Site. The proposed shipments are approximately 0.16% of the INL total.

The LLW will be disposed at the NNSS. The environmental impacts of transferring low level waste from ORNL to the NNSS were analyzed in the 1996 Nevada Test Site EIS (DOE/EIS-0243) and supplemental analysis (SA) (DOE/EIS-0243-SA-01) and DOE's Waste Management (WM) Programmatic EIS (DOE/EIS-200). The fourth Record of Decision (ROD) (65 FR 10061, February 25, 2000) for DOE's Waste Management Programmatic EIS established the NNSS as one of two regional LLW and mixed low-level waste (MLLW) disposal sites. The SA for the Nevada Test Site EIS considers additional waste streams and waste generators other than those considered in the 1996 NTS EIS that may be generated at or sent to the NNSS for management.

The WM EIS evaluated management of ORNL waste including transportation to NNSS. The Pine Bluff Arsenal is approximately 534 miles closer to NNSS than ORNL and along a likely shipping route from ORNL to NNSS. Moreover, the Nevada Test Site EIS SA (DOE/EIS-0243-SA-01) evaluated the transportation impacts for up to 70,792 m3 shipments from ORNL to the NNSS and also noted waste volumes from individual generators could be more than the inventories projected. Therefore, the analyses of the transportation routes in the WM PEIS and the Nevada Test Site Supplemental Analysis are representative of using transportation routes from Pine Bluff Arsenal to the NNSS.

**SECTION C. Environmental Aspects or Potential Sources of Impact:**

**Air Emissions**

Transportation activities would involve the use of fossil fuels and release of greenhouse gases.

Waste packaging activities involve placing bagged, drummed, or otherwise containerized material into waste boxes for transport and disposal at NNSS. Air emissions are not anticipated from these activities.

**Generating and Managing Waste**

In 2017, INL will ship 34 m3 of LLW from the Pine Bluff Arsenal to NNSS. There is a potential for future shipments over the next five years, and the total amount of waste INL will ship from Pine Bluff to NNSS will not exceed 170 m3.

**Releasing Contaminants**

Although very unlikely, the potential exists for a release of contaminants during packaging and transportation activities (e.g., shipping accident).

**Using, Reusing, and Conserving Natural Resources**

Transportation activities would involve using fossil fuels and release of greenhouse gases.

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**SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification:** Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not "connected" to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

**References:** Final Waste Management Programmatic Environmental Impact Statement [WM PEIS] (DOE/EIS-0200-F, May 1997

Final Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada (DOE/EIS-0243) and supplemental analysis (SA) (DOE/EIS-0243-SA-01).

**Justification:** The environmental impacts of transferring LLW to the Nevada National Security Site were analyzed in the 1996 Nevada Test Site EIS (DOE/EIS-0243) and supplemental analysis (SA) (DOE/EIS-0243-SA-01) and DOE's Waste Management Programmatic EIS (DOE/EIS-200). The fourth Record of Decision (ROD) (65 FR 10061, February 25, 2000) for DOE's Waste Management Programmatic EIS established the Nevada National Security Site as one of two regional LLW and MLLW disposal sites. The SA considers additional waste streams, beyond those considered in the 1996 NTS EIS, that may be generated at or sent to the Nevada National Security Site for management.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act)       Yes     No

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on: 8/14/2017