

MODULE IV

STORAGE AND TREATMENT IN TANKS

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~~(All Attachments Referenced in Module IV of the Permit are located in Volume 2)~~

ATTACHMENTS

Attachment IV-1	Tank System Designs, Assessments, Drawings and Specifications
Attachment IV-2	Stabilization Reagent List

MODULE IV - STORAGE AND TREATMENT IN TANKS

IV.A. APPLICABILITY

The requirements of this module pertain to the storage and treatment of hazardous waste in the tank systems identified in Condition IV.B. Clean Harbors Grassy Mountain (CHGM) The Permittee shall comply with Utah Administrative Code (UAC) R315-264-190 through R315-264-200 and the conditions of this permit for all tank systems. CHGM shall manage Management of PCBs in tanks shall be in accordance with Module X of this permit.

IV.B. WASTE IDENTIFICATION AND TANK USAGE

~~Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Wastes: CHGM The Permittee may receive wastes that arrive without EPA waste code numbers, provided that these wastes are from remediation sites regulated under CERCLA and they comply with all CERCLA off-site management policies. These wastes shall be managed as hazardous wastes and are subject to the terms of this permit.~~

1. Resource Conservation and Recovery Act/Toxic Substances Control Act (RCRA/TSCA) Wastes: CHGM The Permittee may receive wastes that arrive with EPA waste codes ~~and that~~ are also regulated by TSCA. These wastes are subject to the terms of this permit.
2. CHGM The Permittee shall only treat or store hazardous wastes or RCRA/TSCA wastes in the tanks specified in Conditions IV.B.6 and IV.B.7, subject to the terms of this permit and the Land Disposal Restriction (LDR) treatment standards specified in UAC Utah Admin. Code R315-268.
3. CHGM shall not treat or store wWaste that has an average volatile organic compound (VOC) concentration of greater than or equal to 500 ppmw ~~shall not be treated or stored~~ in tanks.
4. Waste shall not be stored in a tank unless the material of construction of the tank is compatible with the waste.
5. Waste Stabilization Tanks 122-TN-001, -002 and -003
 - a. Each tank is twenty feet long by twenty feet wide by eight feet high (23,936 gallons capacity) and is constructed of carbon steel.
 - b. CHGM The Permittee shall only treat the hazardous wastes listed in Attachment II-RCRA/TSCA WAP Appendix 3 2 in Waste Stabilization Tanks 122-TN-001, 122-TN-002 and 122-TN- 003.

- c. All waste shall be removed from the stabilization tanks following the treatment process, utilizing the normal method of waste removal. Treatment of hazardous waste shall commence before the end of the shift during which the waste is placed in a tank. The treatment process shall not exceed 72 hours. If there is waste remaining in the tank that cannot be removed by the normal method of waste removal, ~~CHGM~~the Permittee shall apply the EPA waste codes of the batch of waste not entirely removed, to the subsequent load(s) processed in the tank.
 - d. If there is RCRA/TSCA waste remaining in the tank that cannot be removed by the normal method of waste removal, then ~~the Permittee~~CHGM shall consider all subsequent load(s) processed in the tank as polychlorinated biphenyls (PCBs).
 - e. The waste management practices specified in ~~the Attachment II-8 - Supplemental~~Special Waste Management Plan ~~in Attachment II-8~~ shall apply to wastes F020, F021, F022, F023, F026, F027 and F028.
 - f. The maximum level of reagent and waste to be treated in the stabilization tanks shall be no more than five feet or 15,000 gallons. The five-foot level shall be marked on the inside of each stabilization tank. No waste shall splash over the sides of the tank.
 - g. For restabilization, an increased volume of waste and reagent may be placed into a tank as long as 4,150 gallons of freeboard (one foot five inches) is maintained (19,697 gallons of waste/reagent). This will accommodate the precipitation from a 25-year, 24-hour storm event and leave enough space to prevent the waste from splashing over the sides of the tanks.
6. Leachate Storage Tank 119-TN-002
- a. Design – Tanks 119-TN-002 is twelve feet in diameter and twenty feet high (maximum allowable capacity ~~17,000~~16,900 gallons ~~per tank~~). The tanks is constructed of carbon steel.
 - b. CHGM shall only store run-off containment waters from secondary containment, non-hazardous wastewaters, multi-source leachate (F039), and TSCA~~/~~RCRA leachate (combination multi-source leachate ~~from Cell B/6~~) in Storage Tank 119-TN-002. Treatment is not allowed in this tank.
7. Wheel Wash Tanks
- a. There are wheel wash facilities located at the exit of Cells B~~/6,7~~ and 8. The tanks have the following capacities:
 - b. Cell B/6 – 4,000 gallons ~~Cell 7 – 3,000 gallons~~
 - c. Cell 8 – 3,000 gallons

