

**DOE-ID-NEPA CX DETERMINATION  
IDAHO NATIONAL LABORATORY**

**SECTION A. Project Title:** Idaho National Laboratory (INL) Routine Maintenance Activities (Overarching)

**SECTION B. Project Description:**

The purpose of this overarching Environmental Checklist (EC) is to address activities that would meet the intent of the categorical exclusion (CX) B1.3 as described in 10 CFR 1021, Appendix B to Subpart D. These activities would consist of typical and non-typical types of actions, such as routine maintenance, minor modifications, and custodial service activities required to support safe and efficient plant operation, even if performed on an infrequent basis, and would occur on the INL Site and at those in town (Idaho Falls) facilities. These activities would be performed by INL Facility and Site Services personnel or off-site contractors. None of these activities would be performed as part of or in support of a larger project requiring an environmental assessment (EA) or an environmental impact statement (EIS). Activities not covered by this EC include: a) actions which will change the scope or mission of a facility, and b) actions which could cause a significant increase in environmental impact. This document would not support the expansion of a laboratory facility for operational purposes.

Routine maintenance includes activities and custodial services for buildings, structures, rights-of-way, infrastructures (for example, pathways, roads, and railroads), vehicles and equipment, and localized vegetation and pest control, during which operations may be suspended and resumed. Custodial services are activities to preserve facility appearance, working conditions, and sanitation, such as cleaning, window washing, lawn mowing, trash collection, painting, and snow removal. Routine maintenance activities, corrective (that is, repair), preventive, and predictive are required to maintain and preserve buildings, structures, infrastructures, and equipment in a condition suitable for a facility to be used for its designated purpose. Routine maintenance may result in replacement to the extent that the replacement is in kind and is not a substantial upgrade or improvement. In kind replacement includes installation of new components to replace outmoded components if the replacement does not result in a significant change in the expected useful life, design capacity, or function of the facility. Routine maintenance does not include replacement of a major component that significantly extends the originally intended useful life of a facility (for example, it does not include the replacement of a reactor vessel near the end of its useful life). Those conducting maintenance activities will use the instructions from Laboratory-wide Procedure (LWP)-6200 'Maintenance Integrated Work Control Process' and as appropriate all applicable instructions found in LWP-8000 and checked in Section D.

Routine maintenance activities include, but are not limited to:

- A. Repair of facility equipment, such as lathes, mills, pumps, and presses*
- B. Doors and window repair or replacement*
- C. Wall, ceiling, or floor repair*
- D. Re-roofing*
- E. Plumbing, electrical utility, and telephone service repair*
- F. Routine replacement of high-efficiency particulate air (HEPA) (see def.) filters*
- G. Inspection and/or treatment of currently installed utility poles*
- H. Repair of road embankments*
- I. Repair or replacement of fire protection sprinkler systems*
- J. Road and parking area resurfacing, including construction of temporary access to facilitate resurfacing*
- K. Erosion control and soil stabilization measures (such as reseeding and re-vegetation)*
- L. Surveillance and maintenance of surplus facilities in accordance with DOE Order 5220.2, 'Radioactive Waste Management'*
- M. Repair and maintenance of transmission facilities, including replacement of conductors of the same nominal voltage, poles, circuit breakers, transformers, capacitors, crossarms, insulators, and downed transmission lines, in accordance, where appropriate, with 40 CFR 761*
- N. Routine testing and calibration of facility components, subsystems, or portable equipment (including but not limited to, control valves, in-core monitoring devices, transformers, capacitors, monitoring wells, lysimeters, weather stations, and flumes)*
- O. Routine decontamination of the surfaces of equipment, rooms, hot cells, or other interior surfaces of buildings (by such activities as wiping with rags, using strippable latex, and minor vacuuming) including removal of contaminated intact equipment and other materials (other than spent nuclear fuel or special nuclear material in nuclear reactors).*

**SECTION C. Environmental Aspects / Potential Sources of Impact:**

The environmental aspects identified above and discussed below are applicable to maintenance activities on the INL Site. These activities often include the use of maintenance chemicals, disturbance of hazardous materials, operation of fuel burning equipment, and work within culturally and biologically sensitive areas. All of these potential environmental aspects are governed by Federal, State, and local regulations and are embodied in INL procedures such as LWP-8000 'Environmental Instructions for Facilities, Processes, Materials, and Equipment' which address the appropriate way to deal with these aspects and their associated impacts.

By definition, the projects covered by this EC are maintenance only, and do not include activities that expand or increase the size of facilities, infrastructure, or processes.

