



# U.S. Department of Energy

## Categorical Exclusion Determination Form

Submit by E-mail

Proposed Action Title: Non-Comprehensive Environmental Response, Compensation, and Liability Act Facility and Structure Demolition and General Site Clean-up at the Y-12 National Security Complex CX-Y-12-565

Program or Field Office: Office of Environmental Management

Location(s) (City/County/State): Oak Ridge, Tennessee

Proposed Action Description:

The U.S. Department of Energy (DOE) proposes to demolish non-Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) facilities and structures remaining at the Y-12 National Security Complex, Oak Ridge, Tennessee (Y-12) and conduct a general site cleanup to support National Nuclear Security Administration (NNSA) enterprise transformation through continued infrastructure projects, new construction, and the disposition of excess facilities.

As one of the three primary installations on the DOE Oak Ridge Reservation (ORR), Y-12 was constructed beginning in 1943 as part of the World War II Manhattan Project. The early missions of the site included the separation of uranium-235 from natural uranium by the electromagnetic separation process and the manufacture of nuclear weapons components from uranium and lithium. Today, as one of the NNSA production facilities, Y-12 is the primary site for enriched uranium processing and storage, and one of the primary manufacturing facilities for maintaining the U.S. nuclear weapons stockpile. To address the significant number of facilities at or beyond design life, Y-12's modernization strategy has been consolidating operations, modernizing facilities, and reducing the legacy footprint for the past decade. Much of the demolition of excess facilities and cleanup of legacy environmental contamination is being completed under CERCLA, and the National Environmental Policy Act documentation was included as part of the CERCLA documentation.

Categorical Exclusion(s) Applied:

B1.16 - Asbestos removal

B3.10 - Particle accelerators

B1.27 - Disconnection of utilities

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.

Based on my review of the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), 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: **ELIZABETH PHILLIPS** Digitally signed by ELIZABETH PHILLIPS  
Date: 2021.12.15 17:22:10 -05'00'

Date Determined:

### Proposed Action Description for CX-Y12-565:

The U.S. Department of Energy (DOE) proposes to demolish non-Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) facilities and structures remaining at the Y-12 National Security Complex, Oak Ridge, Tennessee (Y-12) and conduct a general site cleanup to support National Nuclear Security Administration (NNSA) enterprise transformation through continued infrastructure projects, new construction, and the disposition of excess facilities.

As one of the three primary installations on the DOE Oak Ridge Reservation (ORR), Y-12 was constructed beginning in 1943 as part of the World War II Manhattan Project. The early missions of the site included the separation of uranium-235 from natural uranium by the electromagnetic separation process and the manufacture of nuclear weapons components from uranium and lithium. Today, as one of the NNSA production facilities, Y-12 is the primary site for enriched uranium processing and storage, and one of the primary manufacturing facilities for maintaining the U.S. nuclear weapons stockpile. To address the significant number of facilities at or beyond design life, Y-12's modernization strategy has been consolidating operations, modernizing facilities, and reducing the legacy footprint for the past decade. Much of the demolition of excess facilities and cleanup of legacy environmental contamination is being completed under CERCLA, and the National Environmental Policy Act documentation was included as part of the CERCLA documentation.

The proposed action would be to remove old and inefficient facilities and structures (including, but not limited to, sprinkler vault houses, conex and sealand storage boxes, electrical transformers and substations, trailers, Rubb Tents, portals, storage tanks, communication towers, pump houses, and small buildings) that do not fall under the existing CERCLA Decision Documents and conduct general site clean-up activities. The facilities and structures would be dispositioned through several avenues, including movement to another location for continued use, returned to vendor, property sales, or demolished and recycled or disposed. The general site cleanup would include, but not be limited to, removal of remaining storage tanks, fences, debris piles, bollards, fire hydrants, concrete slabs, stanchions, asphalt, and disposition of excess equipment to reduce the facility footprint at Y-12.

A DOE contractor would complete the proposed action, which would include: (1) removing and dispositioning materials and equipment from the structures, (2) removing and dispositioning all known hazardous materials, (3) disconnecting utility services, (4) demolishing the buildings by conventional methods (e.g., shears, grapples, and front-end loaders), and (5) removing debris from the site for recycle or disposal. In the event that regulated materials are discovered during the course of demolition, or if it proves infeasible to remove all regulated material prior to demolition, the proposed action would include the proper segregation and disposal of any such materials in accordance with existing DOE contractor procedures prior to disposal of the remaining debris as recycle material or sanitary/industrial waste. At the conclusion of demolition and waste removal, disturbed soil areas would be stabilized utilizing best management practices described in the *Tennessee Erosion & Sediment Control Handbook*.

A Notification of Demolition and/or Asbestos Renovation would be submitted to the Tennessee Division of Air Pollution Control for any applicable asbestos renovation or structure demolition.

Appropriate spill prevention, spill response materials, and stormwater pollution controls would be installed and inspected prior to beginning demolition activities. Water spray would be utilized to control

airborne dust emissions, and runoff would be monitored and regulated to prevent uncontrolled non-stormwater discharges to storm drains and/or waters of the state.

In the event a specific project disturbs an acre or more through demolition, a Notice of Intent for Construction Activity and a sites-specific Storm Water Pollution Prevention Plan would be developed and submitted to the Tennessee Division of Water Resources.

All excavation would be done in compliance with the Tennessee Underground Utility Damage Prevention Act. An excavation/penetration permit would be obtained prior to performing any excavating work. Excavation activities would be limited to the minimum amount necessary to accomplish the goals of the proposed action. All demolition operations in the vicinity of existing utilities would be performed with great care to prevent damage to these utilities. Prior to demolition activities, excavators would verify the location of any marked utilities.

The proposed action would generate a variety of recyclable material and demolition waste that may include, but not be limited to: (1) asbestos-containing materials, including insulation, floor tile, mastic, and transite (asbestos-containing material wastes would be disposed of under the special waste provisions of the ORR Centralized Landfill), (2) limited quantities of universal wastes and hazardous wastes may remain in place until demolition, and the wastes would be segregated and recycled or disposed, as appropriate, through existing DOE contractor waste management systems, (3) any radiological-contaminated materials that could not be accessed prior to demolition would be removed and managed in accordance with existing procedures, (4) materials with painted surfaces would be characterized for potential lead and/or polychlorinated biphenyl content prior to demolition to confirm that resulting waste streams would meet waste acceptance criteria for the receiving facility, and (5) all nonhazardous and nonradioactive waste material that is not appropriate for recycling actions would be disposed at an approved sanitary landfill site. The DOE contractor involvement in the disposal of hazardous waste would include characterizing, packaging, and certifying the waste to ensure that it meets the acceptance requirements of the receiving organization. Prior to demolition activities, the facilities would undergo characterization, and a waste management plan would be developed.

The remaining non-CERCLA buildings and structures at Y-12 that would be candidates for the proposed action are not eligible for inclusion in the National Register of Historic Places, and therefore, do not require further National Historic Preservation Act, Section 106 consultation in accordance with the *Cultural Resource Management Plan DOE Oak Ridge Reservation Anderson and Roane Counties, Tennessee* (DOE/ORO-2085), Section 5.1.1.3.A.1.

This document has been reviewed and confirmed to be UNCLASSIFIED and contains no UCNI.

Name: Dave Lannom

Date: 01/18/2022

UCOR eDC/RO ID: 19080