

# DOE-ID NEPA CX DETERMINATION

## Idaho National Laboratory

### SECTION A. Project Title: Process Demonstration Unit (PDU) Support Structure

### SECTION B. Project Description:

The Process Demonstration Unit (PDU) is a modular feedstock pre-processing system to study ways to densify and stabilize materials including wheat straw, barley straw, corn stover, wood products and other biomaterials into a feedstock for biorefineries. The PDU is located at the Energy Systems Laboratory (ESL [IF-685]) at Idaho National Laboratory's (INL's) Research and Education Campus in Idaho Falls (IF), Idaho. A covered storage area for raw materials is needed to protect raw materials used in the PDU from weather and other elements. To meet this need, INL proposes to erect and use two removable tension-fabric structures on an asphalt paved area north of IF-685. Each steel-framed structure would be approximately 60 feet by 75 feet and would have a foundation formed from removable, concrete jersey bouncers. The structure and all associated activities would be restricted to previously disturbed and paved areas.

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

**Air Emissions** - This project has the potential to generate air emissions from fugitive dust. Steps must be taken to control fugitive dust in accordance with Idaho Administrative Procedures Act (IDAPA) 58.01.01.650, "Rules for Control of Fugitive Dust." These include, when appropriate, use of dust control measures such as water application and logging the date, time, type of dust suppressant and amount applied, in facility records.

**Generating and Managing Waste** - Waste from construction activities may include wooden forms and general construction debris. This non-hazardous waste will be recycled to the extent practicable. Waste generated during routine operations may include scrap wood, metal, lubricants, and cleaning materials. Hazardous and industrial waste will be managed by Waste Generator Services (WGS) in accordance with Battelle Energy Alliance, LLC (BEA) procedures.

**Releasing Contaminants** - Small amounts of contaminants will be released to the atmosphere due to welding. Non-invasive/non-noxious biomass materials may escape from bales and other storage media. Biomass material identified by the state of Idaho as noxious may not be received for storage or processing. Biomass material identified as invasive by the state of Idaho must be approved in the Energy Crop Invasive Species Permit prior to receipt and it must be stored/managed in accordance with Permit Requirements.

Although not anticipated, small spills of substances (e.g., petroleum and/or other fluids) may occur. Any releases would be cleaned up, containerized and provided to WGS (881-6633, 881-6634) for management/disposition. The spill notification team (241-6400) and environmental support (680-5844) would also be notified.

**Using, Reusing, and Conserving Natural Resources** - Scrap material, such as wood and metal, will be recycled to the extent practical. All applicable waste will be diverted from disposal in the landfill when possible. Project personnel will use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible. The project will 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 (<https://sftool.gov/green-products/0?agency=7>).

### SECTION D. Determine the Recommended Level of Environmental Review (or Documentation) and Reference(s): 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 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 B to subpart D, items 1.15 "Support buildings."

**Justification:** Project activities described in this EC are consistent with 10 CFR 1021, Appendix B to Subpart D, item B1.15 "Siting, construction or modification, and operation of support buildings and support structures (including, but not limited to, trailers and prefabricated and modular buildings) within or contiguous to an already developed area (where active utilities and currently used roads are readily accessible). Covered support buildings and structures include, but are not limited to, those for office purposes; parking; cafeteria services; education and training; visitor reception; computer and data processing services; health services or recreation activities; routine maintenance activities; storage of supplies and equipment for administrative services and routine maintenance activities; security (such as security posts); fire protection; small-scale fabrication (such as machine shop activities), assembly, and

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testing of non-nuclear equipment or components; and similar support purposes, but exclude facilities for nuclear weapons activities and waste storage activities covered in B1.10, B1.29, B1.35, B2.6, B6.2, B6.5, B6.6, and B6.10 of this appendix."

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: 2/4/2015