IV.C. GENERAL OPERATING REQUIREMENTS

- 1. ~~CHGM~~The Permittee shall place waste in the Stabilization Tanks for the purpose of treatment or storage as specified in the conditions of Section IV.B. of this module.

2. ~~CHGM shall meet all treatment standards specified in UAC R315-268 in t~~The treatment of hazardous wastes in the tanks identified in the conditions of Section IV.B. of this module; ~~shall meet all treatment standards specified in UAC~~Utah Admin. Code R315-268.
3. ~~CHGM~~The Permittee shall use the controls and good practices to prevent spills and overflows from each tank system, as specified in Attachment II-5, "Preparedness and Prevention."
4. In the event of an equipment or power failure, ~~CHGM~~the Permittee shall stop adding waste to the affected tank system.
5. ~~CHGM~~The Permittee shall comply with the requirements specified in ~~UAC~~Utah Admin. Code R315-264-193 when there has been a leak or spill from a tank or tank system that is unfit for use.
6. ~~CHGM~~The Permittee shall comply with the requirements specified in the facility Contingency Plan, Attachment II-6, when there has been a release from a tank system that threatens human health or the environment.
7. ~~CHGM~~The Permittee shall notify the Director of the Division of Waste Management and Radiation Control (Director) of a release of a reportable quantity of material, as defined in UAC R315-263-30, from a tank system to the environment. ~~CHGM shall notify the Director as soon as possible, but no later than 24 hours after detection of a~~the release. ~~of a reportable quantity, as defined in UAC~~Utah Admin. Code R315-263-30, from a tank system to the environment.
8. ~~CHGM~~The Permittee shall submit a report to the Director identifying details of the release; ~~to the Director~~ within 15 days of detection of a release to the environment.
9. ~~CHGM~~The Permittee shall repair a tank system from which there has been a leak or ~~spill~~ ~~or spill or~~ close the tank; if it is unfit for use, as specified in ~~UAC~~Utah Admin. Code R315-264--196.
10. In accordance with ~~UAC~~ R315-264-196, before a repaired tank or ancillary piping system is returned to service, it shall be certified by a qualified, independent, Utah registered professional engineer, that the repaired equipment is capable of safely managing hazardous waste without release. ~~CHGM~~The Permittee shall submit the tank certification report to the Director within seven days of returning the repaired system to service.
11. ~~Any tank that has been removed from service must be recertified by~~ Before being placed back into service, A qualified, independent, Utah registered professional engineer ~~shall certify any tank that has been out of service for more than 360 days prior to being placed back into service.~~ The certification shall state that the tank system is capable of safely managing hazardous waste without release. ~~CHGM~~The Permittee ~~shall have this certification performed before the tank is put back into service.~~; ~~CHGM~~The Permittee shall submit the certification report to the Director within seven days of returning the tank system to service.

