

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Advanced Test Reactor (ATR) Digital Radiation Monitoring System (DRMS) Replacement Project

SECTION B. Project Description and Purpose:

The Digital Radiation Monitoring System (DRMS) in the Advanced Test Reactor (ATR) monitors radiation levels to verify personnel safety in the facility. The DRMS has reached end of life, and needs to be replaced. The proposed action replaces the DRMS using existing conduit, cable trays, and junction boxes to the extent possible. No new functional and technical requirements are necessary for this project, however some specifications may be revised to meet the capabilities of the replacement equipment. The proposed action includes:

- Replace 47 remote area monitors (RAMs)
- Replace 26 constant air monitors (CAMs)
- Replace digital control and data acquisition components with equivalent components compatible with commercially available Supervisory Control and Data Acquisition (SCADA) hardware (servers, network switches, computers, terminals) and software.

The DRMS will continue to relay information to the Radiological Control Technician Office, Reactor Control Room and Emergency Communications Center.

Project Schedule: 18 to 36 months

Project Start: May 2018

Project End: Nov 2019

Project Cost: ROM \$6M

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Emissions typical of cutting/grinding/welding are expected.

Project activities have the potential to generate fugitive dust.

Disturbing Cultural or Biological Resources

ATR is eligible for nomination to the National Register of Historic Places. Removal and/or changes of original features may adversely impact this historic property.

Project activities have the potential to disturb nesting birds.

Generating and Managing Waste

Industrial waste in the form of scrap wood, scrap metal, packaging material, Resource Conservation and Recovery Act (RCRA) empty chemical containers, rags, insulation, wire, drywall, pipe scrap, etc., will be generated during the project.

Hazardous waste generation has the potential to be generated from paint waste, adhesive waste, cleaning solvents, and spill material.

Asbestos waste may be generated if work activities disturb asbestos containing materials.

PCB waste may be generated from activities involving pre-1982 paints, wire pulling compound, dielectric fluid, etc.

All waste generated during the project will be characterized, stored, and disposed at the direction of Waste Generator Services (WGS).

Releasing Contaminants

Typical construction chemicals such as fuels, lubricants, adhesives, paints, concrete, concrete cure, asphalt, refrigerants, etc., will be used and will be submitted to chemical inventory lists with associated Safety Data Sheets (SDS's) for approval in the vendor data system prior to use. The Facility Chemical Coordinator will enter these chemicals into the INL Chemical Management Database. All chemicals will be managed in accordance with laboratory procedures. Although not anticipated, there is a potential for spills when using chemicals or fueling equipment.

In the event of a spill, notify facility PEL. If the PEL cannot be contacted, report the release to the Spill Notification Team (208-241-6400). Clean up the spill and turn over spill cleanup materials to WGS.

Using, Reusing, and Conserving Natural Resources

Recycled materials will be used to the greatest extent practicable in the selection of materials. All materials will be reused and/or recycled where economically practicable. All applicable waste will be diverted from disposal in the landfill where conditions allow.

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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, B2.2 "Building and equipment instrumentation."

Justification: Project activities are consistent with 10 CFR 1021, Appendix B, B2.2 "Installation of, or improvements to, building and equipment instrumentation (including, but not limited to, remote control panels, remote monitoring capability, alarm and surveillance systems, control systems to provide automatic shutdown, fire detection and protection systems, water consumption monitors and flow control systems, announcement and emergency warning systems, criticality and radiation monitors and alarms, a and security 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: 6/11/2018