

National Environmental Policy Act (NEPA) Categorical Exclusion (CX) Applicable Determination for the Construction and Operation of a Cask Processing Enclosure (CPE) at the Transuranic (TRU) Waste Processing Center (TWPC) on the Oak Ridge Reservation, Lenoir City, Tennessee

(CX-TWPC-11-0001a)

The U.S. Department of Energy (DOE) Oak Ridge Office (ORO) proposed activity is to modify the current 30-Ton Crane Bay at the TWPC to include the construction and operation of a Cask Processing Enclosure (CPE). Activities include, but are not limited to, geotechnical and environmental sampling, the relocation of a portion of WIPP Road, installation of three power poles north of the proposed expansion area, creation of a lay down and parking area to support construction activities (to the north of the current 30-ton crane bay), and construction and operation of the CPE.

The TWPC Waste Processing mission is to prepare transuranic and low-level wastes stored at the Oak Ridge National Laboratory (ORNL) for offsite disposal primarily at the Waste Isolation Pilot Plant (WIPP) and/or the Nevada National Security Site (NNSS).

The TWPC Waste Processing Building will be modified to add the Cask Processing Enclosure (CPE) to the 30-Ton Crane Bay. The CPE will be used to process the same type of waste currently being processed at the TWPC. An area of ~0.7 acres, directly contiguous to the developed TWPC site, will be used to support the project as a lay down and parking area. This area is needed to allow WIPP Road to be moved to allow placement of the CPE and to establish a construction lay down area in close proximity to the CPE construction project. The scope of work proposed includes the following:

- Collect soil samples from 0-8 feet of depth for the full suite of SW-846 organic and inorganic constituents, confirmatory sampling and analysis for radiological constituents through gamma scan (includes cesium-137) and strontium-90, and geotechnical testing.
- Create a lay down area (gravel) and parking area to support construction activities. The lay down area will allow for the safe handling, storage and stockpiling of materials. The parking area will allow for designated safe parking of personnel vehicles and potential for a temporary field office.
- Relocate a portion of WIPP Road.
- Install three power poles to the north of the proposed expansion area. Relocate one pole at the TWPC. Run the overhead 13.8 KV power lines from the poles to the proposed CPE. Install communications cable to Buildings 7880 and 7880B.
- Modify the currently operating process building to add on the Cask Processing Enclosure: (CPE).
- Stabilize slopes adjacent to the wetlands and floodplain.

The proposed action is needed to add flexibility to waste processing at the TWPC. This action meets the eligibility criteria for conditions that are integral elements of actions covered by categorical exclusions as stated in 10 CFR 1021.

The TWPC completed an Environmental Impact Statement (DOE/EIS-0305-F) that covered the following actions: construction, operations, and decontamination and decommissioning of a treatment facility for the legacy and newly generated TRU and alpha low level wastes, pending off-site disposal. This EIS found that the DOE needs to treat the legacy TRU and alpha low level waste from ORNL in order to reduce the risk to human health and the environment, to comply with legal mandates from the Tennessee Department of Environment and Conservation (TDEC) of the ORNL Site Treatment Plan.

All activities associated with this project will occur outside of the 500 year floodplain, except for approximately 85 feet of land that will be cleared to provide a 30 foot right of way for the passage of overhead power lines. The clearing will occur within the 500 year floodplain, but outside the 100 year floodplain. Any potential impacts will be mitigated through implementation of best management practice (BMP) #3 listed below. Activities will be conducted to have no adverse affects on the wetland areas.

To support this NEPA analysis, Oak Ridge National Laboratory Wildlife Management personnel conducted a Wetland and Habitat Survey of the proposed expansion area. Based on this survey, the following best management practices (BMPs) will be implemented:

- 1) Extra precaution will be taken to ensure wetlands in the vicinity of pole installation will not be impacted.
- 2) Project boundaries will be measured to ensure that at least a 60 feet boundary is maintained from any creeks.
- 3) A native planting scheme will be developed and implemented for areas along the proposed 30 foot wide right of way.

This activity falls under categorical exclusions per 10 CFR 1021, Subpart D, Appendix B1.13, B3.1 and B6.6.

- B1.13 Construction/acquisition/relocation of onsite pathways, short onsite access roads/railroads
- B3.1 Onsite and offsite site characterization and environmental monitoring, including sampling and characterization of water, soil, rock, or contaminants
- B6.6 Modification (excluding increases in capacity) of an existing structure used for storing, packaging, or repacking waste other than high-level radioactive waste or spent nuclear fuel, to handle the same class of waste as currently handled at that structure.

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.



William G. McMillan
TRU Waste Program Manager DOE-OR

7/28/11

Date

Based on my review and the recommendation of the DOE-ORO Program Manager, I have determined that the proposed action is categorically excluded from further NEPA review and documentation.



Gary S. Hartman
DOE-ORO NEPA Compliance Officer

7/29/2011

Date