

**DOE-ID NEPA CX DETERMINATION  
Idaho National Laboratory**

**SECTION A. Project Title:** IF-603 Chiller Water Tank Auto Fill and Level Detection Upgrade

**SECTION B. Project Description and Purpose:**

Currently there is no functioning level detection or automatic water fill capability for the IF-603 chiller water storage tank. Levels are checked visually and then filled manually using a hose. The proposed project would install a new tank auto fill and level detection system. This will consist of installing pressure/temperature detectors in hot and cold water storage tanks along with a new 2" makeup water line that will run from the industrial water system to the tank distribution piping within the building. A control valve will be placed on the 2" makeup water line that will receive signals from the new tank sensors and will allow the system to automatically maintain appropriate water levels.

Junction boxes from the previous level detection system that are in the tank top manholes will be removed along with the associated wire/cable. The existing 1" conduit will remain and will be used for the new system wiring. Eleven foot stilling wells will be installed in the two outer tanks and will house the pressure/temperature sensors. New "yard" boxes will be installed next to the current manholes and will house the the temperature sensor termination enclosure and drying tube. Twenty feet of piping will be installed from the existing industrial water line to the adjacent chiller water distribution pipe and this piping will have a control valve, isolation ball valves, and a bypass isolation valve. A control panel will be attached to the north wall and new conduit will be ran from the power panel to the new control panel. New conduit and Ethernet cables and MOBUS cables will be ran from the new control panel to the Network switch in Room D25 and to an existing control panel in Room L113.

This work will be scheduled for FY2021.

**SECTION C. Environmental Aspects or Potential Sources of Impact:**

**Air Emissions**

Although unlikely, fugitive dust could be generated when they install yard boxes next to existing water tank manholes.

**Discharging to Surface-, Storm-, or Ground Water**

N/A

**Disturbing Cultural or Biological Resources**

N/A

**Generating and Managing Waste**

Project activities may generate non-hazardous, non-radioactive waste such as junction boxes, scrap wood, scrap metal, wire/cable, packaging material, RCRA empty containers, etc.

**Releasing Contaminants**

Project activities will use typical construction chemicals such as lubricants, fuels, paints, adhesives, etc. Subcontractors will submit chemical inventory lists along with associated SDS's for approval through the vendor data system. Although not likely, spills of chemicals could occur during project activities.

**Using, Reusing, and Conserving Natural Resources**

Waste minimization practices and recycling will occur where practical.

**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)).

**DOE-ID NEPA CX DETERMINATION  
Idaho National Laboratory**

**References:**

This EC references the Categorical Exclusion B1.5 "Existing steam plants and cooling water systems," and B2.2 "Building and equipment instrumentation."

**Justification:**

Project activities in this EC are consistent with 10 CFR 1021 Appendix B to Subpart D, Categorical Exclusion B1.5 Existing steam plants and cooling water systems. "Minor improvements to existing steam plants and cooling water systems (including, but not limited to, modifications of existing cooling towers and ponds), provided that the improvements would not: (1) Create new sources of water or involve new receiving waters; (2) have the potential to significantly alter water withdrawal rates; (3) exceed the permitted temperature of discharged water; or (4) increase introductions of, or involve new introductions of, hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products."

Project activities in this EC are consistent with 10 CFR 1021 Appendix B to Subpart D, Categorical Exclusion B2.2 Building and equipment instrumentation. "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, and safeguards 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: 02/23/2021