

**U.S. Department of Energy- Idaho Operations Office
National Environmental Policy Act
Categorical Exclusion Determination**

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Categorical Exclusion Posting No.: DOE-ID-INL-25-039

Project Title: TAN-675 Waste Tank Vault Removal & TAN-692 Vault Tank Removal

Project Description and Purpose:

TAN-675 & TAN-692 Tank Removals

Background

There are three legacy tanks, in two vaults at SMC, that will be removed to repurpose the areas for future SMC projects. The tanks are TK-BA-107, TK-BA-113, and TK-AB-123. Their backgrounds are described below.

In 1996, the Idaho National Laboratory (INL) [Idaho National Engineering and Environmental Laboratory (INEEL) in 1996] began negotiations with the State of Idaho Department of Environmental Quality (IDEQ) to address various noncompliance issues regarding hazardous waste regulations. Those negotiations culminated on June 14, 2000, with the Voluntary Consent Order (VCO) that specified numerous actions and milestones that would enable the INL to come into regulatory compliance with the Resource Conservation and Recovery Act (RCRA) for the covered items in an orderly fashion.

Among the actions, the VCO specifically required the INL to provide documentation that would classify the contents of specific tanks, and certain other items, as hazardous or nonhazardous waste. These actions are required by RCRA (40 CFR 262) and similar State of Idaho regulations (IDAPA 58.01.05), which state that a generator of waste must determine if a waste is hazardous or not.

Tanks TK-BA-107 and TK-BA-113 were originally on the list of VCO tanks and were later Non-VCO tanks as per Deficiency Report 26370. TK-BA-107, INL Tank Inventory # TANK-98TAN00218, and TK-BA-113, INL Tank Inventory # 98TAN00221, were designated as Phase II Priority Code 01, which denotes "NOT REG - Empty (V) – Inactive Waste," meaning that the tanks were not regulated, verified empty, and were inactive waste tanks.

