SECTION A. Project Title: CPP-684 – Remote Analytical Laboratory Facility Modifications

SECTION B. Project Description

The proposed activities are intended to render CPP-684 Remote Analytical Laboratory (RAL) as a limited access area by removing existing operational functions that are currently performed in the facility. In general, the activities will involve (1) removing the need for building heat and overall reduction of power consumption; (2) converting the existing fire protection system to an anti-freeze charged system; (3) relocating the Remote Distribution Module (RDM), which is part of installed equipment used for the emergency communication system from CPP-684 to CPP-663; and, if pursued, (4) perform specific tasks which would allow a downgrade CPP-684 to a "less than Hazard Category 3". More specifically, these activities include:

1. Physically relocate the RDM cabinet from CPP-684 to CPP-663.
2. Refurbish trailer TR-81 to accommodate wastewater laboratory activities currently being performed within the Cold Laboratory side of CPP-684 (Room 126).
3. Convert the existing CPP-684 wet sprinkler system (water supplied via the firewater supply system) to an anti-freeze charged system.
4. Reconfigure supply and exhaust fan controls to limited air flow capable of maintaining Radiological Control-required air flows necessary for contamination control.
5. Drain and isolate steam, condensate, and water systems to eliminate the potential for freezing liquids within CPP-684. Asbestos-containing material may be encountered during activities which involve disconnecting pipe connections and pipe flanges on steam lines.
6. Relocate the portable total organic carbon (TOC) analysis equipment currently located in CPP-684 to the CPP-605 Instrument Room. The TOC analyzer will be connected to a self-contained fume hood to control emissions from the equipment when in operation.
7. Install heated enclosures around those electronic cabinets, e.g., fire alarm panel, fan controls, whose function/operations are sensitive to cold temperatures. These enclosures may either be purchased from a vendor or fabricated at INTEC.
8. Discontinue using CPP-684 as a sample process and handling facility. CPP-684 occasionally receives INTEC samples [primarily Tank Farm Facility samples] via the pneumatic transfer system to be repackaged for off-site shipment to an analysis laboratory. To provide equivalent sample process handling capabilities, INTEC Operations would refurbish the NWCF (CPP-659) Liquid Sample Cell – Double Door Transfer System or provide other handling capability to allow retrieval of samples for handling/packaging and off-site shipment. Refurbishing the double door transfer system or the provision of an alternate handling capability may involve some physical modifications (parts replacement, for example) to render an operable system to process and handle samples from the NWCF (CPP-659) Liquid Sample Cell.

An additional proposed activity involves the removal and disposal of HEPA filters, and replacing those filters with new HEPA filters in the facility. This action, if performed, would allow downgrading the facility from its current classification as a "Hazard Category 3" to a "less than Hazard Category 3" facility.

Weekly RCRA inspections of laboratory sink and fume hood drain lines and p-traps will continue to be performed as required under RCRA regulations for equipment ancillary to tank systems. The CPP-684 drain lines and p-traps are considered ancillary to the CPP-601 Deep Tanks System, which was formerly part of a permitted treatment, storage, or disposal facility.

SECTION C. Environmental Aspects / Potential Sources of Impact

1. Air Pollutants – The ventilation system is operated to the extent that there will be radiological emissions that need to be reported as part of the annual calendar-year site-wide emissions. The fabrication of metal constructed equipment and components, such as those for electronic cabinets, may involve some welding work. Minor fugitive emissions would be generated from such welding activities. Welding activities are performed primarily at CPP-663.

2. Asbestos Emissions – Asbestos-containing material may be encountered during work involving the disconnection of steam lines (at pipe connections and pipe flanges) in CPP-684. Submit a completed Form 450.04 (Asbestos Removal Notification Form) for approval prior to beginning work that disturbs potential asbestos-containing material, per MCP-3480 (Section 4.12).

4. Chemical Use and Storage - Chemicals may include those to be used during fire suppression system change-out (coolant liquids), installation and removal activities, wastewater laboratory activities, and other modifications and upgrades, as needed. 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.

7. Discharge to Wastewater Systems or Groundwater – The activities associated with the modifications to CPP-684 and TR-81 may generate wastewater that can be discharged into the INTEC Service Waste System or Sanitary Waste System. These waste streams must be evaluated to ensure they meet the requirements of Wastewater Reuse Permit. The waste "generator" and WGS personnel will perform a hazardous waste determination to determine the appropriate management practices and disposition of the waste streams.

8. Drinking Water Contamination – The potable water supply to building CPP-684 will be isolated. This creates the potential for a dead leg in the drinking water distribution system where the water may become stagnant and subject to bacterial contamination. Thus, the isolation point must be as close to the water main as possible [i.e., the length of the dead leg is within six (6) times the pipe's diameter].

9. Hazardous/Mixed Waste Generation and Management - The activities associated with modifications to the RAL facility, TR-81, and CPP-605, and CPP-659 may generate a small volume of hazardous and/or mixed hazardous waste. A hazardous waste determination

will be conducted to determine the appropriate management practices and disposition of the waste streams. Waste streams will be evaluated to determine if any of these materials can be recycled or reused and will be further evaluated to implement actions for minimizing waste generation.

10. Hazardous/Radiological Material and Waste Handling and Transport – Any hazardous waste or radioactive materials or waste produced and managed during facility modification work activities will be properly packaged, labeled, and placarded in accordance with Department of Transportation regulations prior to transport. Hazardous wastes requiring off-site shipment for treatment and/or disposal will be accompanied by a completed hazardous waste manifest. Radioactive wastes and materials that are transported offsite will be accompanied by appropriate bill of lading documentation.

11. Industrial Waste Generation and Management - During facility modifications/upgrades, some excess materials and wastes will be generated. These include but are not limited to replaced parts, scrap metals and materials, electrical wiring, waste waters, empty containers and canisters, and industrial-grade fabrics. Materials that are not recycled will be managed as industrial waste and disposed of at the INL Landfill Complex.

16. Radioactive Waste Generation – It is anticipated that small volumes of low-level waste will be generated. This waste will be turned over to Waste Generator Services for management and disposal. Reusable PPE that can be laundered (rather than disposed of) will be used where practicable.

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: Categorical Exclusion B1.28, Minor activities to place a facility in an environmentally safe condition, no proposed uses.

Justification: The action will place the Remote Analytical Laboratory in inactive status and move the current operations to existing facilities at INTEC.

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 November 6, 2012.