

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Test Reactor Area (TRA)-640 Fire Sprinkler System Modifications

SECTION B. Project Description:

The Hazardous Chemical Storage Building (TRA-640) currently has a wet (glycol and water) fire sprinkler system that no longer meets National Fire Protection Association (NFPA) requirements [NFPA 13(2013)]. The proposed project would remove the existing wet pipe riser/anti-freeze system along with the associated wiring and replace it with a new dry pipe sprinkler system. A dry pipe system (air) would be needed for this building because portions of the building are not heated and freeze protection is necessary. Installation would include:

- New dry piping and sprinklers throughout TRA-640
- New fire alarm panel in TRA-640
- New air compressor on the dry pipe riser and associated electrical supply for the compressor
- New wiring between TRA-640 and TRA-671
- New fiber optic cable between TRA-640 and TRA-671 using existing conduit
- Connect existing devices to the new fire alarm panel.

Estimated Start Date:6/1/2014
Estimated Completion Date:7/30/2014
Approximate Cost: \$125,000

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions: Mobile sources such as generators, welders, and compressors may be used temporarily (less than six months) by subcontractors at the construction site. These sources would be required to meet Idaho Administrative Procedures Act (IDAPA) 58.01.01.625 visible emission opacity requirements.

Fugitive Dust may be generated during project activities. Reasonable precautions would be taken to prevent particulate from becoming airborne. This is in accordance with the methods specified in the Rules for the Control of Air Pollution in Idaho (IDAPA 58.01.01.650-651).

There is a possibility for disturbance of asbestos containing building materials. All asbestos work must be conducted by properly trained personnel using appropriate abatement methods.

Disturbing Cultural or Biological Resources: TRA-671 is eligible for nomination to the National Register of Historic Places. As described, project activities would impact this historic property, but the impact would not be adverse. The work can proceed without further cultural resource review.

Generating and Managing Waste: Typical construction debris waste such as wood, wire, scrap metal piping, packaging material, Resource Conservation and Recovery Act (RCRA) empty chemical containers, etc., would be generated during the project. Sprinkler heads would likely be managed as RCRA scrap metal. Hazardous waste is not anticipated; however, there is a potential for generating hazardous waste from adhesives, paints or chemical spills. The glycol in the existing sprinkler system would be drained, containerized and turned over to Waste Generator Services (WGS) for disposal. All waste would be characterized and dispositioned at the direction of WGS.

Releasing Contaminants: Typical Construction chemicals such as fuels, adhesives, lubricants, paints, etc., would be used on the project. The Subcontractor would submit all chemicals and associated Material Safety Data Sheets (MSDS's) in the vendor data system for approval. The Construction Chemical Coordinator would track these chemicals in the INL Comply Plus Chemical Management System. Chemical use has a potential for small amounts of air emission and spills. Any spills that occur from these chemicals would be reported to the Spill Notification Team and would be cleaned up by the subcontractor.

Radiological Contamination is not anticipated; however, project personnel must get approval from the Radiological Control organization prior to any soil disturbing activities.

PCB contamination is not anticipated; however, contamination control methods may be required if disturbing painted surfaces (drilling holes for conduit) inside TRA-671.

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 <http://www.sftool.gov/GreenProcurement/ProductCategory/14>). 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.

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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 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 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 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: 10 CFR 1021, Appendix B to Subpart D item B2.5, "Facility safety and environmental improvements."

Justification: The proposed action is consistent with 10 CFR 1021, Appendix B to Subpart D categorical exclusion B2.5, "Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities" and 40 CFR part 280, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks"). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel)."

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: 5/1/2014