IV.D. SPECIFIC OPERATING REQUIREMENTS

1. All F039 leachate shall meet the LDR treatment standards specified in UACUtah Admin. Code R315-268 before final disposal at the facility.
2. RCRA/TSCA wastes that have PCBs as an Underlying Hazardous Constituent (UHC) shall meet the LDR treatment standards specified ~~in the in UACUtah Admin. Code R315-268-48, Table UTS-Universal Treatment Standards Table in UAC R315-268-48~~ before final disposal at the facility. In the event that ~~Pe-PCB UHC concentrations does~~ not meet the LDR treatment standard, ~~(when present as an UHC) CHGMthe Grassy Mountain Facility~~ will follow the site-specific treatment variance procedures in UACUtah Admin. Code R315-268-44.
3. All hazardous waste residues from incineration and thermal treatment that are stored or treated in the tank system identified in Condition IV.B. of this module, shall meet ~~land disposal restrictions~~ LDRs prior to final disposal at the facility.
4. Waste code tracking in the stabilization tanks and ~~tank~~ decontamination of the tanks following the treatment of RCRA or RCRA/TSCA waste streams shall be done in accordance with Module II Attachment Section II-RCRA-TSCA WAP-8 of the Waste Analysis Plan.
5. Non-hazardous ~~waste waterwastewater~~ can be used as makeup water for the stabilization process provided that all applicable portions of the permit are followed. If the water is stored, it can be stored in one double-walled ~~fFrac fFank~~ located adjacent to the east stabilization tank.

IV.E. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

1. CHGM shall not place ignitable or reactive waste ~~shall not be placed~~ in a tank system unless the provisions of UACUtah Admin. Code R315-264-17 and UACUtah Admin. Code R315-264-198 are met.
2. CHGM shall record compliance with Condition IV.E.1., as required by UACUtah Admin. Code R315-264-17 and place this documentation in the facility Operating Record.
3. ~~The Permittee~~ shall maintain the safety separation distance around tank systems as specified in the most recent version of the Uniform Building Code.
4. CHGMThe Permittee shall ground all rail cars (applicable to rail unloading areas) and truck tankers ~~during the unloading of ignitable waste,~~ to an effective and secure earth ground ~~by means of a heavy clamp and cable~~ prior to and during the unloading of ignitable waste.

IV.F. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. ~~CHGM shall not place i~~Incompatible waste ~~shall not be placed~~ in a tank system unless the provisions of ~~UACUtah Admin. Code~~ R315-264-17 and ~~UACUtah Admin. Code~~ R315-264-199 are met.
2. Wastes or other material may be stored in a tank or tank system only if ~~the tank system#~~ is compatible with the wastes already stored or placed in the tank; and compatible with the tank or tank system construction material.
 - a. ~~CHGMThe Permittee~~ shall not store acids or oxidizing halides in any carbon steel tank system.
3. ~~CHGMThe Permittee~~ shall not store hazardous wastes, treatment reagents, or other materials in any of the tank systems if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode, or otherwise fail.
4. ~~CHGMThe Permittee~~ shall not place hazardous waste in a tank system that has not been decontaminated and that previously held an incompatible material. Decontamination solutions generated from cleaning tank systems shall be considered ~~a~~ hazardous waste and shall be managed appropriately. The requirements for incompatible wastes identified in ~~UACUtah Admin. Code~~ R315-264-17 shall apply.
5. ~~CHGMThe Permittee~~ shall record compliance with Condition IV.F.4; as required by ~~UACUtah Admin. Code~~ R315-267-17 and place this documentation in the facility Operating Record.

IV.G. INSPECTION REQUIREMENTS

1. ~~CHGMThe Permittee~~ shall comply with the inspection requirements specified in ~~UACUtah Admin. Code~~ R315-264-195, ~~Module II~~ Condition II.G.; and the Tank Inspection Schedules as shown in Attachment II-3; except that only active tanks need to be inspected and the tank heating coils need only be inspected on an annual basis.
2. ~~CHGM shall inspect t~~The Waste Stabilization Tank Systems, Tanks 122-TN-001, 122-TN-002 and 122- TN-003; ~~shall be inspected~~ for leaks at least once during each operating day. Any liquids accumulated in the annulus between the inner and outer shells shall be removed, analyzed, and managed in accordance with this permit.
3. All active tank systems identified in Condition IV.B.; shall be certified by a qualified, independent, Utah registered; professional engineer; at least once every September. The certification shall state the tank system is capable of handling hazardous waste without release and can safely manage hazardous waste. ~~CHGM shall incorporate t~~The certification report ~~shall be incorporated~~ into the Operating Record and submit ~~a copyted~~ to the Director within 60 days of the inspection.

4. For each tank system found unfit for use ~~as a result of~~because of the inspections, required in Condition IV.G.3, ~~CHGM the Permittee~~ shall comply with the repair and notification requirements specified in Conditions IV.C.9, IV.C.10, and IV.C.11.
5. CHGM shall make aAll tank inspection logs and certification reports ~~shall be made~~ part of the Operating Record. CHGM shall maintain aAll tank certification reports ~~shall be maintained~~ in the Operating Record until closure of the facility.