**Air Emissions** – Fugitive dust may be generated during routine maintenance activities. Hazardous and radiological emissions may also be generated during maintenance activities such as operation of fuel burning equipment, decontamination work, use of maintenance products that contain hazardous constituents, and disturbance of contaminated soils.

**Discharging to Surface-, Storm-, or Ground Water** – Some maintenance activities have the potential to contaminate surface water, groundwater, or storm water that could possibly reach Waters of the U.S.

**Disturbing Cultural / Biological Resources** – Routine Maintenance activities will be conducted both inside and outside of facility fence lines and may involve off-road travel, construction or demolition work, some of which may involve historic structures, equipment staging and storage, and other soil disturbance activities that could impact both cultural and biological resources.

**Generating and Managing Waste** – Routine Maintenance activities may result in the generation of a variety of waste materials including industrial, hazardous, radioactive, and mixed waste. Asbestos and PCB contaminated material may also be encountered during maintenance work and remediation projects (see below):

- **Industrial waste** includes typical maintenance wastes such as boxes, wood, wiring, paper, insulation and non-RCRA metals. Potential waste materials will be evaluated for waste minimization prior to generation and industrial waste generated during maintenance activities will be evaluated for recycling opportunities prior to disposal at the INL Landfill Complex.
- **Hazardous wastes** may be generated during maintenance operations on systems or equipment containing hazardous chemicals or by using hazardous chemicals to clean or decontaminate equipment and systems. RCRA hazardous metal waste may also be generated by discovery during maintenance work or by replacement of outdated equipment. In all cases, potential and existing hazardous waste streams will be evaluated for minimization potential and recycling opportunities prior to disposal.
- **Radioactive waste** may be generated during maintenance activities inside radiologically contaminated areas. Typical types of radioactive waste would include anti-contamination clothing, radiological enclosures and barriers, contaminated materials and components, contaminated HEPA filters, and contaminated absorbent used to clean up small spills. These wastes will be packaged and disposed of through Waste Generator Services (WGS).
- **Mixed waste** may be generated during maintenance on equipment containing both hazardous and radioactive materials. Waste minimization techniques will be practiced and mixed waste will be stored, treated and disposed in accordance with 40 CFR 268 Land Disposal Restriction (LDR) standards.
- **Asbestos waste** may be generated when performing maintenance on equipment or structures that contain asbestos-containing material (ACM) such as pipe insulation, gaskets, flanges, walls, roofing, and flooring. Submittal of Form 450.04 (Asbestos Removal Notification) to DOE-ID is required prior to any asbestos removal; and submittal of a renovation/demolition notification to EPA and IDEQ must be made at least 10 working days in advance of a regulated asbestos abatement project which exceeds the threshold quantities (160 square feet or 260 linear feet or 35 cubic feet). Asbestos waste will be disposed at the asbestos portion of the INL Landfill Complex.
- **PCB wastes** may be generated while performing maintenance on equipment such as lathes, mills, pumps, presses, air compressors, capacitors and electrical equipment manufactured prior to 1980. PCB wastes will be packaged and disposed of through WGS.

**Releasing Contaminants** – There is the potential to release small amounts of contaminants to the environment during routine maintenance activities. These may include air emissions from the use of fuel burning equipment, decontamination operations, asbestos remediation, and maintenance activities involving soil disturbance. Contaminant release to water and soil may also occur from inadvertent leaks or spills.

**Using, Reusing, and Conserving Natural Resources** – Routine maintenance activities may result in waste materials (metal, wood etc.) that can be reused or recycled. When components or equipment are replaced, the old equipment or parts of the equipment can often be reused or recycled. The INL will evaluate routine maintenance activities for reuse and/or recycling opportunities, and will incorporate, wherever possible, replacement parts for equipment and systems that are more efficient users of energy, water, and other natural resources.

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**SECTION D. Determine the 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.

Note: 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, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment 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) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor "related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

References: 10 CFR 1021, Appendix B to Subpart D, B1.3, Routine maintenance/custodial services for buildings, structures, infrastructures, equipment.

Justification: This EC covers both typical and non-typical types of actions, such as routine maintenance, minor modifications, and custodial services required to support safe and efficient plant operations even if performed on an infrequent basis. None of the activities will be performed as part of or in support of a larger project requiring an environmental assessment or environmental impact statement. Proposed activities will not include actions that will change the scope or mission of a facility and actions that will cause a significant increase in 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 10/19/2010.