

DOE-ID NEPA CX DETERMINATION

Idaho National Laboratory

SECTION A. Project Title: Idaho National Laboratory Site Characterization and Environmental Monitoring (Overarching) - Revision 2

SECTION B. Project Description and Purpose:

The purpose of the revision to this environmental checklist (EC) is to update activities allowed and to capture new requirements.

The proposed action would include site-wide sampling, monitoring, and characterization activities at the Idaho National Laboratory (INL). Site-wide sampling, monitoring, and characterization activities are needed to support INL operations, including day-to-day monitoring activities (i.e., measurement of liquid or gaseous effluents for purposes of characterizing and quantifying contaminants, collection and analysis of samples, direct measurement of air, soil, water, biota and other media, etc.); characterization of sites suspected of being contaminated with hazardous, radioactive, and mixed wastes, and characterization of sites to support environmental impact analyses. Data developed from sampling and monitoring activities assists in identifying and delineating contaminated areas. Data collected may verify process knowledge and identify particular technologies that could be applicable for remediation of contaminated sites. Data collected during routine sampling, monitoring, and characterization activities demonstrate compliance with federal, state, and local laws and regulations, and Department of Energy (DOE) Orders, and is reported annually.

Proposed activities would include, but not be limited to, the following: (a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and temperature gradient), geochemical, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing;

- a) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools);
- b) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices
- c) in wells;
- d) Aquifer and underground reservoir response testing;
- e) Installation and operation of ambient air monitoring equipment;
- f) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes);
- g) Sampling and characterization of water effluents, air emissions, or solid waste streams;
- h) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources);
- i) Sampling of flora or fauna; and
- j) Archeological, historic, and cultural resource identification in compliance with 36 Code of Federal Regulation (CFR) part 800 and 43 CFR part 7.

The proposed action would support sampling, environmental monitoring, and site characterization that may fall under the Rules for the Reclamation and Reuse of Municipal and Industrial Wastewater (Idaho Administrative Procedures Act [IDAPA] 58.01.17), the City of Idaho Falls Industrial Wastewater Acceptance permit, Clean Water Act (CWA), Safe Drinking Water Act (SDWA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act (TSCA), the National Historic Preservation Act (NHPA), DOE Orders 450.1 and 5400.5, the Clean Air Act (CAA) (IDAPA 58.01.01) and DOE Guidance document 0173T. For new CERCLA sites a specific EC would need to be generated.

SECTION C. Environmental Aspects or Potential Sources of Impact:

Air Emissions

Fugitive dust may be generated. All reasonable precautions will be taken to prevent particulate matter from becoming airborne.

Emissions may also be generated during activities such as operation of fuel burning equipment (e.g., portable generators), use of products that contain hazardous constituents, and disturbance of contaminated soils.

Discharging to Surface-, Storm-, or Ground Water

Liquid effluent may be produced from sampling actions and equipment decontamination. Liquids would be contained, analyzed, and managed according to hazardous or radioactive characteristics. To the extent possible, effluent would be treated (if required) to release standards in Plan (PLN)-8104 or facility specific release standards. If release standards could not be achieved, the waste would be treated by an approved treatment process at facilities currently handling this type of waste.

Disturbing Cultural or Biological Resources

Soil disturbance could result from sampling or monitoring activities (i.e., collecting surface soil samples, drilling boreholes, etc.). Most activities would take place in previously disturbed areas. However, the potential exists to disturb cultural and biological resources.

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Generating and Managing Waste

Small quantities of non-contaminated industrial waste could be generated during sampling and monitoring activities. Waste Generator Services (WGS) would characterize and manage all waste.

Releasing Contaminants

Small quantities of chemicals would be used for decontamination of equipment, operation of a small-scale laboratory, and sample preservation. These chemicals would be reviewed by an Industrial Hygienist prior to use and managed according to company procedures. Products such as antifreeze, lube oils, gasoline, and diesel fuel would be used in the normal operation of engines and other machinery. Chemical inventory, use, and release would be reported in accordance with Superfund Amendments and Reauthorization Act (SARA) Title III.

Project activities could occur within the boundaries of as CERCLA site in support of ongoing remedial investigations/feasibility activities, and/or as part of a CERCLA response action as identified in the Federal Facility Act and Consent Order and implementing action plan for INL. Project personnel would consult with Idaho Cleanup Project personnel to establish or verify actions required to protect personnel and the environment when working within or near a CERCLA Area.

Using, Reusing, and Conserving Natural Resources

All applicable waste would be diverted from disposal in the landfill when possible. Project personnel would use every opportunity to recycle, reuse, and recover materials and divert waste from the landfill when possible.

SECTION D. Determine Recommended Level of Environmental Review, Identify Reference(s), and State Justification: 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, B3.1 "Site characterization and environmental monitoring"

Justification: Project activities are consistent with 10 CFR 1021, Appendix B, B3.1 "Site characterization and environmental monitoring (including, but not limited to, siting, construction, modification, operation, and dismantlement and removal or otherwise proper closure (such as of a well) of characterization and monitoring devices, and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis). Such activities would be designed in conformance with applicable requirements and use best management practices to limit the potential effects of any resultant ground disturbance. Covered activities include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. (This class of actions excludes activities in aquatic environments. See B3.16 of this appendix for such activities.) Specific activities include, but are not limited to:

- a) Geological, geophysical (such as gravity, magnetic, electrical, seismic, radar, and engineering surveys and mapping, and the establishment of survey marks. Seismic techniques would not include large-scale reflection or refraction testing;
- b) Installation and operation of field instruments (such as stream-gauging stations or flow-measuring devices, telemetry systems, geochemical monitoring tools, and geophysical exploration tools);
- c) Drilling of wells for sampling or monitoring of groundwater or the vadose (unsaturated) zone, well logging, and installation of water-level recording devices in wells;
- d) Aquifer and underground reservoir response testing; (e) Installation and operation of ambient air monitoring equipment;
- e) Sampling and characterization of water, soil, rock, or contaminants (such as drilling using truck- or mobile-scale equipment, and modification, use, and plugging of boreholes);
- f) Sampling and characterization of water effluents, air emissions, or solid waste streams;
- g) Installation and operation of meteorological towers and associated activities (such as assessment of potential wind energy resources);
- h) Sampling of flora or fauna; and
- i) Archeological, historic, and cultural resource identification in compliance with 36 CFR part 800 and 43 CFR part 7.

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: 1/25/2016