DOE-ID NEPA CX DETERMINATION
IDAHO NATIONAL LABORATORY

CX Posting No.: DOE-ID-INL-12-008

SECTION A. Project Title: Test Reactor Area (TRA)-1710 Radioactive Materials Storage Area

SECTION B. Project Description: Provide a brief but thorough description of the project or action, including the type of action (for example, new activity or facility, construction, process or facility modification, maintenance, research and development, work for others), description of activities, work phases, location of work activity (include a map or diagram, if appropriate), purpose and need (what is the activity and why is it being performed), projected start and end dates and the approximate project costs.

Environmental Checklist (EC) INL-09-084 disclosed the environmental aspects and work activities associated with the construction of a 100 ft. x 150 ft. asphalt pad in the northwest corner of the Advanced Test Reactor (ATR) Complex identified as the TRA-1710 Radioactive Materials Storage Area. The storage pad was designed and built to support loads consistent with waste containers, heavy equipment, and concrete blocks. In addition to constructing the storage pad, INL-09-084 authorized ten to thirteen steel reinforced, pre-fabricated concrete shielding walls to be transported from Idaho Nuclear Technology and Engineering Center (INTEC) and placed on the pad.

TRA-1710 Radioactive Materials Storage Area was initially used to store low-level radioactive waste (resin liners) so that the TRA-617 low-level Waste Storage Pad limits were not exceeded. The proposed action would replace the TRA-617 Radioactive Materials Storage Area with the smaller (by approximately 900 ft^2) TRA-1710 Radioactive Materials Storage Area to allow temporary storage of low-level radioactive materials/waste prior to final disposition. The TRA-617 Radioactive Materials Storage Area would no longer be used. The purpose of this replacement is to minimize the radiation exposure around occupied facilities near the TRA-617 Radioactive Materials Storage Area. Exposure reduction will be accomplished by increasing the distance from occupied facilities and by providing shielding in the form of concrete blocks.

SECTION C. Environmental Aspects / Potential Sources of Impact:

Air Emissions - Radioactive wastes stored on the pad will generate air emissions from radionuclides. Low-level waste emissions are tracked through the Integrated Waste Tracking System (IWTS) using waste container radionuclide inventories and using 40 CFR Part 61 Appendix D emission factors. These fugitive emissions are included in the INL Annual National Emission Standards for Hazardous Air Pollutants (NESHAP) Report for Radionuclides. Past years ATR Complex waste handling fugitive emissions have resulted in off-site dose rates significantly below 0.1 mrem/year and this would remain the case with the current project.

Generating and Managing Waste - Low-level waste that will be stored on the new pad will be from existing ATR Complex Operations. This waste is characterized, stored, and disposed at the direction of Waste Generator Services (WGS) and according to company procedures. The amounts of low level waste that will be generated at the ATR Complex is expected to be consistent with past operations. Pollution prevention will be implemented where economically practicable to reduce the volume of waste generated.

Releasing Contaminants - All chemicals utilized in this project will be managed in accordance with company procedure.

Using, Reusing, and Conserving Natural Resources - All materials will be reused and recycled where economically practicable and as accepted by the customer. All applicable waste will be diverted from disposal in the landfill where conditions allow.

SECTION D. Recommended Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

Note: 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, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not “connected” nor “related” (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: National Environmental Policy Act (NEPA) Implementing Procedures, Final Rule, "10 CFR 1021, Appendix B to Subpart D, Categorical Exclusion B 2.5 "Facility safety and environmental improvements" effective November 14, 2011.

Justification: This action will minimize employee exposure/dose from radioactive material/waste that is currently being temporarily stored next to occupied facilities and a high traffic roadway.

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: 4/26/2012