

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Advanced Test Reactor (ATR) Crane 670-C-7 Rated Capacity Upgrade

SECTION B. Project Description:

A leak was previously identified in the resin discharge nozzle at the bottom of the existing 670-M-17 Bypass Demineralizer cation tank. To repair it, it was determined that all four vessels (670-M-16, 670-M-17, 670-M-18, and 670-M-19) needed to be replaced. Each vessel is located in its own concrete vault and connected to system piping within each vault with flanged spool pieces. All the bypass demineralizer vessels are original plant equipment for ATR installed in the 1960s. They are carbon steel and will be replaced with stainless steel vessels of the same size and configuration. In addition, the carbon steel connection flanges will be replaced with stainless steel flanges, and some new piping may be needed to allow proper fit for the new vessels. The carbon steel vessel and piping connection flanges are painted.

In support of the replacement of the ATR bypass demineralizer vessels, the bypass demineralizer crane must be upgraded to meet the required load capacity.

The current bypass demineralizer crane (670-C-7) is located in Test Reactor Area (TRA)-670 first basement and has the following configuration:

- a) rated at a capacity of 5-tons
- b) positioned on a monorail beam (S12 X 31.8) with a length of approximately 80 feet supported by reinforced concrete
- c) approximate lift range of 11 feet.

This work scope includes the following proposed upgrades and activities:

- a) Removal and excess of current hoist/trolley.
- b) Installation of new hoist/trolley with an increased capacity of 6-tons. This activity includes the removal of some potential polychlorinated biphenyl (PCB) paint on monorail beam and installation of new anchors in the unpainted concrete.

Project Start Date: June 2015

Project End Date: July 2015

Project Cost: Approximately \$100,000.00.

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.

Disturbing Cultural or Biological Resources - TRA-670 is eligible for nomination to the National Register of Historic Places. The activities described in the project description are exempted from cultural resource review ("Idaho National Laboratory [INL] Cultural Resource Management Plan" Table 2, exemption 2 [Department of Energy Idaho Operations (DOE/ID)-10997 rev. 5]). Therefore, the project could proceed as described without further cultural resource review.

Generating and Managing Waste - All waste generated from this activity will be managed in accordance with laboratory procedures. Pollution prevention/waste minimization will be implemented where economically practicable to reduce the volume and/or toxicity of waste generated. All waste generated will be transferred to Waste Generator Services (WGS) for appropriate disposition. All waste generated from these activities will have an identified disposition path prior to it being generated.

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.

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

Using, Reusing, and Conserving Natural Resources - All material will be reused and/or recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill when possible. Project personnel would use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. 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, and are non-toxic or less-toxic alternatives. New equipment will meet either the Energy Star or Significant New Alternatives Policy (SNAP) requirements as appropriate (see <https://sftool.gov/green-products/0?agency=7>).

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

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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 to Subpart D, Categorical Exclusion B1.31 "Installation or relocation of machinery and equipment."

Justification: The proposed activities are consistent with CX B1.31 "Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts."

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: 5/19/2015