

MODULE IV

STORAGE AND TREATMENT IN TANKS

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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) 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 PCBs in tanks in accordance with Module X of this permit.

IV.B. WASTE IDENTIFICATION AND TANK USAGE

1. Resource Conservation and Recovery Act/Toxic Substances Control Act (RCRA/TSCA) Wastes: CHGM may receive wastes that arrive with EPA waste codes that are also regulated by TSCA. These wastes are subject to the terms of this permit.
2. CHGM 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 R315-268.
3. CHGM shall not treat or store waste that has an average volatile organic compound (VOC) concentration of greater than or equal to 500 ppmw 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 shall only treat the hazardous wastes listed in Attachment II-RCRA/TSCA WAP Appendix 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 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 CHGM shall consider all subsequent load(s) processed in the tank as polychlorinated biphenyls (PCBs).

- e. The waste management practices specified in Attachment II-8 - Supplemental Waste Management Plan 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 – Tank 119-TN-002 is twelve feet in diameter and twenty feet high (maximum allowable capacity 16,900 gallons). The tank 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) 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 and 8. The tanks have the following capacities:
 - b. Cell B/6 – 4,000 gallons
 - c. Cell 8 – 3,000 gallons

IV.C. GENERAL OPERATING REQUIREMENTS

1. CHGM 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 the treatment of hazardous wastes in the tanks identified in the conditions of Section IV.B. of this module.
3. CHGM 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 shall stop adding waste to the affected tank system.

5. CHGM shall comply with the requirements specified in UAC R315-264-193 when there has been a leak or spill from a tank or tank system that is unfit for use.
6. CHGM 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 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 the release.
8. CHGM shall submit a report to the Director identifying details of the release within 15 days of detection of a release to the environment.
9. CHGM shall repair a tank system from which there has been a leak or spill or close the tank if it is unfit for use, as specified in UAC 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 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 a qualified, independent, Utah registered professional engineer 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 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 UAC 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 UTS-Universal Treatment Standards Table in UAC R315-268-48 before final disposal at the facility. If PCB UHC concentrations do not meet the LDR treatment standard, CHGM will follow the site-specific treatment variance procedures in UAC 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 LDRs prior to final disposal at the facility.

4. Waste code tracking in the stabilization tanks and decontamination of the tanks following the treatment of RCRA or RCRA/TSCA waste streams shall be done in accordance with Attachment II-RCRA-TSCA WAP.
5. Non-hazardous wastewater 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 frac tank 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 in a tank system unless the provisions of UAC R315-264-17 and R315-264-198 are met.
2. CHGM shall record compliance with Condition IV.E.1, as required by UAC R315-264-17 and place this documentation in the facility Operating Record.
3. CHGM shall maintain the safety separation distance around tank systems as specified in the most recent version of the Uniform Building Code.
4. CHGM shall ground all rail cars (applicable to rail unloading areas) and truck tankers to an effective and secure earth ground prior to and during the unloading of ignitable waste.

IV.F. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES

1. CHGM shall not place incompatible waste in a tank system unless the provisions of UAC R315-264-17 and 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. CHGM shall not store acids or oxidizing halides in any carbon steel tank system.
3. CHGM 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. CHGM 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 hazardous waste and shall be managed appropriately. The requirements for incompatible wastes identified in UAC R315-264-17 shall apply.

5. CHGM shall record compliance with Condition IV.F.4 as required by UAC R315-267-17 and place this documentation in the facility Operating Record.

IV.G. INSPECTION REQUIREMENTS

1. CHGM shall comply with the inspection requirements specified in UAC 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 the Waste Stabilization Tank Systems, Tanks 122-TN-001, 122-TN-002 and 122- TN-003 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 the certification report into the Operating Record and submit a copy to the Director within 60 days of the inspection.
4. For each tank system found unfit for use because of the inspections required in Condition IV.G.3, CHGM 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 all tank inspection logs and certification reports part of the Operating Record. CHGM shall maintain all tank certification reports in the Operating Record until closure of the facility.

IV.H. NEW AND MODIFIED TANK SYSTEMS

CHGM 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 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 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 CHGM finds that it will be impossible to meet the 24-hour requirement, CHGM shall orally notify the Director and demonstrate that a longer time is required.
 - c. Manage the collected material as a hazardous waste in accordance with all applicable requirements of UAC R315-262.
 - d. CHGM 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 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. If a leak or spill from a tank system escapes the secondary containment system, CHGM shall complete the following actions in addition to those specified in Condition IV.I.1.:

CHGM 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 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 R315-264-192 and R315-264-193.
4. If a tank system cannot be repaired or is otherwise unfit for continued use, CHGM shall close that tank system in accordance with the Closure Plan in Module II Attachment II-7.
5. CHGM shall maintain records of releases from a tank system that are contained within a secondary containment system 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 shall remove all waste residues and decontaminate the system as specified in UAC R315-264-110 through R315-264-120 and 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 shall notify the Director as specified in UAC 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 shall maintain funding to close all tanks and tank systems.
4. Post-closure care of all tank systems shall meet the requirements of UAC R315-264-197 and Module II Condition II.O of the Permit.