

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Materials and Fuels Complex (MFC)-752 Analytical Laboratory (AL) Casting Laboratory Glovebox Heat Detection

SECTION B. Project Description:

The glovebox heat detection and fire alarm system in the Material and Fuels Complex (MFC) Analytical Laboratory's (building MFC-752) Casting Lab needs to be replaced to meet requirements of the National Fire Protection Association's (NFPA) "National Fire Alarm and Signaling Code," NFPA-72. The proposed action would replace two glovebox heat detectors and add an additional heat detector to the Casting Lab glovebox. In addition, a new detector would be added to a test box on the wall used to test the fire alarm system. The old module would be removed and replaced with an FMM-1 module alarm. The system would be tested as required to meet NFPA-72.

The two sensors and associated equipment within the glovebox would be disposed of as radioactive waste. The total volume would be less than 2 cubic feet. Although this glovebox has a history of processing transuranic materials, the level of surface contamination on the objects relative to their mass indicates that this waste would be low-level waste (LLW).

All waste generated from outside the glovebox will also be LLW (1-2 cubic feet). The environmental impacts of transferring low level waste from the INL to the Nevada National Security Site were analyzed in the 1996 Nevada Test Site (NTS) Environmental Impact Statement (EIS) (Department of Energy [DOE]/EIS-0243) and supplemental analysis (SA) (DOE/EIS-0243-SA-01) and DOE's Waste Management Programmatic EIS (DOE/EIS-200). The fourth Record of Decision (ROD) (65 FR 10061, February 25, 2000) for DOE's Waste Management Programmatic EIS established the Nevada National Security Site as one of two regional low-level waste (LLW) and mixed low-level waste (MLLW) disposal sites.

SECTION C. Environmental Aspects or Potential Sources of Impact: Check the applicable box for the following environmental aspects by reviewing the applicability statements; provide an explanation for any aspect checked Yes. Ask yourself, "How can this activity affect the environment?"

Air Emissions: 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. Quantities of asbestos that are to be disturbed will be communicated to the Construction Environmental Support and Services (ES&S) representative in order to file the Asbestos Removal Notification Form (450.04). Asbestos work will not take place until the project has received approval from the Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAPs) Technical Point of Contact (TPOC).

Disturbing Cultural or Biological Resources: MFC-752 is eligible for listing on the National Register of Historic Places. The project as described is exempted from cultural resource review (Idaho National Laboratory [INL] Cultural Resources Management Plan, Table 2, exemption 6 [Department of Energy Idaho Operations Office (DOE/ID)-10997 rev. 5]). Therefore, the project may proceed as planned.

Generating and Managing Waste: Typical construction debris waste such as wire, scrap metal piping, packaging material, Resource Conservation and Recovery Act (RCRA) empty chemical containers, etc., would be generated during the project. The two sensors and associated equipment within the glovebox would be disposed of as radioactive waste. The total volume would be less than 2 cubic feet. Although this glovebox has a history of processing transuranic materials, the level of surface contamination on the objects relative to their mass indicates that this waste would be LLW. All waste generated from outside the glove box will be LLW (1-2 cubic feet). All waste has a path for disposal and would be characterized and dispositioned at the direction of WGS.

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. 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 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 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

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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 Environmental Checklist (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."

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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: 6/18/2015