

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Advanced Test Reactor Air Conditioning Upgrades

SECTION B. Project Description:

The proposed action will replace the air conditioning (AC) units in multiple areas located within the Advanced Test Reactor (ATR) [Test Reactor Area (TRA)-670]. The units considered for replacement are the following:

AC units in Reactor Data Acquisition System (RDAS) rooms 110 and 111:

Scope consists of replacing the three (3) equipment cooling AC units with four (4) new and more efficient models. The new units would be combined units with local water cooled condensers and have increased reliability and lower maintenance costs than the old units. The new units also allow one unit to be cycled off for maintenance while the others still operate. Independent power sources would be used for the AC units so the loss of one power supply does not impact all of the operational AC units in this area. Raw water would be routed to and from the location of the water cooled condensers as necessary.

AC unit in canal area:

Scope consists of replacing the HVA-2 unit in the canal area. The unit would be evacuated of R-22 refrigerant and oil, dismantled, and removed from the mezzanine east of the canal in TRA-670. The equipment would be dismantled and moved through the main door at the north end of the mezzanine and onto the lower roof of TRA-670. Once removed, the equipment would be excessed or disposed of appropriately. All utilities including wiring and water would be connected to the new unit. Functional testing and start-up would be completed as part of the replacement.

All AC units under consideration for replacement use R-22 refrigerant and would be managed according to company procedure. The watering system for the units would be water cooled single pass. The cooling water is directed to Cold Waste Drain System after passing through the AC unit.

Project Start Date: April 2015

Project End Date: June 2015

Estimated Cost: Approximately \$300,000.00

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions – Emissions typical of cutting/grinding/welding are expected. The emissions from this activity are not considered construction of a new stationary emission source. Adhere to all required good service practices identified in 40 Code of Federal Regulation (CFR) 82 (condensed in Laboratory Requirements Document (LRD)-8000, Section 3.92 and 3.61) to prevent the release of Class I/II Ozone Depleting Substance or any other refrigerants to the atmosphere while servicing systems containing refrigerants.

There is a potential for disturbing regulated asbestos containing material (RACM). All asbestos work must be conducted by properly trained personnel using appropriate abatement methods. Quantities of asbestos to be disturbed will be communicated to the Construction Environmental Support and Services (ES&S) representative in order to file the Asbestos Removal Notification Form (450.04). Asbestos work will not take place until the project has received approval from the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAPs) Technical Point of Contact (TPOC).

Disturbing Biological or Cultural Resources - TRA-670 is eligible for nomination to the National Register of Historic Places and removal and/or changes of original features may adversely impact this historical property. The project as described is exempted from cultural resource review (Idaho National Laboratory [INL] Cultural Resources Management Plan, Table 2, exemption 2 [Department of Energy Idaho Operations Office (DOE/ID)-10997 rev. 5]). Therefore, the project may proceed as planned.

Generating and Managing Waste - All waste generated from this activity will be managed in accordance with laboratory procedures. Contact Waste Generator Services (WGS) prior to start of activity to begin waste identification, classification and characterization. All waste generated will be transferred to WGS for appropriate disposition.

Releasing Contaminants – All chemicals typically used in construction/maintenance, if used, will be managed in accordance with laboratory procedures.

There is the potential for possible disturbance of suspect polychlorinated biphenyl (PCB) paint. Approved work controls will be in place to ensure that no releases occur during project activities.

Using, Reusing, and Conserving Natural Resources - All materials would be reused and/or recycled where economically practicable and as accepted by the customer. All applicable waste would be diverted from disposal in the landfill where conditions allow. New equipment would meet either the Energy Star or Significant New Alternatives Policy (SNAP) requirements as appropriate (see <https://sftool.gov/green-products/0/hvacmechanical?agency=0>). In addition, the project would practice sustainable acquisition, as appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, are bio-based in content, environmentally preferable, non-ozone depleting, have recycled content, or are non-toxic or less-toxic alternatives. Such purchases could include hydraulic fluid in accordance with BioPreferred requirements (<https://sftool.gov/green-products/0/lube-oil-hydraulic-fluid-grease?agency=0>).

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SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s): 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 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, B1.4 'Air Conditioning Systems for Existing Equipment' and B2.1 'Workplace enhancements

Justification: The activity is consistent with those actions found in 10 CFR 1021, Appendix B, B1.4 "Installation or modification of air conditioning systems required for temperature control for operation of existing equipment" and B2.1 "Modifications within or contiguous to an existing structure, in a previously disturbed or developed area, to enhance workplace habitability (including, but not limited to, installation or improvements to lighting, radiation shielding, or heating/ventilating/air conditioning and its instrumentation, and noise reduction)."

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: 2/19/2015