

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Energy Systems Laboratory Process Demonstration Unit Pellet Mill Exhaust Stack Installation

SECTION B. Project Description:

The proposed action is needed to allow operation of the Process Demonstration Unit (PDU) at the Energy Systems Laboratory (ESL) (Idaho Falls [IF]-685). Bioenergy research and development (R&D) activities/operations that take place at the ESL have been captured in environmental checklist Idaho National Laboratory (INL)-10-003. Environmental impacts associated with operation of the PDU were evaluated in environmental checklist INL-10-050 R1.

The proposed action would install an exhaust stack at ESL from the existing PDU pellet mill and connect to existing natural gas supporting the PDU equipment. The exhaust stack would be an 8 inch diameter stack that would penetrate a wall and then extend approximately 6 feet higher than the ESL roof. The wall penetration would be sealed with flashing and a sealant.

The project is estimated to occur in the September, 2014 time frame for an estimated cost of \$20,000.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions: Mobile sources such as welders may be used temporarily (less than six months) at the site. These sources will be required to meet Idaho Administrative Procedures Act (IDAPA) 58.01.01.625 visible emission opacity requirements.

Air emissions from PDU activities are included in existing Air Permitting Applicability Determination (APAD) APAD INL-10-005 and APAD INL-10-005 Amendment. Addition of this stack will not challenge the emission limits stated in the APADs.

Generating and Managing Waste: Typical construction debris such as wood, wire, scrap metal, packaging material, etc., would be generated during the project. Hazardous waste is not anticipated, however, there is a possibility of generating hazardous waste from adhesives used to seal the roof. All waste would be managed through Waste Generator Services.

Releasing Contaminants: Typical construction chemicals such as fuels adhesives, lubricants, etc., would be used on the project. Associated material safety data sheets must be available. The chemical coordinator would track these chemicals in the INL Comply Plus chemical management system. Chemical use has the potential for small amounts of air emissions and spills. Any spills that occur would be reported to the spill notification team, environmental support, and cleaned up.

Using, Reusing, and Conserving Natural Resources: All materials would be reused and/or recycled where economically practicable and as accepted by the customer. All applicable waste would be diverted from disposal in the landfill where conditions allow. New equipment would meet either the Energy Star or SNAP requirements as appropriate (see <http://www.sftool.gov/GreenProcurement/ProductCategory/14>). In addition, the project would practice sustainable acquisition, as appropriate and practicable, by procuring construction materials that are energy efficient, water efficient, are bio-based in content, environmentally preferable, non-ozone depleting, have recycled content, or are non-toxic or less-toxic alternatives.

SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 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 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 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 B to Subpart D, B1.31 "Installation or relocation of machinery and equipment".

Justification: The proposed action is consistent with categorical exclusion 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 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: 8/26/2014