

SECTION A. Project Title: Idaho Completion Project Environmental and Regulatory Service Activities

SECTION B. Project Description

The proposed action addresses the site-wide sampling and monitoring and waste characterization sampling programs that support the Idaho Completion Project (ICP) operations. Actions include:

- groundwater monitoring,
- 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, systems and containers suspected of being contaminated with hazardous, radioactive, and mixed wastes, and
- collection and/or shipment of various media types for multiple organizations.

Data developed from sampling and monitoring activities will:

- assist environmental restoration in identifying and delineating contaminated areas,
- verify process knowledge and identify particular technologies that could be applicable for remediation of contaminated sites,
- provide information to complete waste disposition, ascertaining compliance to waste acceptance criteria for treatment, storage, and disposal facilities including interim and permitted facilities and 90-day accumulation areas, and
- develop data to show compliance with federal, state, and local laws and regulations, and Department of Energy (DOE) Orders.

Proposed activities will include, but not be limited to, the following:

- (a) travel to conduct sampling or monitoring activities requiring driving where roads exist or two track Priority 4 roads exist, or travel by foot on the INL where no roads exist, **(Travel by vehicle in essentially undisturbed area where no roads or two track Priority 4 roads exist requires submittal of additional, activity-specific environmental checklists (ECs) prior to initiating field activities);**
- (b) collection of surface water such as, rivers, streams, ponds, discharge outfalls, impoundments; and other open systems;
- (c) collection of solid, liquid, or air samples from open systems, such as municipal landfills, hazardous waste dumps, irrigation discharge, soil sludge and sediment, and bulk material;
- (d) collection of solid, liquid, or air samples from closed systems such as containers, where process or other knowledge indicates that no radioactive materials are present and that no hazardous materials are present that could result in airborne releases or sample collection from closed systems that potentially do contain radioactive or hazardous contaminants that could become airborne during sampling activities (this work will be managed using engineering controls such as a glovebox);
- (e) collection of samples from raw water systems and potable water systems;
- (f) geological, geophysical, geochemical, and engineering surveys and mapping including the establishment of survey marks;
- (g) operation of portable field instruments, such as stream-gauging stations or flow measuring devices, telemetry systems, geochemical monitoring devices and similar portable devices, provided that preparation of the site such as addition of permanent mounting pads is not required; **(Construction and operation of essentially permanent field measurement devices, such as stream-gauging weirs, meteorological towers, or similar installations that are not considered portable and that require site preparation prior to use, requires submittal of additional, activity-specific environmental ECs, prior to initiating activities);**
- (h) installation and operation of ambient air monitoring equipment [i.e., sampling and/or monitoring regulated and/or non-regulated stack emissions, suspended particulates, organics, volatile organic compounds, and radioactivity];
- (i) construction of temporary sample and equipment decontamination pads to support proposed actions;
- (j) analysis of samples by an approved laboratory that has undergone a liability assessment; and
- (k) disposal of samples in compliance with applicable regulations.

The proposed action will support sampling and environmental monitoring under the Clean Water Act, Safe Drinking Water Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Resource Conservation and Recovery Act (RCRA), and State of Idaho rules and regulations, carried out within a Waste Area Group (WAG), will support the remedial investigation/ feasibility studies (RI/FS) under CERCLA and appropriate RCRA actions. These actions will not unduly limit the choice of reasonable alternatives (by permanently altering substantial site area or by committing large amounts of funds to the scope of the remedial alternatives). For CERCLA investigations, investigation-derived waste (IDW) will be treated, stored, and/or disposed at appropriate facilities. Should treatment, storage and/or disposal not be available, those wastes will be stored either at the area of contamination pending a CERCLA Record of Decision for the particular WAG or as CERCLA-IDW at a designated area. Storage of IDW has been determined to be in compliance with the Land Disposal Restriction storage prohibition. Storage of IDW outside of the immediate area must go to an on-site treatment, storage, and disposal facility.

SECTION C. Environmental Aspects / Potential Sources of Impact

1. Air Pollutants – Fugitive dust emissions may be generated from setting up equipment and decontamination pads. All fugitive emissions should be controlled using applicable guides and procedures.

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Sampling activities that could potentially result in airborne releases of radioactive or hazardous contaminants will be controlled using engineering controls such as a glovebox.

2. Asbestos Emissions – Project personnel may encounter asbestos during project activities (i.e., sampling hazardous or mixed waste sites). If regulated asbestos containing materials are expected to be or are encountered, comply with applicable guides and procedures.

4. Chemical Use and Storage – Small quantities of chemicals will be used for decontamination of equipment and sample preservation. In addition, petroleum products such as antifreeze, lube oils, gasoline, and diesel fuel will be used in the normal operation of machinery. Project personnel will use non-hazardous chemical substitutes in the place of hazardous chemicals as long as the non-hazardous substitutes meet the requirements/ specifications of the requester. Spill prevention/ minimization measures will be employed during storage and use of chemicals/fuels.

