

# DOE-ID NEPA CX DETERMINATION IDAHO NATIONAL LABORATORY

**SECTION A. Descriptive Information:** Materials and Fuels Complex (MFC) Contaminated Equipment Storage Building (CESB) Conversion Scope Change

## **SECTION B. Project Description:**

MFC-794 CESB is currently being modified for reasons described in Environmental Checklist (EC) Idaho National Laboratory (INL)-10-074 (OA 12). During construction it was determined that some of the equipment that will be located in the building will need non-contact cooling water in order to operate. This EC addresses the additional requirements associated with this equipment. The equipment (Hot Isostatic Press) that will occupy the CESB requires a potable water supply line and a drain line that will discharge to the MFC Industrial Wastewater System. This discharge will add a significant amount of water to the permitted system (MFC Industrial Wastewater Reuse Permit) and will require modification to the permit. This additional scope and resulting requirements were not identified in EC INL-10-074 (OA 12), therefore this EC is being written to address the additional scope and requirements identified after construction began. The additional scope will consist of the following:

- Installing supply piping and drain lines for the Hot Isostatic Press and future equipment that require non-contact cooling water. The potable water supply line will have appropriate backflow prevention devices installed. Installation of future equipment will require a separate environmental checklist.

A main drain and an alternate drain will be located in the CESB floor and routed to the existing industrial waste utility located south of the CESB. When not in use the drains will be plugged. These drains will discharge non-contact cooling water used to cool experimental equipment like the Hot Isostatic Press. Cooling water is isolated from chemical or radiological hazards by the experimental equipment.

Previously approved scope from EC INL-10-074 (OA 12) is listed below:

### Construction Activities:

- Construction of an entry airlock and vestibule
- Demolition of existing and installation of new heating, ventilating, and air conditioning (HVAC) components
- Installation of a new transformer, new duct bank, and electrical feeder cable
- Installation of a new service panel
- Installation of new information technology equipment
- Replacement of suspect exhaust system and building air supply
- Installation of new task lighting
- Interior electrical upgrades
- Fire sprinkler and alarm modifications
- Installation of interior instrument air runs and connection to the existing system.

## **SECTION C. Environmental Aspects / Potential Sources of Impact:**

**Air Pollutants:** An Air Permitting Applicability Determination (APAD) was performed for operation of the equipment for intended Research and Development (R&D) that was previously performed in Fuels and Applied Science Building (FASB) and found it to be Below Regulatory Concern (BRC). Fugitive dust may be generated during construction excavation activities.

**Discharging to Surface-, Storm, or Ground Water:** It is anticipated that the drain will see 15 gallons per minute of flow operated for 3 days at 2 times a month (1.5 Million [M] gallons per year) up to 3 days operation per week (3.4 M gallons per year). As other experimental equipment is used that requires non-contact cooling water, it is anticipated that no more than 4 M gallons per year will be generated. This discharge will add a significant amount of water to the permitted system (MFC Industrial Wastewater Reuse Permit) and will require modification to the permit. See section E. Conditions for the permit modification requirements.

**Generating and Managing Waste:** Radioactive waste will be generated from items removed. Removing radioactive components (e.g., suspect ventilation ducting will generate mixed low-level waste and possibly a small quantity of low-level waste (approximately 1000-mixed low level waste [MLLW] ft<sup>3</sup>).

**Hazardous/Radioactive Material or Waste Handling and Transportation:** Waste Generator Services (WGS) personnel will perform a hazardous waste determination on all generated waste to apply appropriate management practices. WGS personnel will determine if any of the material generated can be recycled or reused to minimize waste generation. Project personnel will work with WGS to properly package and transport regulated, hazardous or radioactive material or waste according to company procedures.

**Low Level Waste Generation:** Personal protective equipment (PPE), towels used for cleaning and polishing is estimated at ~2 ft<sup>3</sup> per week.

**Industrial Waste Generation and Management:** Project activities are likely to result in the generation of small amounts of industrial waste.

**DOE-ID NEPA CX DETERMINATION  
IDAHO NATIONAL LABORATORY**

Project personnel will work with WGS to properly characterize, store, and dispose of all waste according to established waste streams and company procedures.

<b>SECTION D.</b>	<b>Recommended Level of Environmental Review (or Documentation) and Reference(s):</b> Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.
-------------------	--

Note: 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, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, 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) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor "related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: 10 CFR 1021, Appendix B to Subpart D item B1.31 "Installation or relocation of machinery and equipment."

Justification: The proposed action is consistent with 10 CFR 1021 Subpart D, item B1.31 "Installation or relocation of machinery and equipment--Installation or relocation and operation of machinery and equipment (including, but not limited to, laboratory equipment, electronic hardware, manufacturing machinery, maintenance equipment, and health and safety equipment), provided that uses of the installed or relocated items are consistent with the general missions of the receiving structure. Covered actions include modifications to an existing building, within or contiguous to a previously disturbed or developed area, that are necessary for equipment installation and relocation. Such modifications would not appreciably increase the footprint or height of the existing building or have the potential to cause significant changes to the type and magnitude of environmental impacts."

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: 3/15/2012