

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Purchase and installation of a Thermo-Fisher/FEI Spectra 300 kV Transmission Electron Microscope at CAES, an off-site 70/30 leased facility

SECTION B. Project Description and Purpose:

The proposed action, funded by Idaho National Laboratory (INL), remodels a laboratory in the Center for Advanced Energy Studies (CAES) to facilitate installing a new Transmission Electron Microscope (TEM), vibration cancelling unit, and an analysis unit. Facility modifications include removing concrete slab to construct an 18" pit, installing walls and ceilings, modifying ventilation and fire suppression, and installing utilities (electrical, water, air, data) and chiller units. The CAES is owned by the State of Idaho and managed by Idaho State University (ISU). The Idaho Department of Public Works (DPW) is managing the project, and ISU is managing the interaction between ISU, DPW, and INL. INL performs no work activities under the proposed action except for funding the proposal.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Project activities have the potential to create fugitive dust.

Project activities have the potential to release hazardous and chemical contaminants into the air.

Subcontractors may bring mobile generators, welders and compressors on-site during construction. Equipment must meet the visible emissions/opacity requirements or will be shut down and repaired or removed from the facility. These non-road sources will be used at project locations for less than a year.

Generating and Managing Waste

Industrial waste in the form of concrete, asphalt, grass, scrap wood, scrap metal, packaging material, Resource Conservation and Recovery Act (RCRA) empty chemical containers, rags, insulation, wire, carpet scrap, tile scrap, drywall, pipe scrap, etc., will be generated during the project.

Hazardous waste generation has the potential to be generated from paint waste, adhesive waste, cleaning solvents, and spill material.

All waste generated during the project will be characterized, stored, and disposed at the direction of the facility waste services organization.

Releasing Contaminants

Typical construction chemicals such as fuels, lubricants, adhesives, paints, concrete cure, asphalt, refrigerants, etc., will be used. Although not anticipated, there is a potential for spills when using chemicals or fueling equipment.

Using, Reusing, and Conserving Natural Resources

Recycled materials will be used to the greatest extent practicable in the selection of materials.

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: National Environmental Policy Act (NEPA) Implementing Procedures, Final Rule, 10 CFR 1021, Appendix B to Subpart D, Categorical Exclusion B1.31 "Installation or relocation of machinery and equipment."

Justification: The proposed activities are consistent with CX B1.31 "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

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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 Jason Sturm, DOE-ID NEPA Compliance Officer on: 09/26/2019