5. Contaminated Site Disturbance – Project activities will occur within the boundaries of CERCLA sites in support of ongoing RI/FS activities, and/or as part of a response action under CERCLA as identified in the FFA/CO and implementing action plan for the INL. Actions that disturb CERCLA soils will be assessed to determine if a CERCLA notice of disturbance (NSD) is required per applicable guides and procedures.

6. Cultural/Historical Resource Disturbance – Prior to performing sampling and monitoring activities (i.e., collecting surface soil samples, drilling of boreholes, etc.) in areas outside of INL facility boundaries, project personnel must obtain an archaeological clearance.

All vehicle travel will be restricted to existing roads and two-track Priority 4 roads to prevent impact to cultural resources in unsurveyed areas. The Stop Work will be evoked immediately should unusual materials (i.e., bones, flakes of obsidian, “arrowheads” or other artifacts, rusty cans, etc.) be encountered.

7. Discharge to Wastewater Systems or Groundwater – Monitoring of liquid effluents and groundwater is conducted to ensure CWI-operating facilities and operations are properly maintained and comply with EPA and State of Idaho regulatory requirements. Water will be used for standard drilling operations, aquifer response testing, characterization of in-situ soil hydraulic properties, lab activities, and decontamination of equipment by wiping, washing, and/or steam use. Temporary decontamination pads will be constructed, using geomembrane and railroad ties or similar methods to collect the decontamination water. Contaminated water will be disposed according to the hazardous characteristics of the effluent and applicable regulations and guidelines.

8. Drinking Water Contamination – Monitoring is conducted to ensure CWI-operating drinking water systems are properly maintained and comply with State of Idaho and DOE requirements. Facilities are inspected for cross connections with non-potable water and backflow devices are tested to ensure proper operation.

9. Hazardous /Mixed Waste Generation and Management – Small quantities of hazardous waste may be generated from project activities. Small quantities of mixed waste (liquids and /or solids) may be generated during decontamination activities. Treatment, storage, and disposal options either on-site or off will depend on the waste stream generated and treatment options available at the time of generation.

10. Hazardous /Rad. Material or Waste Handling and Trans. - A Hazardous Waste Determination will be performed on all generated waste to apply the appropriate management practices. Waste streams will be evaluated to determine if any of these materials can be recycled or reused and will be evaluated to implement actions for minimizing waste generation. Samples returned to Environmental and Regulatory Services that no longer meet the sample exclusion must be managed as solid waste.

11. Industrial Waste Generation and Management – Industrial waste in the form of plastic tarps, tape, plywood, uncontaminated personal protective equipment, contamination control material, and other sampling equipment that cannot be reused will be disposed of in the INL Landfill Complex. This waste will include unused samples and sample residues returned from laboratories that are not contaminated.

12. Interaction with Wildlife/Habitat - Soil disturbance is anticipated to be minimal. Revegetation will be implemented, if necessary. No new roads will be created and all vehicles will remain on existing road ways and parking areas.

A nesting bird survey is required for any vegetation removal between April 15 and September 1.

14. PCB Contamination – Samples and wastes generated during sampling and monitoring operations of regulated PCBs (above the threshold limit of 50 ppm) will be managed in compliance with the applicable guides and procedures.

15. Radioactive Materials Use and Storage – To support operation of the in-situ gamma spectrometry units, sealed sources will be stored and used.

16. Radioactive Waste Generation and Management – Sampling and monitoring activities may generate small quantities of radioactive liquids and solids during investigation of contaminated sites, equipment decontamination, or packaging and contamination control processes. This waste stream will be disposed of at a permitted facility.

19. Work within areas Subject to Flooding – Since the sampling and monitoring work is planned to occur in several unidentified locations throughout the INL site, the potential exists for the activities to occur within the 100-year floodplains of the Big Lost River,

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Birch Creek, or the overland flow 100-year floodplains of INTEC and RWMC. However, the sampling and monitoring work described in this EC is not expected to have a significant impact on the 100-year floodplains described above and the work is not expected to disrupt floodplain dimensions, elevations, flow volumes, or velocities of the Big Lost River, Birch Creek or the INTEC or RWMC watersheds. If the hypothetical flood(s) was (were) to occur, access to the work areas may be temporarily interrupted. Work can resume after floodwaters subside as access allows.

<p>SECTION 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.</p>

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: B3.1, Site characterization and environmental monitoring

Justification: The proposed action is an ongoing program that supports ICP Operations. The sampling and monitoring actions are categorically excluded from further NEPA review.

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 March 4, 2011