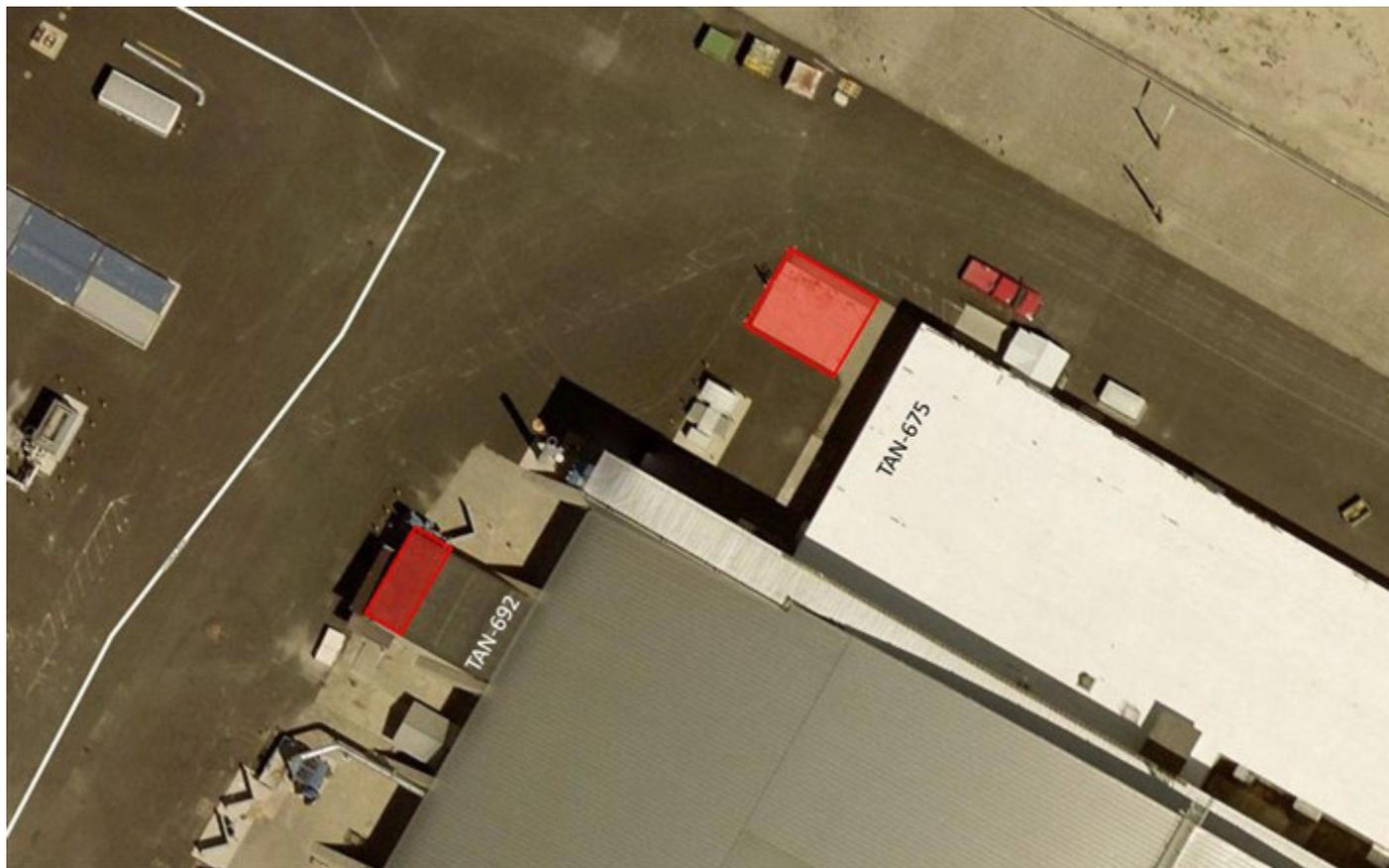
TK-AB-123 is INL Tank Inventory # 98TAN00011 and collected radioactive wastewater from past processes.

References:

- B. R. Monson, Idaho Division of Environmental Quality, to D. N. Rasch, DOE Idaho Operations Office, Enclosure: "Consent Order," Idaho Code Section 39-4413, June 14, 2000. (Commonly referred to as the "Voluntary Consent Order.")
- Voluntary Consent Order Tank and Equipment Characterization Technology Roadmap, INEEL/EXT-2000-0218, September 2000, Rev. 0.
- The Location of the Documentation which Validates the Environmental Regulatory Status of Numerous Aboveground and Underground Tanks at the INEEL Listed in the INEEL Tank Inventory Database is Currently not Known, DR-26370, December 18, 2001.

TAN-675 Vault Waste Tanks Removal

Tanks TK-BA-107 and TK-BA-113 are located in a waste tank vault just west of TAN-675 (see upper red highlight on picture below).



According to EDMS record “TANK-98TAN00218 – Information Regarding Tank 98TAN00218,” TK-BA-107 was installed in 1986, never used, and out-of-service. It is an 1800-gal stainless steel underground storage tank (UST) with stainless steel piping. Its intended function was to store wastewater. It was verified empty on February 15, 1999, in 2001, and as recently as May 2025.

During the May 2025 inspection, the tanks and piping were observed as being painted. Therefore, four different painted surfaces were sampled and analyzed for RCRA TCLP metals on June 17, 2025. PCBs were not analyzed because the tank installations were post 1982 (per LWP-8000). All four paints TK-AB-123 white paint (sample # WGS25-15-01), TK-AB-123 motor grey/blue paint (sample # WGS25-15-3), TK-BA-113 tank cream paint (sample # WGS25-15-04), and TK-BA-113 vault magenta paint (sample # WGS25-15-05) were either non-detect for RCRA TCLP metals or below RCRA regulatory limits for TCLP metals per Task Order Statement of Work TOS25-15.

