

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Test Reactor Area (TRA)-670 Control Room Break Room and 2nd Basement Bathroom Modification

SECTION B. Project Description and Purpose:

The sewer system associated with the TRA-670 2nd basement restroom does not work properly. The piping leaks, does not drain properly, and sewer gas odor is present. To fix this, the sewer system has been re-designed to have the proper number of vents, piping size, and functioning components. The scope of this modification would include removal and replacement of the sink, toilet, sewer piping, ventilation piping, veneer on the restroom walls, and fire sprinkler head. Work will be performed on the building plumbing and not on the sewage mainline. A new isolation valve would be installed on the potable water supply inside the restroom. In addition, the lower lift station would have a new lid fabricated and more powerful grinder pump installed. The upper lift station would be removed entirely. Finally, for convenience and proper lighting, a new Light-emitting diode (LED) light fixture would be added to the maintenance closet behind the restroom. In terms of replacing the sewer piping and ventilation piping, the sewer line is galvanized pipe and the ventilation line is black acrylonitrile-butadiene-styrene (ABS) piping.

Additionally, the sink in the TRA-670 control room break room does not work, and the piping leaks which renders the sink inoperable. Therefore, the break room needs to be remodeled. Currently the kitchen sink and cabinets are located on the west wall of the control room break room. The proposed work would remove the sink, faucet, and cabinets from the west wall and install a new sink, fixtures, and cabinets on the east wall. The floor tiles and fridge would be removed and replaced. This would require drilling a hole through the break room wall into the canal area room (i.e., into the radiological buffer area). Drilling the new hole in the break room wall creates a breach in the Advanced Test Reactor (ATR) Confinement, and so the hole would need to be sealed and tested. A new 2" pipe would be hot-tied into the building drainage piping east of the break room in the first basement. The drainage piping would serve the kitchen sink to be located on the east wall of the break room. The water heater would be replaced with a new instantaneous water heater and the hot and cold water supplies to the sink would need to be re-routed in order to accommodate the new sink location. In addition, new electrical circuits would be installed for the microwaves as well as new shelving on the north wall of the break room. The small metal cupboards would be removed and replaced. Since the pipe is embedded in the concrete floor, it would be capped and abandoned. Finally, the break room would be painted and a cleanout would be installed in the radiological buffer area.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Work may result in the disturbance or removal of asbestos.

Disturbing Cultural or Biological Resources

TRA-670 is eligible for nomination to the National Register of Historic Places and is considered a Category 1 historic property. Removal and/or changes of original features may adversely impact this historic property; however, the plumbing specific project activities as described are exempt and may proceed as described without further cultural resource review (Idaho National Laboratory Cultural Resource Management Office. Idaho National Laboratory Cultural Resource Management Plan. Department of Energy/Idaho Operations Office (DOE/ID)-10997, revision 5, Idaho Falls, Idaho: U.S. Department of Energy, Idaho Operations Office, 2013; pg 53, Table 2, Exemption 2). Replacement of fixtures (sink and toilet) and wall veneer may be exempt as long as these items are "replaced in kind" (matching or similar colors, finishes, textures, or patterns; Idaho National Laboratory Cultural Resource Management Office. Idaho National Laboratory Cultural Resource Management Plan. DOE/ID-10997, revision 5, Idaho Falls, Idaho: U.S. Department of Energy, Idaho Operations Office, 2013; pg 53, Table 2, Exemption 3).

Generating and Managing Waste

Maintenance activities 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 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. Note: Lead has been encountered very infrequently (e.g., shielded cables).
- Asbestos waste may be generated when performing maintenance activities on equipment or structures with asbestos-containing materials (ACM) such as insulation, gaskets, flanges, walls, roofing, and flooring.
- 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.

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Releasing Contaminants

Although not anticipated, chemical use has a potential for small air emissions and spills.

Using, Reusing, and Conserving Natural Resources

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, B2.1 "Workplace enhancements"

Justification: Project activities are consistent with 10 CFR 1021, Appendix B, "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: 1/7/2016