SECTION A. Project Title: INL – Idaho Cleanup Project Core Environmental Compliance Activities

SECTION B. Project Description

The proposed action addresses the site-wide sampling and monitoring and waste characterization sampling programs that support the Idaho Cleanup Project (ICP) Core 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 or containing hazardous, radioactive, and mixed wastes,
- collection and/or shipment of various media types for multiple organizations, and
- drinking water backflow prevention assembly testing and cross connection control.

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 hazardous waste determinations, ascertaining compliance to waste acceptance criteria for treatment, storage, and disposal facilities including interim and permitted facilities and 90-day accumulation areas, and
- demonstrate 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;
(b) collection of surface water from 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 contain radioactive or hazardous contaminants that could become airborne during sampling activities (this work will be managed using engineering controls);
(e) collection of samples from wastewater 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;
(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;
(k) disposal of samples in compliance with applicable regulations;
(l) store equipment, prepare samples, calibrate instruments, preserve samples, and package samples for shipment; and
(m) drinking water backflow prevention assembly testing and cross connection control.

The proposed action will support sampling and environmental monitoring under the Clean Air Act, Toxic Substances Control Act, Clean Water Act, Safe Drinking Water Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), State of Idaho rules and regulations, and

DOE Order 450.1A. Activities, 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.

Portable generators used for temporary power are considered non-road engines and exempted per IDAPA 58.01.01.222.02e as mobile internal combustion engines.

Potential or known disturbances of contaminated soils will be evaluated to determine whether potential fugitive radiological emissions should be calculated for inclusion in annual NESHAP Report.

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

2. Asbestos Emissions – Project personnel may encounter asbestos during project activities (i.e., sampling hazardous or mixed waste sites)..

3. Radionuclide Release/Protection of the Public and the Environment – Sampling activities could release radionuclides to the environment however, the potential is very low. Releases would not exceed as low as reasonably achievable goals as the releases are far below applicable regulatory standards (e.g., NESHAPS) and satisfy the exemption criteria. Controls are addressed under the applicable aspects.

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 characterization activities, and/or as part of a response action under.

Actions that disturb CERCLA soils will be assessed to determine if a CERCLA notice of disturbance (NSD) is required.

Actions that disturb soils outside of INL facility boundaries may come in contact with unexploded ordnances. To avoid contact with unexploded ordnances, a review of the unexploded ordnance maps will be completed to ensure personnel safety.

6. Cultural/Historical Resource Disturbance – Soil disturbance outside defined INL facility boundaries, including off-road vehicle use, has the potential to impact cultural resources and cultural review is required for these activities. All vehicle travel will be restricted to existing roads and two-track Priority 4 roads to prevent impact to cultural resources in un-surveyed 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 Fluor-operated facilities and operations are properly maintained and comply with EPA, State of Idaho, and Department of Energy 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 Fluor-operated 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. 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 characteristics of the waste stream generated and treatment options available at the time of generation.

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. Other waste will include unused samples and sample residues returned from laboratories that are not radioactively contaminated or hazardous waste.

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.

10. 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 Compliance that no longer meet the sample exclusion of 40 CFR 261.4(d) must be managed as solid waste.

11. 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 soil disturbance between April 1 and September 1. Time of day and seasonal restrictions may apply for field work done in the vicinity of known sage grouse leks from March 15 through May 15.

13. 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 40 CFR 761 Subpart D.

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

17. 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, Birch Creek, or the overland flow 100-year floodplains of INTEC and RWMC.

The sampling and monitoring work 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.

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: B3.1, Site characterization/environmental monitoring

Justification: The proposed action is an ongoing program that supports ICP Core Operations. The action will not result in significant effect to the human environment.

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) ☐ Yes ☒ No

Approved by Jason Sturm, DOE-ID NEPA Compliance Officer on July 10, 2017.