DOE-ID NEPA CX DETERMINATION
Idaho National Laboratory

CX Posting No.: DOE-ID-INL-16-027

SECTION A. Project Title: Central Facilities Area (CFA)-625, 668, 1611, and 1612 Heating, Ventilating, and Air Conditioning (HVAC) Modifications

SECTION B. Project Description and Purpose:

The proposed project will modify heating, ventilation, and air conditioning (HVAC) equipment at Central Facilities Area (CFA) buildings CF-625, CF-668, CF-1611, and CF-1612.

The scope of work includes the following activities:

CFA-668:

- Install instrumentation and controls for two air handling units (AHUs) for AHU monitoring, alarm, control and interface with two exhaust fans (EFs) and two fan coil units (FCUs).

CFA-625:

- Install instrumentation and controls for two EFs for EF monitoring, alarm, control and interface with two AHUs
- Install instrumentation and controls for eighteen existing FCUs for FCU monitoring, alarm, control and interface with room space pressure and AHU's
- Verify and adjust manually each negative pressure controlled room/lab as necessary to maintain 0.05 inches water column.

CFA-1611:

- Purchase and install a new HVAC control system
- Modify existing ductwork and install new ductwork to support installation of Variable Air Volume (VAV) Boxes
- Remove the existing HVAC unit and install a new GFE HVAC unit
- Install electrical conduit, wiring, and components in support of the control system
- Test HVAC equipment.

CFA-1612:

- Remove condenser, cooling coils, refrigerant line piping, associated electrical disconnects, un-utilized circuits, and conduits
- Remove grass, sidewalk, and asphalt parking lot where the new condenser pad will be constructed
- Install new concrete condenser pad and replace sidewalk
- Install new GFE condenser, GFE indoor coil, refrigerant piping, in-line-filter, site glass, vibration absorbers, and new electrical disconnect for condenser
- Install controls and associated electrical upgrades for new condenser
- Modify ductwork and install of variable air volume boxes.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Fugitive dust may be generated while excavating for the new condenser pad. All reasonable precautions will be taken to control fugitive dust if generated. Any dust control methods that are used will be documented in subcontractor daily logbooks and used as compliance records.

Due to the phase out of Ozone Depleting Substance (ODS) R-22 and difficulty of obtaining it, the CFA-1612 cooling system will be converted to R410A. Certified Refrigeration Technicians will use approved service practices and EPA approved equipment when removing/recharging the CFA-1612 cooling system.

Generating and Managing Waste

Construction waste such as scrap wire, conduit, condenser, cooling coils, evacuated refrigerant lines, concrete, asphalt, grass, and packaging material, etc., will be generated during the project. Scrap metal will be sent to excess for recycle as appropriate. Electronic waste, such as circuit boards will be removed and sent out for recycle.

Releasing Contaminants

Chemicals such as lubricants, adhesives, cleaners, paints, concrete cure, etc. will be used on the project. The subcontractor will submit chemical inventory lists and associated Safety Data Sheets in the vendor data system for approval. The Construction Chemical Coordinator will track these chemicals in the Comply Plus Chemical Management System.

Using, Reusing, and Conserving Natural Resources

Scrap wire, piping, conduit, circuit boards and other metal will be recycled where appropriate and practical.

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: 10 CFR 1021, Appendix B2.1 "Workplace enhancements" and B2.2 "Building and equipment instrumentation".

Justification: Activities are consistent with 10 CFR 1021, Appendix B2.1 "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, … or heating/ventilation/air conditioning and its instrumentation, and noise reduction)."

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, … announcement and emergency warning systems, … and safeguards and security equipment)."

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: 3/15/2016