



U.S. Department of Energy

Categorical Exclusion Determination Form

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Proposed Action Title: Y12-NEPA-006-WM, Rev 0, Waste Management, Waste Minimization, Energy Conservation, Sustainability, and Pollution Prevention Activities, CY 2022 to CY 2024.

Program or Field Office: NNSA Production Office - Y-12 National Security Complex (Y-12), other NNSA-owned and contractor operated facilities, and ancillary areas associated with Y-12, but does not apply to the Pantex Plant

Location(s) (City/County/State): Oak Ridge / Anderson and Roane Counties / Tennessee

Proposed Action Description:

National Nuclear Security Administration (NNSA)'s proposed action is to perform the routine and necessary waste management, waste minimization, energy conservation, sustainability, and pollution prevention activities to comply with established permits, regulatory requirements, and to meet NNSA's missions at the Y-12 National Security Complex (Y-12). In general, this includes, but not limited to: routine waste management, storage, and handling; routine management, handling, and storage of recycled materials; sustainable procurement; waste minimization activities of separating, segregating, sorting, and recycling useful components of Y-12 waste streams; and installation of equipment that would result in better utilization of existing materials and resources for Y-12 activities. In addition, waste disposition pathways would be determined for any other proposed actions at Y-12. The major process waste types generated at Y-12 include: Low-level Radiological Waste (LLW), Mixed LLW (MLLW), hazardous waste, and nonhazardous waste. Other waste includes sanitary and industrial waste, polychlorinated biphenyls (PCBs), asbestos, construction waste/debris, general refuse, medical wastes, universal wastes, recycled waste by-products, and waste from on-site treatment. Additional details are documented in NEPA Review Form "Y12-NEPA-0621-006, Rev 0". Y-12 does not generate or manage high-level radiological waste or TRU waste.

As required by agreements among DOE, NNSA, the Environmental Protection Agency (EPA), State of Tennessee agencies, these activities would be performed in accordance with applicable laws, regulations, permits, and stipulations and controls stated in Y12-NEPA-0621-006, Rev 0. Documentation of NEPA reviews for individual projects/programs/activities will provide greater detail, state the applied control/stipulation, and will be tiered from the appropriate Categorical Exclusion Determination.

The scope of the Umbrella Categorical Exclusion Determination (UCXD) includes the following activities to assure regulatory compliance and to support Y-12 operations and projects:

1. Waste sampling and characterization efforts
2. Pollution Prevention and Site Sustainability and Stewardship efforts to recycle, reclaim, and exchange wastes and the procurement and marketing sustainable materials. This includes handling, storage, disposal or recyclable materials on-site and at off-site vendor support facilities
3. On-going on-site waste cleanup actions involving Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) actions;
4. Management of soil/debris piles;
5. Asbestos removal, handling, and storage;
6. The management, handling, storage, clean-up, and disposal of the following waste types: sanitary and industrial, PCB, CERCLA, RCRA, Mixed, and Radiological waste (LLW and MLLW);
7. Waste minimization practices, including the use of new and efficient equipment or the use of vendor services that would result in waste minimization and reuse of process materials;
8. Minor operation changes at Y-12 facilities to minimize waste generation and reuse material;
9. Improve efficiency of utility services (e.g. lighting, HVAC, water, steam, electrical, etc.) with the installation of new equipment or components;
10. Management of the Destruction and Recycle (DAR) Facility;
11. Establishment of temporary waste storage areas; and
12. Prepare and stage waste for off-site shipments.

The proposed action would occur at Y-12, NNSA properties at East Tennessee Technology Park, 113-C Union Valley Rd, 103 Palladium Way, and other NNSA owned properties for calendar year (CY) 2022 thru CY 2024. **Proposed actions NOT covered under this UCXD** include, capital asset projects conducted under DOE O 413.3b, *Programs and Project Management for the Acquisition of Capital Assets*. This single categorical exclusion determination (i.e. UCXD) has considered the aggregate impacts of the proposed action, as authorized by §1021.410(f), and documented in the associated NEPA Review Form.



