

**ATTACHMENT 10 MANAGEMENT OF WASTE IN THE BULK SOLIDS  
TANKS AND CONTAINMENT BUILDING**

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## **1.0 WASTE TO BE MANAGED**

Clean Harbors Clive, LLC (CHC) is permitted to accept the following waste for management at the facility:

1. Waste identified in Condition 2.C.1
2. Industrial waste
3. Household hazardous waste
4. Site generated waste
5. Regulated and non-regulated PCB waste

Management of all waste at the CHC facility is subject to the conditions of this permit. CHC will use EPA Method 21 in accordance with Utah Administrative Code (UAC) R315-264-1063 and the Waste Analysis Plan (WAP) to determine that a waste has less than 500 ppmw volatile organic compounds (VOCs) emissions.

Waste streams to be managed in the Bulk Solids Tanks will be bulk waste that has less than 500 ppmw volatile organic compounds (VOCs) emissions.

When Building 106 is permitted as a Containment Building (Permit Condition 4.A.), all waste streams managed therein will be non-containerized bulk solids without free liquids that have less than 500 ppmw VOC emissions.

## **2.0 DESIGN AND OPERATING REQUIREMENTS OF THE BULK SOLIDS TANKS AND CONTAINMENT BUILDING**

The Bulk Solids Tanks are enclosed in Building (Unit) 251. The building prevents wind dispersal of waste and keeps precipitation and surface water run-on from entering the tanks. The three tanks are enclosed in an external sealed concrete liner; however, the sides of the tanks are exposed to allow for visual inspection. The bottoms of the tanks are equipped with interstitial leak systems that are positioned between the tank bottoms and the concrete liner. If a leak were to develop, the leaked material would be directed into a sump. The tank design drawings are in Attachment 9 (Design Drawings).

Building 106 has perimeter curbs that prevent surface water run-on into the containment areas. The existing building and doors prevent dispersal of the waste by wind. The types of waste or materials being handled by CHC are not expected to decompose.

CHC will test waste or material prior to adding it to the existing wastes in the Bulk Solids Tanks or Containment Building to ensure compatibility. The types of waste or materials CHC manages are not expected to decompose.

## **3.0 BULK SOLIDS TANK MANAGEMENT PRACTICES**

Because Unit 251 does not have air controls to regulate VOCs, no waste managed in the unit may exceed 500 ppmw VOCs.

Incoming waste will be received in dump trailers, roll-off boxes, or in other trailer-type vehicles. These can be staged on the concrete pad on the east side of Unit 251 for up to 15 days.

CHC will follow the waste acceptance procedures in the WAP. Prior to accepting waste for management in Unit 251, CHC will ensure it has less than 500 ppmw VOCs. CHC will verify this by sampling each waste container's headspace using a photo ionizing detector (PID) in accordance with EPA Method 21. The PID will be calibrated and maintained according to the manufacturer's recommendations.

Once CHC has determined the waste is acceptable for management in Unit 251, waste will be emptied into the Bulk Solids Tanks by backing the bulk container up to one of the access ramps and through a roll-up door. The back end of the container will be positioned above the tank and emptied. Non-bulk containers of waste may be added to the Bulk Solids Tanks the same way.

CHC will use an excavator to mix or remove waste from the tanks using the access ramps described above. Removed waste will be placed into dump trailers, roll-off boxes, or another trailer type vehicle and staged on the concrete pad on the east side of Unit 251.

The doors of Unit 251 must be kept closed unless actively adding or removing waste from the tanks. CHC must inspect the containers stored east of Unit 251 and the tank containment daily and incorporate the results into the operating record.

#### **4.0 CONTAINMENT BUILDING MANAGEMENT PRACTICES**

CHC shall follow the acceptance procedures identified in the WAP. Because Building 106 does not have air controls to manage VOCs, the waste stored there must have a VOC concentration less than 500 ppmw. To ensure that the waste meets this criteria, CHC personnel shall test the headspace of all containers of waste to be placed in the building with a photo ionizing detector (PID) prior to acceptance. ensure The PID will be calibrated and maintained according to the manufacturer's recommendations. The monitoring will be done in accordance with EPA Method 21 and UAC R315-264-1063(b)(1).

To offload into the Containment Building, trucks will enter through the south door of Building 106. Waste storage will start on the south end of the building and continue to the north. Trucks will exit the building through the north truck door. Prior to exiting the building, CHC personnel shall inspect the container, transport vehicle, and wheels to ensure that all are clean and that no waste is tracked out of the building. All inspections will be documented in accordance with permit Condition 4.G.10.

