

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: MFC Replacement of HFEF Cask Bagging Ring Vacuum and Purge System Panel to Improve User Interface

SECTION B. Project Description and Purpose:

The purpose of this EC is to replace the existing cask bagging ring vacuum and purge system controls in the Hot Fuel Examination Facility (HFEF), MFC 785, to improve the user interface of the system. To do this, the controls will be replaced with panels, one for each penetration.

Each panel contains valves and pressure differential instruments to perform the vacuum/purge function as currently occurs. One panel also has a flowmeter installed so that a value can be read on what the flowrate is for that penetration. Since the panels are being replaced, the overpressure alarm panel will also need to be replaced so it can interface with the new components.

There are three cask penetrations in the Transfer Tunnel: 7.2002, 7.2010 and 7.1012. Two of the penetrations service the Decon Cell and the other one services the Main Cell. Each penetration has a ring at the bottom where the cask mates to the penetration. This ring is called the cask bagging ring. Functionally, a cask is mated to the penetration and a large bag is connected to the bagging ring and the top of the cask. This bag is a contamination control item so that any radiological contamination is contained in the bag during transfers of the cask contents from the cask and into the cell. To accomplish this transfer, the penetration is equipped with a vacuum and purge system. Currently, this system has some valves and pressure instruments to control the purging or vacuum system so that the atmosphere in the bag is maintained as required during operations.

Replacement of the overpressure alarm panel is included so that it can interface with the new panels. Functionally, the system does not change. Components include a new panel for each penetration. The panels contain the various valves to configure the system for the desired function (vacuum or purge). Additionally, differential pressure instruments are included in each of the three panels and the 7.1012 panel also includes a flowmeter.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Due to the vacuum pump exhausting into the cell, there is potential for radioactive contamination in the bag/cask and as air goes out the stack

Discharging to Surface-, Storm-, or Ground Water

N/A

Disturbing Cultural or Biological Resources

The Hot Fuels Examination Facility (HFEF) is a Category 2 historic property and is eligible for listing on the National Register of Historic Places (NRHP). In order to comply with Section 106 of the National Historic Preservation Act (NHPA), the CRMO will complete a cultural resource review record, which will be retained for their records. The proposed activities in this EC are considered exempt under and will not require additional CRMO review. Work may proceed as described. If the scope of the activities changes, please contact the CRMO (grp-crmo@inl.gov) on whether a revised review will be required.

Generating and Managing Waste

It is anticipated that project activities will generate industrial (non-hazardous, non-radioactive) waste includes typical maintenance wastes such as boxes, wood, wiring, paper, insulation, and some metals. Potential waste materials will be evaluated for waste minimization prior to generation, and industrial waste generated during proposed activities will be evaluated for recycling opportunities prior to disposal at the INL Landfill Complex.

Radioactive low-level may be generated if the equipment being removed cannot be free-released.

All solid waste will be managed by WGS using approved laboratory procedures.

Releasing Contaminants

All chemicals and associated Safety Data Sheets (SDS's) must be submitted in the vendor data system for approval. The Chemical Coordinator would track these chemicals in the INL Comply Plus Chemical Management System. Chemical use has a potential for small air emissions and spills. In the event of a spill, notify facility Environmental Staff. If the Environmental Staff 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

All material will be reused and/or recycled where economically practicable. All applicable waste would be diverted from disposal in the landfill when possible. Project personnel would use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. 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, and are non-toxic or less-toxic alternatives.

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

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

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: The proposed action is covered by 10 CFR 1021, Appendix B to subpart D Items B2.2 "Building and Equipment Instrumentation" and B6.3 "Improvements to Environmental Control Systems".

Justification: The proposed activity aligns with those activities described in 10 CFR 1021, Appendix B to subpart D Items 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)." and

B6.3, "Improvements to environmental monitoring and control systems of an existing building or structure (such as changes to scrubbers in air quality control systems or ion-exchange devices and other filtration processes in water treatment systems), provided that during subsequent operations (1) Any substance collected by the environmental control systems would be recycled, released, or disposed of within existing permitted facilities and (2) there are applicable statutory or regulatory requirements or permit conditions for disposal, release, or recycling of any hazardous substance or CERCLA-excluded petroleum or natural gas products that are collected or released in increased quantity or that were not previously collected or released."

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: 4/20/2020