According to EDMS record “TANK-98TAN00221 – Information Regarding Tank 98TAN00221,” TK-BA-113 was installed in 1986 and never used. It is a 500-gal stainless steel UST with stainless steel piping. Its intended function was to store solvent, Trichloroethylene (TCE) for degreasing. It was verified empty on February 15, 1999, in 2001, and as recently as May 2025. Painted surfaces are described above.

Since these tanks were never used and the paint is nonhazardous and contain no PCBs, the scope of this project is to:

- Remove metal vault lid (Lid paint: see CCN 245950 for PCB analytical data that determined that there were no PCBs. See CNN 245954 for RCRA TCLP metals analytical data that determined that all metals were below regulatory limits).
- Remove TK-BA-113 and TK-BA-107, including existing piping from the vault outside of TAN-675.
- Remove any abandoned electrical conduit, wiring, etc. back to TAN-675.
- Demo concrete vault after all utilities and piping have been removed or capped and backfill with compacted gravel.
- All waste material will be disposed of as solid waste or low-level waste or recycled. Field determinations will be made whether the waste material can be radiologically free released prior to disposal or recycling.

TAN-692 Vault Waste Tank Removal

Tank TK-AB-123 is located in a vault in TAN-692 (see lower red highlight on picture above). According to EDMS record “TANK-98TAN00011 - Information Regarding Tank 98TAN00011,” TK-AB-123 was installed in 1985 and was used to store radioactive liquid wastewater. It is a 1500-gal stainless steel UST with stainless steel piping. The record also notes:

“In 2013 it was decided to reduce the quantity of tanks in the inventory so that the inventory contained only those tanks that met certain criteria to fulfill Conduct of Operations mapping needs or which were required to be tracked by law. This tank did not meet either of the criteria for future tracking so was removed from inventory future reporting/tracking.”

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The TK-AB-123 wastewater was sampled on September 9, 1997, to determine that it was nonhazardous. Per Case Narrative 0170, Waste Characterization TK-123, Sample Numbers 97L-100873 to 97L-100882 the following description was obtained:

“The wastewater Waste tank TK-AB-123 is located in TAN-692. ... The sampling and analysis includes collecting samples from Tank 123 (to verify SMC is not processing hazardous waste) for TCLP metals, TCLP semivolatile organics, TCLP volatile organics and isotopic uranium. Knowledge of process (KOP) negated the need for TCLP pesticides, TCLP herbicides, corrosivity, ignitability and reactivity.”

All TCLP values from this September 9, 1997, sampling event were either non-detect or below regulatory limits. Only Barium (23.8 µg/L and 24.0 µg/L) and Lead (4.3 µg/L and 3.2 µg/L) were detected. pH values were 8.13 and 8.14. Isotopic uranium, U-234, U-235, and U-238 ranged between 2.91 pCi/L to 201 pCi/L. This confirmed that TK-AB-123 was only a low-level wastewater tank system.

In preparation for tank removal project, on June 17, 2025, the sludge that had accumulated over time was sampled and analyzed for the same constituents that were performed in 1997. The analysis, per TOS25-15 sample # WGS25-15-02, validated that the sludge was nonhazardous. Only Barium (274 µg/L), Cadmium [27.3 µg/L, B qualifier (B - Either presence of analyte detected in the associated blank or MDL/IDL < sample value < PQL)], and Chromium (16.1 µg/L, B qualifier) were detected. The pH value was 6 for the filtrate. Isotopic uranium, U-234, U-235, and U-238 ranged between 18.3 pCi/g to 994 pCi/g. Painted surfaces are described above.

Since Waste tank TK-AB-123 sludge is nonhazardous and the paints are nonhazardous, the scope of this project is also to remove this tank and existing piping from the TAN-692 vault and dispose of as low-level waste (LLW). The vault will then be backfilled with gravel, compacted, and capped with a concrete slab.

