DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

CX Posting No.: DOE-ID-INL-20-087

SECTION A. Project Title: TRA 670 ATR HVAC Upgrade

SECTION B. Project Description and Purpose:

This project shall update the existing TRA 670 Advanced Test Reactor Criticality (ATR) Heating Ventilation and Air Conditioning (HVAC) system, which is inadequate and out-of-date. The project shall install a split air conditioning unit with an evaporator coil replacing the Waste Heat Recovery coil in the 670-HVS-2 inlet plenum and the associated air-cooled condenser outside on a new concrete pad. ATR Counting Room air conditioner 670-HVA-1, which uses R 22 as a refrigerant, shall be removed. Variable Air Volume boxes will be added to the existing ductwork to control the airflow to the spaces currently supplied by 670-HVA-1 and 670-HVS-2. Heating Ventilation Board (HVB) -2 will be removed and replaced with controls connected to the ATRnet (ATR HVAC Network). The project will replace the inlet air filter bank, remove all Steam, Condensate, and Waste Heat Recovery piping and valves used with the coil, and all instrumentation and pneumatic controls relating to the original equipment. Electrical loads and connections shall be revised as required.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

This activity will be distributing, excessing, or disposing of refrigerants or appliances containing refrigerants as well as purchasing equipment containing refrigerants or halon, or refrigerant recovery/recycling equipment.

Discharging to Surface-, Storm-, or Ground Water

N/A

Disturbing Cultural or Biological Resources

This activity has the potential to adversely affect a building constructed on the INL before 1970 and is eligible for nomination to the National Register of Historic Places (NRHP).

Generating and Managing Waste

The proposed activity may generate a variety of waste. It is anticipated that the following types of waste could be generated:

• Industrial (non-hazardous, non-radioactive) waste includes typical maintenance wastes such as boxes, wood, wiring, paper, insulation, and some metals.

• Hazardous and/or low-level wastes have the potential to be generated during maintenance operations on systems or equipment containing hazardous chemicals, or by using hazardous chemicals to clean or decontaminate equipment and systems. Hazardous metal waste (e.g., lead, electronics, brass, metal containing paints, etc.) may also be generated during maintenance work or by replacement of outdated equipment.

• Polychlorinated Biphenyl (PCB) waste could be generated when performing maintenance associated with pre-1982 equipment/materials such as capacitors, lubricants/dielectric fluids, transformers/bushings, painted surfaces and other electrical equipment/components.

Releasing Contaminants

Although not anticipated, chemical use has a potential for small air emissions and spills. All chemicals and associated Safety Data Sheets (SDS's) must be submitted in the vendor data system for approval. The Chemical Coordinator would track these chemicals in the INL Comply Plus Chemical Management System.

Using, Reusing, and Conserving Natural Resources

Using, Reusing, and Conserving Natural Resources (Describe Impact): All materials would be reused and/or recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill where conditions allow. The project would practice sustainable acquisition.

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:
10 CFR 1021, Appendix B to Subpart D, item B1.4 "Air conditioning systems for existing equipment."

Justification:
Activities are consistent with 10 CFR 1021, Appendix B to Subpart D, item B1.4 "Installation or modification of air conditioning systems required for temperature control for operation of existing equipment."

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

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on:12/22/2020