IV.H. NEW AND MODIFIED TANK SYSTEMS

~~CHGM~~The Permittee shall comply with Conditions I.O, covering planned changes, and I.P, certification of new construction and modifications. All new tanks systems and modifications to existing systems shall also meet secondary containment and leak detection requirements specified in ~~UAC~~Utah Admin. Code R315-264-193.

IV.I. RESPONSE TO LEAKS OR SPILLS OF HAZARDOUS WASTE OR PCBs

1. In the event of a leak or a spill from a tank system or if the tank system becomes unfit for continued use, ~~CHGM the Permittee~~ shall remove the system from service immediately and complete the following actions:
 - a. Stop the flow of hazardous waste ~~or PCBs~~ into the tank system and inspect the system to determine the cause of the release.
 - b. Remove waste and accumulated precipitation from the tank system and containment system within 24 hours of detection of the leak or spill to prevent further release and allow inspection and repair of the system. If ~~t~~CHGM the Permittee finds that it will be impossible to meet ~~this time period~~the 24 hour~~24-hour requirement~~, ~~CHGM the Permittee~~ shall orally notify the Director and demonstrate that a longer time period is required.
 - c. Manage the collected material as a hazardous waste in accordance with all applicable requirements of ~~UAC~~Utah Admin. Code R315-262.
 - d. ~~CHGM~~The Permittee shall make any necessary repairs to fully restore the integrity of the tank system before returning the system to service.
 - e. For all major repairs to eliminate leaks or restore the integrity of the tank system, ~~CHGM the Permittee~~ shall obtain a certification by an independent, qualified, Utah registered, professional engineer that the repaired system is capable of handling hazardous wastes without release for the intended life of the system before returning the system to service. Examples of major repairs are installation of an internal liner, repair of a ruptured tank, or repair or replacement of a secondary containment vault.
2. In the event that a leak or spill from a tank system escapes the secondary containment system, ~~CHGM the Permittee~~ shall complete the following actions in addition to those specified in Condition IV.I.1.:

~~CHGM~~The Permittee shall immediately conduct a visual inspection of all releases to the

environment and based on that inspection shall (1) prevent further migration of the leak or spill to soils or the surface water and (2) remove and properly dispose of all contamination of the soil or surface water.

3. If ~~CHGM~~~~the Permittee~~ replaces a component of a tank system to eliminate a leak, that component must satisfy the requirements for new tank systems or components in ~~UAC~~~~Utah Admin. Code~~ R315-264-192 and R315-264-193.
4. If a tank system cannot be repaired or is otherwise unfit for continued use, ~~CHGM~~~~the Permittee~~ shall close that tank system in accordance with the Closure Plan in Module II Attachment II-7.
5. ~~CHGM shall maintain r~~Records of releases from a tank system that are contained within a secondary containment system ~~shall be maintained~~ in the operating record. These records shall include information on the cause of the release, the volume and type of material released, any injuries or damage caused by the release, and corrective measures taken.

IV.J. CLOSURE AND POST-CLOSURE CARE

1. To close a tank system, ~~CHGM~~~~the Permittee~~ shall remove all waste residues and decontaminate the system as specified in ~~UAC~~~~Utah Admin. Code~~ R315-264-110 through R315-264-120 and ~~UAC~~~~Utah Admin. Code~~ R315-264-197, and Module II Condition II.O.
2. If a current cost estimate to close a tank system and provide post closure care is greater than the cost estimates specified in Attachment II-7, ~~CHGM~~~~the Permittee~~ shall notify the Director as specified in ~~UAC~~~~Utah Admin. Code~~ R315-264-112 and provide updated documentation for financial assurance based on the revised closure plan and post closure care within 90 days of the initiation of closure.
3. ~~CHGM~~~~The Permittee~~ shall maintain funding to close all tanks and tank systems.
4. Post-closure care of all tank systems shall meet the requirements of ~~UAC~~~~Utah Admin. Code~~, R315-264-197 and Module II Condition II.O of the Permit.