Environmental Aspects or Potential Sources of Impact:

Air Emissions

Fugitive dust may be generated during proposed work.

Discharging to Surface-, Storm-, or Ground Water

NA

Disturbing Cultural or Biological Resources

CULTURAL: Pursuant to 2023 Programmatic Agreement as amended in 2025, this federal undertaking is excluded from project-specific consultation. The proposed activity results in no historic properties affected.

There is the potential for this work to impact vegetation and for project personnel to interact with various wildlife species. A nesting bird survey is required prior to the initiation of activities that might disturb soil or vegetation for activities taking place between April 1st and October 1st.

Generating and Managing Waste

Industrial (non-hazardous, non-radioactive) wastes will be generated such as boxes, wood forms, concrete, asphalt, wiring, tanks and piping. INL transfers this waste to a certified recycler or a properly permitted solid waste landfill for disposal. Projects characterize and manage soils and environmental media generated during activities in accordance with laboratory procedures. INL has an active program to minimize waste generation. The waste minimization program includes both source reduction and recycling. Waste Minimization and Pollution Prevention Opportunities are also an integral part of the work review process. INL continually considers opportunities for waste minimization and pollution prevention during these activities.

Activities performed inside contaminated areas will generate radioactive waste. Radiological waste includes anti-contamination clothing, rags, radiation enclosures and barriers, wood, dirt, contaminated materials and components (e.g., pumps, piping, tanks), demolition debris (which may include asphalt and concrete), and contaminated absorbent used to clean up small spills. INL packages these materials and stores them in on-site storage facilities pending disposal at an authorized and permitted facility. For excavation in an area suspected to be radioactively contaminated, Radiological Control personnel assist in developing specific radiation work permits to minimize the potential for encountering contaminated media.

INL manages excavated soils in accordance with site procedures, policies, and applicable regulatory requirements. INL designs excavation activities to minimize waste. To reduce the amount of radioactive waste generated, clean debris is segregated from radioactively contaminated areas and debris. Radioactively contaminated tools are kept in contaminated areas for reuse rather than disposal at the completion of the activity.

Releasing Contaminants

When chemicals are used during the project there is the potential for spills that could impact the environment (air, water, soil).

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Using, Reusing, and Conserving Natural Resources

INL reuses or recycles all materials where economically practicable. INL also diverts all applicable waste from disposal in the landfill where conditions allow. INL practices sustainable acquisition.

Determination

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, or similar requirements of Department of Energy (DOE) or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment or facilities; (3) disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources (see 10 CFR 1021); (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Appendix B. The proposal has not been segmented to meet the definition of a categorical exclusion. Segmentation can occur when a proposal is broken down into small parts in order to avoid the appearance of significance of the total action. However, segmentation does not include proposals that are developed and potentially implemented over multiple phases where each phase results in a decision whether to proceed to the subsequent phase. There is no extraordinary circumstance related to the proposal that is likely to cause a reasonably foreseeable significant adverse effect or for which DOE does not know the environmental effect. Extraordinary circumstances are unique situations presented by specific proposals, including, but not limited to, scientific controversy about the environmental effects of the proposal; uncertain effects or effects involving unique or unknown risks; and unresolved conflicts concerning alternative uses of available resources.

References: B6.1 "Cleanup actions"

Justification: For the DOE procedures regarding categorical exclusions, including the full text of each categorical exclusion, see 10 CFR 1021.102 and Appendix B to 10 CFR Part 1021, and also Section 5.4 (Applying one or more categorical exclusions to a proposal) and Appendices B and C of DOE's National Environmental Policy Act Implementing Procedures (June 30, 2025). Requirements and guidance in 10 CFR 1021.102 and DOE's National Environmental Policy Act Implementing Procedures: (See full text in regulation and in Implementing Procedures).

