



U.S. Department of Energy Categorical Exclusion Determination Form

Proposed Action Title: Continuation of Low-Level Waste Transportation Program (LB-CX-24-01)

Program or Field Office: Berkeley Site Office, Lawrence Berkeley National Laboratory

Location(s) (City/County/State): Berkeley, California and various locations

Proposed Action Description: The US Department of Energy (DOE) proposes to continue the periodic shipment of low-level waste (LLW) generated at Lawrence Berkeley National Laboratory (LBNL) in Berkeley, California for offsite disposal (the Program). LBNL's Environment, Health and Safety (ESH) Division would continue to manage infrequent transport of LLW to Nuclear Regulatory Commission (NRC)-licensed commercial nuclear waste disposal facilities in various locations. Removal of LLW under this Program is necessary for LBNL to stay within on-site storage limits. This CX considers the transport of LLW from the LBNL security gate to the gate of the receiving disposal facilities.

The on-going Program was initially reviewed under a NEPA Environmental Assessment (EA-1214, October 31, 1997). In addition to LBNL, EA-1214 considered LLW disposal transport from three other California-based DOE Lab sites: Lawrence Livermore National Laboratory (LLNL) in Livermore, Energy Technology Engineering Center (ETEC) in Canoga Park, and Stanford Linear Accelerator Center (SLAC) in Menlo Park. EA-1214 resulted in a Finding of No Significant Impact (FONSI) concluding that the environmental impact of LLW transport from LBNL to the commercial receiving facilities would be low. Notably, under the full four-Lab program, the chances of a 100% radioactive material release were estimated to be one for every million shipments; in such a speculative scenario, any health risk would be experienced mainly by the transport truck personnel.

As has been the practice in recent years, the Program is expected to make far fewer LLW shipments than were considered in the EA-1214 and FONSI. For LBNL, the EA analyzed 110 LLW truck shipments over a 10-year period—11 shipments per year, while the currently proposed program continuation anticipates ~10 truck shipments over a 5-year period—approximately 2 shipments per year. Receiving facilities would include EnergySolutions Clive Disposal Facility in Clive, Utah and EnergySolutions Bear Creek Processing Facility in Oak Ridge, Tennessee, which are expected to account for approximately 90% of LBNL's low-level waste. The remaining 10% or more, if an unforeseen need is realized, may be shipped to other NRC-licensed facilities, including but not limited to: Perma-Fix of Florida, Inc., Gainesville, Florida; Perma-Fix Diversified Scientifics Services, Inc., Kingston, Tennessee; Waste Control Specialists LLC, Andrews, Texas; and Perma-Fix Northwest, Richland, Washington. Travel routes, safety protocols, equipment standards, and monitoring would continue to be overseen by LBNL EHS specialists and would continue to meet all applicable regulatory and permit standards.

With approximately two truck shipments per year, environmental effects would be de minimis and below levels already found to be less-than-significant in the EA/FONSI. This considers effects on environmental media such as air, water, noise, transportation, and human health and safety. There are no known changes to circumstances involving local and interstate roadways, the receiving facilities, or the characteristics of the low-level waste stream itself that would trigger preparation of a new EA or EA Supplement pursuant to 40 CFR §1502.9(c)(1)(ii). This CX considers an approximate five-year continuation of the Program, after which time the Program would be re-evaluated unless unforeseen substantial changes trigger earlier re-evaluation.

Categorical Exclusion(s) Applied:

B1.30 - Transfer actions
B1.28 – Placing a facility in an environmentally safe condition

For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, including the full text of each categorical exclusion, see Subpart D of [10 CFR Part 1021](#).

Regulatory Requirements in 10 CFR 1021.410(b): (See full text in regulation)

- The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.
- There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal.
- The proposal has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

I concur that the above description accurately describes the proposed action.

**LBNL Sr. Site & Environmental
Planner:**



January 17, 2024

Jeff Philliber
Digitally signed by Jose Roldan
Date: 2024.01.17 12:30:53
-08'00'

Date Determined

BSO NEPA Program Manager:

Jose Roldan

[Click here to enter a date.](#)

Jose Roldan

Date Determined

The above description accurately describes the proposed action, which reflects the requirements of the CX cited above. Therefore, I recommend that the proposed action be categorically excluded from further NEPA review and documentation.

BSO Director of Operations:

**MARY
GROSS**

Digitally signed by
MARY GROSS
Date: 2024.01.24
15:11:28 -08'00'

[Click here to enter a date.](#)

Mary Gross

Date Determined

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1 B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer:

PETER SIEBACH

Digitally signed by PETER SIEBACH
Date: 2024.01.29 16:54:29 -06'00'

[Click here to enter a date.](#)

Peter Siebach

Date Determined