

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Irradiated Materials Characterization Laboratory (IMCL) Ventilation Modifications

SECTION B. Project Description and Purpose:

The Materials and Fuels Complex (MFC) Irradiated Materials Characterization Laboratory (IMCL), building MFC-1729, was constructed and placed into operational status approximately two years ago. During this period, operational experience has shown that air flow across the laboratory is minimal and does not meet expectations for radiological controls. Modifications to the ventilation supply and exhaust systems are needed to provide better airflow across the IMCL floor.

The proposed modifications would remove one of three east-to-west supply ducts and add a supply duct line against the south wall about 12-ft off the floor. In addition, drop downs would be added to exhaust ducting on the north wall. The supply louvers on the south supply drop downs would be controlled open/close and directional via the building management control system.

The proposed action would include the following:

1. Replace variable logic controllers and re-Program the direct digital control files to replace software interlocks with interlocks hard-wired to the physical I/Os to prevent false trip of the network interlock between the supply fan and exhaust fans
2. Modify ventilation to alleviate stagnant air flow and provide better supply side to exhaust side air flow
3. Replace supply damper door with new design to prevent door failure
4. Install new central Alarm Panel in the Office area for monitoring critical facility and equipment parameters
5. Provide line conditioning and End-of-Line terminators to reduce data losses on the integrator trend logs and eliminate false trips of the network interlock between the supply fan and exhaust fans.

The projected finish date is Fiscal Year (FY)16 due to the current funding. Projected start is April 2016 with an end date of September 2016. Estimated cost is \$200K.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Prior to construction, the IMCL was required to obtain an Air Permit to Construct (PTC) from the Idaho Department of Environmental Quality and an Approval to Construct (ATC) from the Environmental Protection Agency. The changes described in this document would not be considered a modification that would require a PTC or ATC, because although there will be a physical change to the IMCL, there will be no increase in emissions as a result of these changes.

Generating and Managing Waste

Industrial and low-level waste (LLW) will be generated as part of this project.

Releasing Contaminants

All chemicals typically used in construction/maintenance, if used, will be managed in accordance with laboratory procedures.

Using, Reusing, and Conserving Natural Resources

All material generated from project would be reused and 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.

SECTION F. 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)).

References: National Environmental Policy Act (NEPA) Implementing Procedures, Final Rule, 10 CFR 1021, Appendix B, B2.1 "Workplace enhancements"

DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

Justification: Project activities are consistent with 10 CFR 1021, Appendix B, "Modifications within or contiguous to an existing structure, in a previously disturbed or developed area, to enhance workplace habitability (including, but not limited to, installation or improvements to lighting, radiation shielding, or heating/ventilating/air conditioning and its instrumentation, and noise reduction."

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: 2/12/2016