The proposal fits within a class of actions that is listed in Appendix B to 10 CFR Part 1021 or Appendix B and C of DOE's NEPA Implementing Procedures (June 30, 2025). To fit within the classes of actions listed in Appendix B to 10 CFR Part 1021, or Appendix B of DOE's NEPA Implementing Procedures, a proposal must satisfy the conditions that are integral elements of the classes of actions in Appendix B of both 10 CFR Part 1021 and DOE's NEPA Implementing Procedures.

There are no extraordinary circumstances related to the proposal that may affect the significance of the environmental effects of the proposal. DOE or an applicant may modify the proposal to avoid reasonably foreseeable adverse significant effects such that the categorical exclusion would apply.

The proposal has not been segmented to meet the definition of a categorical exclusion.

[Note: For proposals that fit within the categorical exclusions listed in Appendix C of DOE's NEPA Implementing Procedures, see DOE's notice of adoption for the subject Appendix C categorical exclusion for additional considerations. DOE notices of adoption for other agency categorical exclusions may be found on DOE's Section 109 webpage.]

B6.1 Cleanup actions. Small-scale, short-term cleanup actions, under RCRA, Atomic Energy Act, or other authorities, less than approximately 10 million dollars in cost (in 2011 dollars), to reduce risk to human health or the environment from the release or threat of release of a hazardous substance other than high-level radioactive waste and spent nuclear fuel, including treatment (such as incineration, encapsulation, physical or chemical separation, and compaction), recovery, storage, or disposal of wastes at existing facilities currently handling the type of waste involved in the action. These actions include, but are not limited to: Excavation or consolidation of contaminated soils or materials from drainage channels, retention basins, ponds, and spill areas that are not receiving contaminated surface water or wastewater, if surface water or groundwater would not collect and if such actions would reduce the spread of, or direct contact with, the contamination; Removal of bulk containers (such as drums and barrels) that contain or may contain hazardous substances, pollutants, contaminants, CERCLA-excluded petroleum or natural gas products, or hazardous wastes (designated in 40 CFR part 261 or applicable state requirements), if such actions would reduce the likelihood of spillage, leakage, fire, explosion, or exposure to humans, animals, or the food chain; Removal of an underground storage tank including its associated piping and underlying containment systems in accordance with applicable requirements (such as RCRA, subtitle I; 40 CFR part 265, subpart J; and 40 CFR part 280, subparts F and G) if such action would reduce the likelihood of spillage, leakage, or the spread of, or direct contact with, contamination; Repair or replacement of leaking containers; Capping or other containment of contaminated soils or sludges if the capping or containment would not unduly limit future groundwater remediation and if needed to reduce migration of hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products into soil, groundwater, surface water, or air; Drainage or closing of man-made surface impoundments if needed to maintain the integrity of the structures; Confinement or perimeter protection using dikes, trenches, ditches, or diversions, or installing underground barriers, if needed to reduce the spread of, or direct contact with, the contamination; Stabilization, but not expansion, of berms, dikes, impoundments, or caps if needed to maintain integrity of the structures; Drainage controls (such as run-off or run-on diversion) if needed to reduce offsite migration

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of hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum or natural gas products or to prevent precipitation or run-off from other sources from entering the release area from other areas; Segregation of wastes that may react with one another or form a mixture that could result in adverse environmental impacts; Use of chemicals and other materials to neutralize the pH of wastes; Use of chemicals and other materials to retard the spread of the release or to mitigate its effects if the use of such chemicals would reduce the spread of, or direct contact with, the contamination; Installation and operation of gas ventilation systems in soil to remove methane or petroleum vapors without any toxic or radioactive co-contaminants if appropriate filtration or gas treatment is in place; Installation of fences, warning signs, or other security or site control precautions if humans or animals have access to the release; and Provision of an alternative water supply that would not create new water sources if necessary immediately to reduce exposure to contaminated household or industrial use water and continuing until such time as local authorities can satisfy the need for a permanent remedy.

Approved by Robert Herzog, DOE-ID NEPA Compliance Officer on: 9/9/2025