

**SECTION A. Project Title:** INTEC – Acid Recycle Tank (VES-NCR-171) to Valve Box Leak Detection Modifications

**SECTION B. Project Description**

The proposed action will modify the Acid Recycle Tank leak detection method on the tank system output. The modification is necessary to ensure primary containment within the Acid Recycle Tank System. The Acid Recycle Tank is located in CPP-659A at the Idaho Nuclear Technology and Engineering Center.

Modifications will discontinue the current leak detection cable system and replace with a functionally equivalent carboy system. The change in the system will require a HWMA/RCRA permit modification. The change in the permitted system will require a change in the system drawings and inspection sheets. The proposed modification will not change the current permit system process or the permitted monitoring system.

Background:

The Acid Recycle Tank and associated system is regulated under IDAPA. The output line requires a leak detection system that is designed and operated so that it will detect the failure of the primary line. The output line is a direct buried line from the acid recycle sump in CPP-659A to an encasement drain low point in CPP-659. The leak detection monitoring associated with this line is no longer functioning and needs to be replaced. The current system is a leak detection cable that runs within the 4" secondary encasement line. To ensure that leak detection is continued with a functionally equivalent component and one that meets permit performance specifications, it is proposed that a carboy be used to identify any leak from this section of line.

The carboy will be installed at an existing valve located at the encasement low point in CPP-659.

**SECTION C. Environmental Aspects / Potential Sources of Impact**

**4. Chemical Use and Storage** – Typical building maintenance/modification chemicals may be used. 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 used during storage and use of chemicals/fuels.

**9. Waste Generation and Management** – Hazardous waste may be generated from equipment and components containing hazardous materials. Hazardous wastes will be stored, treated, and or disposed in compliance with applicable RCRA regulations at an EPA permitted treatment, storage, and disposal facility in accordance with the facility's waste acceptance criteria.

Small quantities of mixed waste may be generated. This waste stream will be treated and/or disposed of through one of the contracted RCRA TSD facilities.

Activities performed inside contaminated areas will result in some radioactive waste. Typical types of waste will include anti-contamination clothing, radiation enclosures and barriers, contaminated materials and components, and contaminated absorbent used to clean up small spills.

Typical maintenance wastes such as boxes, wood forms, wiring, piping, paper, insulation, and metal will be generated and disposed of as nonhazardous, nonradioactive waste to the INL Landfill Complex.

**10. Material or Waste Handling and Trans** – A hazardous waste determination will be performed for all waste streams to develop the appropriate management practices. Waste streams will be evaluated to determine if any of the materials can be recycled or reused and to implement actions for minimizing waste entering the landfill.

**15. Storage of Hazardous/Rad. Materials or Waste in Tanks** – The Acid Recycle Tank system is a RCRA-permitted system. Modifications that involve equipment replacement or upgrading with functionally equivalent components are categorized as a Class I modification without an asterisk in Appendix I; therefore, prior notification to the Director is not required (§270.42 Appendix I). Changes to the as-built, inspection sheets, and rationale for the modification in narrative form will be submitted to the Director within 7-days of returned to service and kept in the operating record.

**DOE-ID NEPA CX DETERMINATION  
IDAHO NATIONAL LABORATORY**

**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: B6.3, Improvements to environmental control systems

Justification: Modifications to the Acid Recycle Tank System is categorically excluded from further NEPA review. 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 7, 2017.