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The proposed action of waste management, waste minimization, energy conservation, sustainability, and pollution prevention activities would take place on the Oak Ridge Reservation (ORR) have been reviewed in accordance with the Cultural Resource Management Plan (CRMP) or applicable sections in a Programmatic Agreement and would not result in an adverse effect to historic properties included or eligible for inclusion in the National Register of Historic Places (National Register). If the proposed ORR actions would have an adverse effect on properties included or eligible for inclusion in the National Register, NNSA would consult with the State Historic Preservation Officer (SHPO) and initiate actions specified in procedures set forth in the Advisory Council's regulations in 36 CFR Part 800.

To ensure that sensitive resources are protected, existing maps and surveys/studies on threatened and endangered species, wetlands and floodplains, and historically sensitive areas would be used to locate these areas. In addition, personnel responsible for identifying these resources would be consulted and, if warranted, additional surveys and walkovers would be conducted to confirm or update available information.

Although an action might fall under the category of "**Waste Management, Waste Minimization, Energy Conservation, Sustainability, and Pollution Prevention Activities**" a separate NEPA review would be performed and documented should the action, or aggregate impacts of the action, have the potential to result in an unusual or significant impact to the environment.

Categorical Exclusion(s) Applied:

B1.31, Installation or relocation of machinery and equipment

B1.35, Drop-off, collection, and transfer facilities for recyclable materials

B5.1, Actions to conserve energy or water, "....weatherization of building, lighting replacement, and HVAC systems and appliances...."

B6.3, Improvements to environmental control systems

B6.4, Facilities for storing packaged waste for 90 days or less

B6.5, Facilities for characterizing and sorting packaged waste and overpacking

B6.6, Modification of facilities for storing, packaging, and repacking waste

B6.8, Modifications for waste minimization and reuse of materials

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):

- ☐ The proposal fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. See paragraph above for specific categorical exclusion(s) applied.
- ☐ The classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B include conditions that are integral elements of the class of actions which must be satisfied in order to determine that a proposal is categorically excluded under Appendix B. Specifically, 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:
 - ☐ (i) Property (such as sites, buildings, structures, and objects) of historic, archeological, or architectural significance designated by a Federal, state, or local government, Federally recognized Indian tribe, or Native Hawaiian organization, or property determined to be eligible for listing on the National Register of Historic Places;
 - ☐ (ii) Federally-listed threatened or endangered species or their habitat (including critical habitat) or



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Federally-proposed or candidate species or their habitat (Endangered Species Act); state-listed or state-proposed endangered or threatened species or their habitat; Federally-protected marine mammals and Essential Fish Habitat (Marine Mammal Protection Act; Magnuson-Stevens Fishery Conservation and Management Act); and otherwise Federally-protected species (such as the Bald and Golden Eagle Protection Act or the Migratory Bird Treaty Act);

- ☐ (iii) Floodplains and wetlands (as defined in 10 CFR 1022.4, "Compliance with Floodplain and Wetland Environmental Review Requirements: Definitions," or its successor);
- ☐ (iv) Areas having a special designation such as Federally- and state-designated wilderness areas, national parks, national monuments, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, scenic areas (such as National Scenic and Historic Trails or National Scenic Areas), and marine sanctuaries;
- ☐ (v) Prime or unique farmland, or other farmland of statewide or local importance, as defined at 7 CFR 658.2(a), "Farmland Protection Policy Act: Definitions," or its successor;
- ☐ (vi) Special sources of water (such as sole-source aquifers, wellhead protection areas, and other water sources that are vital in a region); and
- ☐ (vii) Tundra, coral reefs, or rain forests; or
- ☐ 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 the Department of Agriculture, the Environmental Protection Agency, and the National Institute of Health.

☐ There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal. Extraordinary circumstances are unique situations presented by specific proposals, including, but not limited to, scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternative uses of available resources.

☐ The proposal has not been segmented to meet the definition of a categorical exclusion. Segmentation can occur when a proposal is broken down into small parts in order to avoid the appearance of significance of the total action. The scope of a proposal must include the consideration of connected and cumulative actions, that is, the 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 §1021.211 of this part concerning limitations on actions during EIS preparation.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Policy 451.1, National Environmental Policy Act Compliance Program), 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:

Date Determined:

(This form will be locked for editing upon signature)