

SECTION A. Project Title: INTEC – Tank Farm Closure Project

SECTION B. Project Description

The proposed action will continue to clean and close underground storage tanks located in the Tank Farm Facility (TFF) within the Idaho Nuclear Technology and Engineering Center (INTEC). The closure actions are part of approved Hazardous Waste Management Act/Resource Conservation and Recovery Act (HWMA/RCRA) Closure Plans. The TFF has been closed in phases based on available funding. The final phase is addressed in this document and is scheduled to be completed in October of 2015.

The remaining scope includes decontaminating and grouting tanks, vaults, and some piping including the remaining cooling coils. The remaining four 300,000-gallon tanks (VES-WM-187, -188, -189, and -190) will be decontaminated and grouted. The tanks will be grouted following the successful removal of the liquid waste and successful cleaning phases of the project.

Decontamination: The remaining tanks will be decontaminated with water that will: (1) create enough agitation within solids/liquids in the bottom of the tank to move and suspend the solids, (2) remove the solids down to about 1-inch, and (3) remove solids/debris surrounding cooling coils supply and return lines and along the tank walls and floor. During the decontamination of the underground storage tanks, the hazardous material from the tanks will be removed and transferred over to the new Intergrated Waste Treatment Unit (IWTU). Lead that was used as shielding during operations of structures to be deconned and grouted will be removed.

Decontamination of the piping encasements will allow decontamination fluid to flow onto the vault floor and decontaminate the floor. Remaining liquids will be transferred using the existing sump steam jets to the Process Equipment Waste Evaporator. Sampling of the vault sumps will provide sufficient data to characterize the vaults (the sumps are the lowest points within the vault). Following decontamination, samples will be collected from liquids remaining in the vault sumps. All the pipes feeding to the tanks will be permanently capped. Vaults will be accessed through vault risers by removing the covers to the vault riser access boxes.

Grouting: Grout will be supplied from either the grout plant located East of INTEC or Idaho Falls if approved by project. Grouting equipment consisting of a new or relocated grout mast, camera, and grout arms will be installed onto interface risers located above each 300,000-gallon tank riser. An engineered pour will be utilized to displace the remaining heel towards the lowest level steam jet. This jet will be used to transfer the remaining tank heels to either New Waste Calcine Facility for transfer to IWTU, or directly to one of the liquid waste evaporators. Following the heel displacement, pour grout will be placed alternately in a tank and vault respectively until full. Prior to the final lift in each of the 300,000-gallon tanks, modifications will be performed on either the vessel off gas or process off gas inlet and/or outlet lines to prevent the grouting of the main process off gas or vessel off gas supply line. Following completion of grouting the tanks and vaults, the ancillary equipment that has been identified in approved closure documents will also be grouted.

Modifications to existing facilities: The actions will close many of the operations at the tank farm which will require some modifications to other structures to support additional operations and closures of other facilities. These include modifications to valve box C-20 to support cooling coil flushing and C-25 for transfer line tie-ins. A truck unloading station will also be installed west of CPP-666 requiring modifications to valve box-C37.

The remaining proposed action will cost approximately \$11.5M and is scheduled to begin in October 2011 and continue through October 2015.

- FY-12 - Erect contamination containment tents, repair wash equipment, fabricate new jets and transfer lines, and remove lead from selected structures to be closed.
- FY-13 - Wash and Sample tanks, vaults, valve boxes and ancillary equipment including cooling coils. Perform modifications to miscellaneous valve boxes (C-20, C-15, and C-37) to support closure activities and truck unloading stations and grout connections.
- FY-14 – Grout tanks, vaults, valve boxes, and ancillary equipment.
- FY-15 - Complete grouting and demobilize and disposal of construction waste.

SECTION C. Environmental Aspects / Potential Sources of Impact

The environmental aspects of the Tank Farm Closure project have been analyzed in the Environmental Impact Statement.

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

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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: This action has been analyzed in the Idaho High-Level Waste and Facilities Disposition Final Environmental Impact Statement (DOE/EIS-0287, September 2002). The decision to clean-close the tank farm is documented in the Amended Record of Decision that was approved November 8, 2006.

Justification: The tank farm was used to store high-level waste at the INL. All high-level waste facilities scheduled for RCRA closure located at the INL are addressed in the Environmental Impact Statement and Record of Decision.

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 September 26, 2011.