

**SECTION A. Project Title: AIR CONDITIONING SYSTEMS FOR EXISTING EQUIPMENT/WORKPLACE ENHANCEMENTS**

**SECTION B. Project Description and Purpose:**

**Background**

Idaho National Laboratory's (INL's) mission is to discover, demonstrate and secure innovative nuclear energy solutions, other clean energy options, and critical infrastructure. INL activities include nuclear energy and homeland security research, development, and demonstration. Battelle Energy Alliance, LLC, manages and operates INL. Most INL Site buildings and structures are located within developed areas that are typically less than a few square miles and separated from each other by miles of undeveloped land. The U.S. Department of Energy (DOE) controls all land within the INL Site. In addition to INL Site facilities, INL manages and operates leased and DOE-owned laboratories and administrative offices in Idaho Falls.

**Purpose and Need**

INL needs to manage facilities and property in a safe, secure, cost-effective, and sustainable manner to ensure assets are available, utilized, and in a suitable condition to support efficient mission execution. INL must sustain assets by completing installation or improvements to building and equipment instrumentation activities to assure mission readiness, operational safety, worker health, environmental protection and compliance, security, and property preservation to cost-effectively meet program missions. To meet this need, INL installs, replaces, or modifies air conditioning (AC) systems to control the temperature of existing equipment, processes, communication systems, data processing equipment, and similar electronic equipment and to enhance workplace habitability for personnel.

**Type and Scope of Activities**

The proposed action involves installing, modifying, replacing, or improving AC systems covered under DOE Categorical Exclusion (CX) B1.4 and Workplace Enhancements covered under DOE Categorical Exclusion (CX) B 2.1 that include, but are not limited to:

- Upgrading, modifying, or replacing air conditioning equipment which may include evaporator coils, compressors, glycol loops, glycol pumps, condensing coils, and cooling fans.
- Installing, rerouting, or replacing ducting.
- Installing or removing HVAC controls.
- Anchoring of equipment.
- Adding or removing conduit.
- Installing concrete pad(s) to support AC equipment.
- Installing drywall or paneling, acoustical ceiling tile, and dropped ceilings.
- Installing new facility access ramps.
- Reconfiguring support areas, including bathrooms, offices, break areas, and conference rooms.
- Reconfiguration and remodeling spaces including reconfiguring walls and cubicles.
- Removing, relocating, and adding electrical circuits, outlets, switches, data drops and other electrical upgrades.
- Removing, replacing, and relocating light fixtures.
- Re-routing heating, ventilation, and air conditioning (HVAC) ducting; and changes to HVAC controls to accommodate reconfiguration and remodeling activities.
- Upgrading facility components such as light fixtures, kitchen appliances in break areas, install or replace drinking water dispensers, cabinets, countertops, carpet, paint, tile, windows, heaters, air conditioners, and audio and visual equipment.
- Upgrading telecommunication rooms/systems, including new network equipment racks, fiber optic cable, and network switches to support user applications, allow for faster internet speeds, and improve technology performance.

Activities may encounter asbestos or PCB materials (i.e., caulking, paint, light fixtures, joint sealer, adhesives, ceiling tiles, ventilation duct gaskets and insulation, etc.).

A separate Environmental Compliance Permit (ECP) will be prepared if a proposed action falls outside of this scope.

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

Proposed activities, including those at off-site locations, must meet the DOE categorical exclusion (CX) eligibility criteria (10 Code of Federal Regulations [CFR] 1021.410) and the following criteria:

- Activities would be conducted within existing structures that supply appropriate wastewater storage and handling, exhaust ventilation, air filtration, and additional confinement or controls appropriate to the nature of the materials and equipment used in the project.
- Each activity would comply with applicable facility safety and environmental administrative controls and permit requirements.
- Activities would not generate, use, or reprocess spent nuclear fuel (SNF).
- Activities do not include demonstration of advanced nuclear reactors or risk reduction for future demonstrations.
- Each activity could use hazardous and/or radioactive materials, should the use be necessary, except as excluded by bullet number 3 above. Inventories would be maintained at the lowest practicable levels while remaining consistent with continuing operations and research goals, pollution prevention measures, applicable permits and licenses, and waste minimization practices.
- Releases of liquid and airborne substances to the environment would be minimized and remain compliant with applicable facility, local, state, and federal regulations and DOE Orders and INL guidelines.
- Waste generated would be limited to wastes with an available onsite or off-site treatment, storage, and disposal pathway. Volumes of waste generated by each activity would be reduced as much as possible by pollution prevention measures and waste minimization practices. Wastes would be dispositioned in accordance with applicable local, state, and federal regulations and DOE Orders and guidelines. The Proposed Action does not include projects that would generate transuranic (TRU) waste or a new type of waste not currently managed at INL or waste with no path for disposition.
- Actions that are part of, or in support of, a larger project that requires either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) are not covered by this ECP.

