DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

CX Posting No.: DOE-ID-INL-16-020

SECTION A. Project Title: Containment Tent for Opening of Containers at Materials and Fuels Complex (MFC)-793C

SECTION B. Project Description and Purpose:

The Sodium Components Maintenance Shop (SCMS) Storage building at the Materials and Fuels Complex (MFC) building MFC-793C is used for storage of Toxic Substances Control Act (TSCA)-regulated contact-handled low level waste (CH LLW) and mixed LLW. The building size is 40 × 30 ft with a 16-ft eave height. The floor of the storage building is concrete, sloping toward the center with two small concrete sumps designed to remove liquid resulting from precipitation. The floor is painted with an epoxy coating; however, the epoxy floor is not maintained as the secondary containment. Waste containing liquids are stored atop spill pallets and non-liquid hazardous waste/mixed waste containers are stored on pallets or secondary containment devices. The prefabricated metal building has ridge ventilation and a wall louver to provide gravity ventilation. This facility has a Hazardous Waste Management Act/Resource Conservation and Recovery Act (HWMA/RCRA) permit to store and treat mixed waste. Waste is stored, packaged, and repackaged in the facility.

The proposed action would procure a soft-walled containment tent inside MFC-793C that would be set-up within the facility as needed, and used to provide contamination control and containment for opening various radiologically contaminated or mixed waste containers for examination, maintenance, repackaging, or container treatment. If needed, waste characterization would be performed on containers, and samples would be collected from waste containers and sent to a laboratory for analyses. To provide for operational flexibility and waste management needs, the dimensions of the containment enclosure could be adjusted to the appropriate size for the activity conducted. The management standards for the storage of the waste, such as aisle spacing and emergency ingress and egress, would not be affected. The tent would consist of three compartments, a radiological buffer area and step out area, a decontamination area for containers after removal from the work area, and the work area where the containers are opened. The walls of the tent must consist of a National Fire Protection Association (NFPA)-701 compliant fire-retardant or noncombustible material. The tent would be provided with negative pressure and the ventilation system for the tent would include high-efficiency particulate air (HEPA) filtration.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

The potential for radiological emissions exist during examination and repackaging operations. This potential is significantly reduced since the containers contain debris packages inside the storage boxes and would not be opened unless necessary. Operations inside Building MFC-793C would be performed within a containment tent and all emissions would be HEPA-filtered prior to exiting the building.

Generating and Managing Waste

Radioactive waste such as gloves, anti-contamination clothing, etc., from waste handling operations would be generated. This waste would be contaminated with a variety of radionuclides, but is expected to be minimal due to containment by the inner packaging. The generation and management of mixed waste during verification, repackaging and container treatment would be performed in accordance with the MFC HWMA/RCRA Permit. Disposition of mixed waste would be in accordance with directions from Waste Generator Services (WGS).

Using, Reusing, and Conserving Natural Resources

Scrap material, such as wood and metal, would be recycled to the extent practical.

SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification: Identify the applicable categorical exclusion from 10 Code of Federal Regulation (CFR) 1021, Appendix B, give the appropriate justification, and the approval date.

For Categorical Exclusions (CXs), the proposed action must not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021). In addition, no extraordinary circumstances related to the proposal exist that would affect the significance of the action. In addition, the action is not “connected” to other action actions (40 CFR 1508.25(a)(1) and is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1608.27(b)(7)).

References: National Environmental Policy Act (NEPA) Implementing Procedures, Final Rule, 10 CFR 1021, Appendix B, B6.6 "Modification of Facility for storing, packaging, and repackaging waste"

Justification: Project activities are consistent with 10 CFR 1021, Appendix B, 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."

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) ☐ Yes ☒ No

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on: 3/8/2016