If necessary, a power washer, shovel, or broom will be used to clean off the wheels prior to the truck leaving the containment. These items will be kept on the containment pad north of the building. The rinse waters will be collected at the end of the shift it was generated and stored in the frack tank used to store precipitation that accumulates in the containment areas. Rinse water and sediment will be shipped offsite as hazardous waste for management at a permitted facility in accordance with permit Condition 4.H.2. A front-end loader and brooms will be utilized in Building 106 to prevent the waste from spreading out of the area. The south door will always remain closed except when waste is being added or removed from the building.

To remove waste from the Containment Building, a front-end loader or equivalent will be used to scoop material from the north end of the pile of waste and place it into end-dump trailers or other bulk solids containers for transport off-site. The transport vehicle, and

container if used, will be inspected prior to exiting the building and the trailer will be inspected again outside of the building. The vehicle's tires will be inspected to ensure that waste is not tracked out of the building. The wheels will be decontaminated in the same manner as the trucks that are being offloaded, as necessary. All inspections will be documented in accordance with Condition 4.G.10 of the permit.

At a minimum, CHC will maintain a ten-foot-wide truck lane on the west side of the interior of the Containment Building. Jersey-style barricades will be located between the waste and the truck lane to keep waste out of the truck lane. The barricade shall extend a minimum of five feet beyond the northern most point of the waste. Waste shall not exceed six inches in height where the waste contacts the barricade and the secondary containment wall within the building in accordance with Condition 4.G.7.i of the Permit.

A forty (40) foot area at the north end of the Containment Building will be kept clear of material for there to be room to stage and operate equipment. The area around the building's containment will be inspected at least once a day to ensure that waste has not migrated from the containment area. If the inspections indicate that waste has migrated CHC will take corrective actions immediately. Inspection results shall be incorporated into the operating record.

Prior to bringing a vehicle into the building, the facility shall ensure the truck lane and the area north of the stored waste are clean to prevent waste from contacting the transport vehicle's tires. CHC will also ensure the floor is clean a minimum of five feet beyond where the transport vehicle will park to load or off load.

To discontinue the use of the Containment Building and return the building to a container storage unit, CHC shall remove all waste from the building and decontaminate the containment area in accordance with permit Attachment 7 (Closure Plan). The rinsate generated during the final power washing procedure must meet the standards in Table 1.3 of Attachment 7. CHC must comply with the requirements of Permit Condition 4.I.2 prior to returning the building to container storage.

CHC is allowed to store waste in polypropylene sacks in the Containment Building. When waste is received in bags that are 9 feet long, 9 feet wide, and 3.0 feet high, the maximum capacity of waste in the Containment Building is 527 polypropylene bags (650,000 gallons) and the maximum height of the waste shall not exceed 17 feet. Waste in different size sacks may be stored in the Containment Building contingent upon approval by the Director.

When the only waste stored in the building is in polypropylene sacks, the truck lane can be used to store sacks of waste. In addition, sacked waste can be stored in the northern 40 feet of the Containment Building and the sacks can be placed against the curbs of the secondary containment if they are compatible with the material inside the berm.

Access to the building for the placing and removal of sacks can be through either the north or south truck doors. The doors can remain open during the movement (moving waste to and from a railcar or truck trailer) of waste and will be closed afterwards. When operating in this mode, inspection forms verifying cleanliness of the transport vehicle are not necessary. All spills will be cleaned up according to this Permit.

## 5.0 WASTE TRACKING

CHC shall assign a unique identifying number to each load of waste that will be stored in the Bulk Solids Tanks or Containment Building when it arrives at the facility. This number will be used to track the location at the facility and all data associated with the waste in the container.

Tracking of waste into and out of the Bulk Solids Tanks and Containment Building will involve a “last in, first out” tracking system where the loads will be tracked out beginning with the last load to go in. The waste inventory shall be updated at the end of the shift that the waste was received or shipped from the building.

In addition to tracking the loads of waste in the Bulk Solids Tanks and Containment Building, CHC shall track the volume of waste in the containment area. The volume will be updated in the operating record at the end of the shift when waste is added or removed from the waste in the Bulk Solids Tanks or Containment Building. The volume of waste in the containment area shall not exceed 422 cubic yards for an individual Bulk Solids Tank or 2,583 cubic yards for the Containment Building.

Waste tracking for the polypropylene sacks is like that of roll-boxes. Each sack has a unique identifying number assigned to it and will be tracked into and out of the Containment Building using this number.