In addition to the above criteria, the Proposed Action does not include the following:

- Actions that change the scope or mission of a facility.
- Actions that cause a significant increase in environmental impacts of a facility.
- Activities at EBR-I.
- Actions that require a permit or permit modification.
- Actions for which a separate categorical exclusion is specified in 10 CFR 1021, Appendix B to Subpart D.
- Actions with extraordinary circumstances that affect any sensitive area or natural resources (cultural and historic resources, federally-listed threatened or endangered (T&E) species or their habitat, federally-proposed or candidate species and their habitat, state-listed or state-proposed T&E species, and other federally-protected species such as Bald and Golden eagles and birds protected under the Migratory Bird Treaty Act (MBTA), floodplains and wetlands, areas having a special designation (e.g., national landmarks), special sources of water (such as sole source aquifers), and involve genetically engineered organisms, synthetic biology, noxious weeds and invasive species).
- Activities that disturb:
  - Sagebrush anywhere on the INL Site outside of fenced facility boundaries,
  - Native vegetation within the Sage-Grouse Conservation Area (SGCA), Sagebrush Steppe Ecosystem Reserve, or the area between Specific Manufacturing Capability (SMC) and Test Area North (TAN),
  - Soil in the INL storm water corridor, or
  - Disturb vegetation or soils in the CITRC area (including previously disturbed areas at CITRC) require project specific ECPs.
- Actions that result in a substantial upgrade or improvement that would significantly extend the useful life of a facility.

Activities that may adversely impact historic resources or resources potentially eligible to the National Register of Historic Places or projects that require mitigation for historical resources require review by the Cultural Resource Management Office (CRMO). Maintenance on EBR-I requires preparation of a separate ECP.

**Schedule and Timing**

INL completes activities evaluated in this EC on an "as-needed" basis. INL bases these determinations on plant experience and good engineering practices. This Environmental Compliance Permit (ECP) covers activities through FY 2028. This ECP will be reviewed and revised prior to September 30, 2028.

**SECTION C. Environmental Aspects or Potential Sources of Impact:**

**Air Emissions**

The proposed action has the potential to remove or disturb asbestos-containing materials (ACM). Project activities have the potential to release ozone depleting substances and greenhouse gases. Fugitive dust may be generated during proposed work.

**Discharging to Surface-, Storm-, or Ground Water**

Some condensates might be discharged to the ground or industrial wastewater systems from air conditioning units.

**Disturbing Cultural or Biological Resources**

Project activities performed between April 1 and October 1 have the potential to impact nesting birds. Threats include, but are not limited to, noise, vegetation removal, human activity around nests, lighting, and collisions with windows and other infrastructure. If warranted, a work activity could be postponed, moved, or other restrictions could be developed to protect active migratory bird nests.

All activities covered under this tent ECP must be separately entered into the Environmental Review Process electronic workflow and reviewed individually to determine if a Cultural Resource Review (CRR) is needed. Hold Points and Project Specific instructions will be provided to project managers prior to beginning work and no cultural review is needed at this time.

**Generating and Managing Waste**

Industrial (non-hazardous, non-radioactive) waste may be generated such as boxes, wood forms, concrete, asphalt, wiring, piping, paper, waste materials (insulation, wood, metal). INL transfers this waste to a certified recycler or a properly permitted solid waste landfill for disposal. Projects characterize and manage soils and environmental media generated during activities in accordance with laboratory procedures. INL has an active program to minimize waste generation. The waste minimization program includes both source reduction and recycling. Waste Minimization and Pollution Prevention Opportunities are also an integral part of the work review process. INL continually considers opportunities for waste minimization and pollution prevention during these activities.

