# DOE-ID NEPA CX DETERMINATION Idaho National Laboratory

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CX Posting No.: DOE-ID-INL-21-074

SECTION A. Project Title: Facility Safety and Environmental Improvements at Idaho National Laboratory

# **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, (BEA) 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. In addition to the INL Site facilities, INL manages and operates leased and DOE-owned laboratories and administrative offices in Idaho Falls.

#### **Purpose**

BEA and its subcontractors perform safety and environmental improvements of a facility (including but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. These improvements will be conducted at INL in accordance with the categorical exclusion (CX) referenced in 10 CFR 1021, Appendix B, CX B2.5, "Facility Safety and Environmental Improvements." Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; replacement of aboveground or below ground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR Part 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities"; and 40 CFR Part 280, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks"). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel).

This CX covers recurring actions that meet the requirements and conditions that are "integral elements" for applying CXs (see 10 CFR 1021, Appendix B to Subpart D, B. Conditions that are Integral Elements of the Classes of Actions in Appendix B). Actions would not individually or cumulatively have significant effect on the human environment; would fit CX definitions, including any caveats for use of the CX; would not have "extraordinary circumstances" [see 10 CFR 1021.410(b)(2)] that may affect the significance of environmental effects of the proposal; and would not be divided into smaller actions (segmentation) to meet CX definitions. CXs include the foreseeable activities necessary for implementing actions, such as award of grants and contracts, site preparation, purchase and installation of equipment, and associated transportation activities [10 CFR 1021.410(d)]. INL's Program Environmental Leads (PELs) and NEPA Technical Points of Contact (TPOCs) would verify that applicable requirements and conditions are met prior to applying this CX to proposed actions. This includes compliance with the Clean Air Act, Clean Water Act, and other applicable laws and regulations; as well as conformance with applicable NEPA Environmental Assessments (EAs) or Environmental Impact Statements (EISs), associated Findings of No Significant Impact (FONSIs), Records of Decision (RODs), designations, policies, and procedures.

These activities may consist of typical actions for the purpose of implementing safety and environmental improvements of a facility. In accordance with the limitations on CX B2.5- facility safety and environmental improvements imposed by 10 CFR Part 1021, Appendix B to Subpart D, none of the activities addressed in this ECP include the following:

- 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)
- · Actions that change the scope or mission of a facility
- Actions that may cause a significant increase in environmental impacts of a facility
- Actions at EBR-I beyond normal custodial work
- Actions that require a permit or permit modification from a regulator. In the event a new or modified permit is required, a project specific ECP must be prepared
- 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, Undertakings determined during the National Historic Preservation Act Section 106 process that may affect historic properties, 36 CFR 800.4(d)(2), 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 1) current or potential sagebrush habitat anywhere on the INL Site outside of current facility footprints, 2) native or
  naturalized vegetation within the INL boundary, Sagebrush Steppe Ecosystem Reserve, or the area between Specific Manufacturing Capability
  (SMC) and Test Area North (TAN), 3) soil in the INL storm water corridor, or 4) disturb vegetation or soils in the CITRC area (including previously
  disturbed areas at CITRC)

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- Activities that generate transuranic waste (TRU), high-level waste (HLW), Greater-Than-Class C low-level waste (GTCC-LLW), or any waste with no path for disposition
- An upgrade or improvement that would extend the useful life of a facility
- Activities performed by contractors other than BEA, including University partnerships

"Previously disturbed or developed area" refers to land that has been changed such that its functioning ecological processes have been and remain altered by human activity. The phrase encompasses areas that have been transformed from natural cover to nonnative species or a managed state, including, but not limited to, utility and electric power transmission corridors and rights-of-way, and other areas where active utilities and currently used roads are readily available.

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

#### Air Emissions

Activities addressed by this ECP may require an Air Permitting Applicability Determination (APAD) and have the potential to contribute to air emissions through:

- Generating air pollutants, including but not limited to radionuclides, chemical and combustion emissions. Some activities may involve stationary air emission sources, including stationary internal combustion engines.
- Generating hazardous and radiological emissions, such as by operation of fuel burning equipment, decontamination work, use of maintenance products that contain hazardous constituents, and disturbance of contaminated soils.
- Distributing, excessing, or disposing of appliances containing refrigerants.
- Maintaining, servicing, or repairing stationary heating, ventilation, air conditioning and refrigeration equipment.
- Maintaining, testing, or disposing of halon-containing equipment or halon.
- Purchasing equipment containing refrigerants or halon.
- Acquiring and dispositioning chemicals.
- Working with asbestos-containing materials (ACM) that could release friable material to the air.
- Generating fugitive dust or other fugitive emissions.
- Purchasing, relocating, operating, modifying, or maintaining portable air emission sources, including non-road internal combustion engines.

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

Activities addressed by this ECP have the potential to contaminate waters of the United States (U.S.) or groundwater through:

- Construction or modification of drinking water systems and cross connections at the INL and in-town facilities
- Maintaining, repairing, or altering drinking water systems and cross connection at the INL and in-town facilities
- Using drinking water systems and cross connections at the INL and in-town facilities
- Constructing or modifying sewage and other reuse systems
- Maintaining or repairing septic tanks or septic systems
- Discharging Wastewaters
- Managing storm water discharges.

### **Disturbing Cultural or Biological Resources**

Activities addressed by this ECP have the potential to disturb cultural or biological resources through:

- · Constructing or modifying facilities, structures, equipment or processes
- Maintaining or repairing facilities, structures, equipment or processes
- Management of migratory birds and bird nests on the INL and at in-town facilities

# **Generating and Managing Waste**

Activities addressed by this ECP have the potential to generate waste requiring management through:

Constructing or modifying facilities, equipment or processes at permitted or interim status Resource Conservation Recovery Act (RCRA) facilities

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- Decontaminating equipment containing or contaminated with polychlorinated biphenyls (PCBs) (From equipment manufactured before 1982)
- Maintaining equipment containing or contaminated with PCBs (From equipment manufactured before 1982)
- Disposing asbestos-containing material
- Disturbing asbestos or removing asbestos-containing material
- Generating wastes.

#### Releasing Contaminants

Activities addressed by this ECP have the potential to release contaminants through:

- Acquiring, using, storing, and dispositioning chemicals
- Managing and dispositioning excess property and materials
- Reporting and cleaning up spills and releases
- Managing elemental lead
- Removing lead from service or from a structure.

### Using, Reusing, and Conserving Natural Resources

Activities addressed by this ECP have the potential for use, reuse and conservation of natural resources related to:

- Generating greenhouse gasses
- Building energy use
- Consuming potable, industrial or irrigation water
- Generating storm water
- Generating landfill waste or construction and demolition wastes
- Generating recyclable materials
- Providing an opportunity to engage in sustainable acquisition practices.

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 B2.5 "Facility safety and environmental improvements."

**Justification:** The proposed activities are consistent with CX B2.5 "Safety and environmental improvements of a facility (including, but not limited to, replacement and upgrade of facility components) that do not result in a significant change in the expected useful life, design capacity, or function of the facility and during which operations may be suspended and then resumed. Improvements include, but are not limited to, replacement/upgrade of control valves, in-core monitoring devices, facility air filtration systems, or substation transformers or capacitors; addition of structural bracing to meet earthquake standards and/or sustain high wind loading; and replacement of aboveground or belowground tanks and related piping, provided that there is no evidence of leakage, based on testing in accordance with applicable requirements (such as 40 CFR 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities" and 40 CFR 280, "Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks"). These actions do not include rebuilding or modifying substantial portions of a facility (such as replacing a reactor vessel)."