

CATEGORICAL EXCLUSION (CX) DETERMINATION – STORAGE OF TRU AND
TRU MIXED WASTE IN BUILDING 7860A AT OAK RIDGE NATIONAL
LABORATORY (ORNL), OAK RIDGE, TENNESSEE (CX-K25-561)

The U. S. Department of Energy, Oak Ridge Office (DOE-ORO), proposes to store lined concrete casks and containers holding treated and untreated remote-handled (RH) and contact-handled (CH) transuranic (TRU) waste and low-level/mixed waste in 7860A. The majority of the waste proposed to be stored in 7860A has already been generated and is currently managed in existing RCRA-permitted storage facilities on site. The 7860A facility is a RUBB tent that was constructed over the former New Hydrofracture Facility site and was formerly used to support the demolition of the facility under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

The waste to be stored in 7860A would be Resource Conservation and Recovery Act (RCRA) regulated and potentially Toxic Substances Control Act (TSCA) regulated for polychlorinated biphenyls (PCBs). The concrete casks containing the waste would have an inner liner in addition to the original waste container, providing a total of 3 layers of containment. Available characterization data indicates that all casks have <1% free liquid. The RCRA permit for the building would require that all steel or poly drums or boxes holding RCRA waste and stored in 7860A would be staged in portable spill containment. Procedures would be modified to require that all steel or poly drums or boxes holding RCRA, PCB, or free-liquids >10% are stored on portable secondary containment pallets. Procedures are in place for safely handling RH-TRU, CH-TRU, and low-level/mixed waste in existing permitted container storage units. These procedures would be modified to include the 7860A facility.

Prior to resuming waste storage and becoming an active waste management facility, an implementation review for the radioactive waste storage operations would be conducted and procedures for waste handling and inventory management would be prepared. To qualify the facility for storage of materials containing fissile isotopes, a Documented Safety Analysis (DSA) would be developed. There are no criticality safety concerns with storing TRU wastes in this facility because activity limits in the approved DSA would be below critical levels. Fissile storage quantities would be limited per container to meet fissile storage exemption criteria.

The RH-TRU casks would be stored in accordance with the controls established by the Nuclear Criticality (NCS) Organization. Building 7860A would be included in the DSA for Melton Valley Solid Waste Storage Facilities, and the physical form of the RH-TRU waste in the casks would fall into one of the waste types accepted for this storage. Containers of waste would not be opened and no processing of waste would occur within the facility. Although no waste is expected to be generated from this activity, any waste resulting from management activities in 7860A (e.g. radiological contaminated PPE) would be appropriately managed, characterized, transported, and stored in accordance with all regulatory requirements and waste acceptance criteria for the receiving, storage, disposal, and recovery facility.

Spill response equipment and spill prevention measures would be implemented to comply with the RCRA permit inspection requirements and site-wide contingency planning and equipment would be inspected as required under the RCRA permit to ensure proper operation and determination if any leaks are present. The proposed action would be conducted under DOE authorities pursuant to the Atomic Energy Act (AEA) and would be consistent with current and future actions at the site. The proposed action meets the

eligibility criteria for conditions that are integral elements of actions eligible for categorical exclusion as stated in 10 CFR 1021.

The proposed action would not threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including requirements of DOE and/or Executive Orders and would not pose any significant individual or cumulative environmental effects. The activities would be conducted in a previously disturbed area and would not adversely affect environmental sensitive resources such as archeological or historical sites, endangered species, critical habitats, floodplains, and wetlands.

The proposed action would not require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators). Wastes would be appropriately characterized and disposed of at existing permitted/approved waste storage, treatment, or disposal facilities.

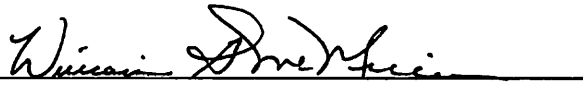
The described action is not connected to other actions with potentially significant impacts and is not part of a proposed action that is or may be the subject of an environmental assessment or an environmental impact statement. There are no extraordinary circumstances related to the action, and the proposal is not connected to other actions with potentially significant impacts.

The Categorical Exclusion (CX) applicable to the proposed action is from DOE NEPA Implementing Procedure, 10 CFR Part 1021, Subpart D, Appendix B:

Section B6.10. This proposed action would be for storage in a developed area at a DOE site of waste that is already generated at the site, and would not involve storage of high-level radioactive waste, spent nuclear fuel, or any waste that would require special precautions to prevent nuclear criticality. Cost of the proposed action is less than 5 million dollars, and would take place in less than 5 years duration, and the facility is less than 50,000 sq. ft.


The proposed action would not disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that may preexist in the environment. This proposed action is in a previously disturbed area and no additional disturbances are necessary. The proposed action that would take place on the Oak Ridge Reservation has been reviewed in accordance with the Cultural Resource Management Plan, DOE Oak Ridge Reservation Anderson and Roane Counties, Tennessee (DOE/ORO2085, issued July 2001), and found to be addressed in Section 5.1.1.3.A.1. Building 7860A is located outside the ORNL Historic District and is not eligible for inclusion in the National Register of Historic Places. DOE-ORO has determined that the proposed undertaking would not have an adverse effect upon historic properties; therefore no further review is needed and Section 106 requirements of the National Historic Preservation Act have been satisfied.

The above 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 Program Manager
DOE-Oak Ridge Office

June 30, 2010
Date

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


for Gary Hartman
DOE-ORO NEPA Compliance Officer

June 29, 2010
Date