Activities performed inside contaminated areas would generate some radioactive waste. Radiological waste includes anti-contamination clothing, rags, radiation enclosures and barriers, wood, dirt, contaminated materials and components (e.g., pumps, piping, roofing materials), demolition debris (which may include asphalt and concrete), contaminated filters, and contaminated absorbent used to clean up small spills. INL packages these materials and stores them in on-site storage facilities pending disposal at an authorized and permitted facility. For excavation in an area suspected to be radioactively contaminated, Radiological Control personnel assist in developing specific radiation work permits to minimize the potential for encountering contaminated media.

INL manages excavated soils in accordance with site procedures, policies, and applicable regulatory requirements. INL designs excavation activities to minimize waste. To reduce the amount of radioactive waste generated, clean debris is segregated from radioactively contaminated areas and debris. Radioactively contaminated tools are kept in contaminated areas for reuse rather than disposal at the completion of the activity.

Asbestos waste would be sent to a properly permitted solid waste landfill for disposal.

Hazardous Waste - Maintenance activities on equipment containing hazardous materials, such as acids, hazardous and listed solvents, and heavy metals may require management as hazardous waste. INL plans activities and performs maintenance using waste minimizing strategies to limit the generation of hazardous waste. INL sorts, characterizes, treats, and disposes of any hazardous waste in compliance with applicable Resource Conservation and Recovery Act and other waste management regulations.

Mixed Waste- Maintenance activities on equipment containing hazardous materials, such as acids, hazardous and listed solvents, and heavy metals may require management of resultant waste material as mixed waste. INL plans activities and performs maintenance using waste minimizing strategies to limit the generation of mixed waste. INL sorts, characterizes, treats, and disposes of any mixed waste in compliance with applicable Resource Conservation and Recovery Act and other radioactive waste management regulations.

PCB Waste-Activities performed on structures or equipment containing PCBs (e.g., pre-1982 equipment and materials such as capacitors, lubricants/dielectric fluids, transformers and bushings, painted surfaces, caulking, joint sealer, ventilation duct gaskets or insulation, and other electrical equipment/components) require management as PCB waste. INL stores and manages PCB wastes in compliance with applicable federal regulations.

Activities that generate TRU, HLW, GTCC or any waste with no path for disposition are not included in the scope of work for this ECP.

Waste Generator Services (WGS) manages all solid waste using approved laboratory procedures.

**Releasing Contaminants**

Activities use typical construction chemicals such as fuels, lubricants, adhesives, concrete, concrete cure, asphalt, etc., and those used must be submitted to chemical inventory lists with associated Safety Data Sheets (SDSs) for approval in the vendor data system prior to use. INL manages all chemicals in accordance with laboratory procedures.

Activities may involve working with PCB-containing or PCB-contaminated equipment (e.g. activities associated with pre-1982 equipment and materials such as capacitors, lubricants/dielectric fluids, transformers and bushings, painted surfaces, caulking, joint sealer, ventilation duct gaskets or insulation and other electrical equipment/components).

Although not anticipated, there is a potential for spills when using chemicals.

Do not intentionally vent refrigerants the atmosphere.

#### Using, Reusing, and Conserving Natural Resources

Project description indicates materials will need to be purchased or used that require sourcing materials from the environment. Being conscientious about the types of materials used could reduce the impact to our natural resources.

INL reuses or recycles all materials where economically practicable. INL also diverts all applicable waste from disposal in the landfill where conditions allow.

#### Environmental Justice

NA

**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 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:** B1.4 "Air conditioning systems for existing equipment", B2.1 "Workplace enhancements"

**Justification:** Based on the purpose and need and description of the proposed action and potential environmental impacts, the proposed action fits within the class of actions that is listed in Appendix B CX B1.4 and B2.1. There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal. The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)) and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

Authorizing the proposed action will not (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive orders; (2) require siting of new facilities or expansion of existing facilities; (3) disturb hazardous substances, pollutants, or contaminants; (4) adversely affect environmentally sensitive resources; or (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act)     Yes     No

Approved by Robert Douglas Herzog, DOE-ID NEPA Compliance Officer on: 10/24/2024