

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Materials and Fuels Complex (MFC)-765 Fuel Conditioning Facility (FCF) Fire Suppression System

SECTION B. Project Description:

The project scope consists of modifying three (3) separate sections of the FCF (MFC-765) Fire Suppression System to convert them from wet pipes to dry pipes. These modifications are required to comply with National Fire Protection Association (NFPA) requirements for maximum glycol/water ratios per NFPA 13 - Standard for the Installation of Sprinkler Systems. For the portions of the system list below, the legal limit for glycol/water mixtures has been determined to provide an inadequate antifreeze solution for protecting against freeze protection. The sections to be modified are comprised of: 1) Roof Level Antifreeze System, 2) Stairwell/Penthouse Antifreeze System, and 3) Loading Dock Antifreeze System.

Work scope includes, 1) Demolition of existing piping (including disposal of existing glycol solution), 2) Installation of new piping, valves, and sprinkler heads (wall coring/penetration maybe required), 3) Installation of either a) plant air, b) nitrogen cylinder, or c) riser mounted air compressor and associated power, 4) Installation of new fire alarm supervision modules with wiring and Fire Alarm Control Panel programming, and 5) Drain and/or splash block installation to accommodate system testing.

Project start and end dates are to be determined. Approximate project costs are \$300,000 for subcontracted work and \$370,000 total project cost.

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 will be required to meet Idaho Administrative Procedures Act (IDAPA) 58.01.01.625 visible emission opacity requirements.

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. If the amount of asbestos that will be disturbed exceeds threshold quantities (260 linear feet, 160 square feet, 35 cubic feet) a 10-day renovation notification will be required.

Disturbing Cultural or Biological Resources: MFC-765 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, exemptions 6 [Department of Energy Idaho Operations Office (DOE/ID)-10997 rev. 5]). Therefore, the project could proceed as described 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., will be generated during the project. 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 systems will be drained, containerized and turned over to Waste Generator Services (WGS) for disposal. Brass/bronze sprinkler heads will be managed as RCRA scrap metal.

All waste will be characterized and dispositioned at the direction of WGS.

Releasing Contaminants: Typical Construction chemicals such as fuels, adhesives, lubricants, paints, etc., will be used on the project. The Subcontractor will submit all chemicals and associated material safety data sheets (MSDS's) in the vendor data system for approval. The Construction Chemical Coordinator will 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 will be reported to the Spill Notification Team and will be cleaned up by the subcontractor.

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 <https://sftool.gov/green-products/0/hvacmechanical?agency=0>). 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. Such purchases could include hydraulic fluid in accordance with BioPreferred requirements (<https://sftool.gov/green-products/0/lube-oil-hydraulic-fluid-grease?agency=0>). Fire suppression materials will be procured in accordance with SNAP requirements, as appropriate (see <https://sftool.gov/green-products/0/special-construction-products?agency=0>).

SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s): Identify 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,

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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 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 to Subpart D item 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 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, and safeguards and security equipment."

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: 9/22/2014