SECTION A. INTEC - Fuel Tank Installation and Operation for Backup Air Compressor

SECTION B. Project Description

Purchase, install, and operate a new aboveground diesel fuel storage tank for the emergency backup air compressor located at the Idaho Nuclear Technology and Engineering Center (INTEC). The backup air compressor is a critical equipment item to supply plant air in support of INTEC operations including the Idaho Waste Treatment Unit (IWTU). Failure of the primary air compressors, without adequate backup capability will result in a shutdown of waste management activities at both INTEC and IWTU. With the pending startup of IWTU waste treatment operations, it has been determined that a diesel fuel tank with enough capacity to support operation of the backup air compressor for an entire weekend period of up to 96 hours without refueling will be required to minimize the potential for a shutdown of operations.

The air compressor is located outdoors on the southeast side of the CPP-606 boiler house. Based on the compressor’s fuel consumption rate under full load, a tank of at least 4,000 gallons will be required to allow for 96 hours of continuous run-time between refueling. The proposed tank will be a commercially manufactured double-walled tank system designed to meet applicable spill control requirements, fire codes, and impact resistance codes. The tank will be located on the southeast corner of CPP-606 on a concrete pad where two out-of-service heat exchangers are currently located. The new tank will be hard-piped to the compressor and equipped with leak and overfill detection monitoring capabilities.

The scope of this project will consist of removing the heat exchangers for disposal, replacement or upgrade of the existing concrete pad to support the tank, and installation of the new tank and associated piping and electrical components.

SECTION C. Environmental Aspects / Potential Sources of Impact

1. Air Pollutants: Fugitive dust may be generated during activities performed to upgrade or replace the concrete pad, which may include soil excavation and concrete demolition. All fugitive emissions will be controlled.

3. Radionuclide Release/Protection of the Public and the Environment – The proposed action 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., NESHAP) and satisfy the exemption criteria.

4. Chemical Use and Storage: Petroleum products will be used in the trucks and grading equipment. Diesel fuel to power the backup air compressor will be stored in the aboveground storage tank. Spill prevention/minimization measures will be employed during storage and use of chemicals/fuels. Affirmative Procurement practices will be used as guidance in procuring applicable chemicals and materials.

5. Contaminated Site Disturbance: Soil will be disturbed during the upgrade/replacement of the concrete pad. All areas located within the INTEC security fence are part of CERCLA Site CPP-88, which consists of potentially contaminated soils. Completion of a Notice of Soil Disturbance will be required for this activity. Soil disturbance will be coordinated with appropriate personnel.

9. Waste Generation and Management: A hazardous waste determination will be performed for waste streams to develop 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 entering the landfill.

Industrial waste expected to be generated for this project include the galvanized steel heat exchangers, which may contain propylene glycol; demolition debris, and other materials generated as a result of the installation activities
including scrap wiring, piping, PPE and similar items. These items will be nonhazardous/nonradioactive and will be disposed or recycled to an appropriate onsite (e.g., INL Landfill Complex) or offsite facility.

No hazardous waste is anticipated to be generated. However, in the event that any hazardous waste is generated, it will be managed in accordance with applicable site procedures at the direction of Waste Generator Services to ensure compliance with regulatory requirements.

Soil generated as a result of excavation activities will be sampled and managed in accordance with the requirements of the Notice of Soil Disturbance. Soil management will consist of returning the soil to the excavation or disposition at the Idaho CERCLA Disposal Facility (ICDF).

10. Material or Waste Packaging or Transportation: Nonhazardous/nonradioactive wastes will be transported from the project site to the INL Landfill Complex. Waste soil may require transport for disposition to the ICDF. Diesel fuel will be delivered by a vendor in bulk to fill the tank upon completion of the installation.

12. Managing Property or Materials: A commercially manufactured aboveground storage tank system will be procured for this installation.

15. Storage of Regulated Materials in Tanks: Diesel fuel will be stored in the tank to supply the backup air compressor. The INL is not subject to EPA’s Spill Control and Countermeasures (SPCC) requirements. Idaho does not have additional environmental regulations for aboveground storage tanks. The tank system procured will be a vault system with integral secondary containment to prevent a release to the environmental and will be designed and constructed to meet applicable fire codes and impact resistance requirements.

16. Use, Reuse and Recycling of Resources – Backfill, if needed, will be taken from existing borrow sources within the Idaho National Laboratory (INL). INL borrow sources must be coordinated through appropriate personnel and completion of applicable Form is required.

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: B2.5, Facility safety and environmental improvements

Justification: Installing and operating a 4000-gallon diesel fuel tank for the emergency backup air compressor to ensure safe plant operation described are addressed by the referenced categorical exclusion. 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 June 5, 2019.