

ATTACHMENT 7-4

**VII. Treatment, Storage, & Disposal Facility (TSDF)
Organic Air Emissions Requirements**

The Permittee must comply with the applicable requirements of 40 CFR Part 264, Subparts AA, BB, and CC as modified by the operating requirements specified below.

VII.A. Bulk Solids Tanks:

The bulk solids tanks (T404 A/B and T403) will normally comply with tank level 2 control requirements specified by 40 CFR 264.1084(d)(5), for a tank located inside an enclosure that is vented through a closed vent system to an enclosed combustion device. However, when the incinerator afterburner chamber (ABC) is less than 1400 degrees F., a backup carbon adsorption system must be used. The sludge receiving tank (T406) shall comply with the tank level 2 control requirements specified by 40 CFR 264.1084(d)(3). The Permittee shall operate the bulk solids building and tanks and the associated carbon adsorption system as follows:

1. The roll up doors of the bulk solids building must remain in the closed position at all times except for the following conditions: a) unloading waste into tanks b) managing waste with external equipment c) emergencies, and maintenance activities.
2. All other doors and openings in the bulk solids building, except designated Natural Draft Openings (NDOs), must be kept closed at all times except for maintenance and operations activities and emergencies. The list of designated NDOs is attached to this Permit (Attachment 1 of this Permit).
3. The doors on the sludge receiving tank (T406) must be kept closed at all times except for adding waste, sampling, cleaning of grizzly screens, and performing maintenance and operations activities. When pumping waste into the tank, the smallest opening that is feasible must be used to minimize fugitive VOC emissions.
4. The VOC emissions from the bulk solids tanks (T404 A/B and T403) must be captured and controlled at all times (except as allowed elsewhere in this Permit). When the incinerator is in operation at a temperature greater than or equal to 1400 deg. F. as measured in the afterburner chamber (ABC), these tanks shall be vented to the incinerator. When the temperature in the ABC is less than 1400 deg. F. (for greater than 10 minutes), the tanks must be vented through a closed vent system to the bulk solids carbon adsorption unit. This condition supersedes the requirements of 40 CFR 264.1084(d)(5). The periods when the carbon adsorption unit is utilized must be noted in the operating record.

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5a. The sludge receiving tank (T406) shall be ventilated through a closed vent system to the kiln and ABC during normal plant operations (when ABC temperature is 1400 deg. F. or greater), as required under 40 CFR 264.1084(d)(3) (tank level 2 control - tanks that are vented through a closed vent system to a control device).

5b. During backup operations (when the ABC temperature is less than 1400 deg. F.) the sludge receiving tank shall not be vented through the combustion air system, but instead, shall be vented through the bulk solids carbon adsorption unit. The sludge receiving tank (T406) shall comply with the tank level 2 control requirements specified by 40 CFR 264.1084(d)(3).

6. The bulk solids carbon adsorption unit is a duplex, single stage design. The duplex arrangement (two single-stage absorbers in parallel operated one at a time) allows for changing out or regenerating the spent carbon of one unit, while the other unit is in operation.

The Permittee must replace Calgon BPL carbon (or equivalent specification) on an interval not to exceed the following:

43 days (1,032 hours) of operation if any operating day occurs in the months of June, July, or August.

61 days (1,464 hours) of operation for all other months.

The Permittee must replace Calgon React carbon (or equivalent specification) on an interval not to exceed the following:

22 days (528 hours) of operation if any operating day occurs in the months of June, July, or August.

37 days (888 hours) of operation for all other months.

The carbon replacement frequency is based on the April 7, 1998 Engineering Design Analysis for Backup Emissions Control Unit Report. The Permittee is prohibited from using any other type of carbon specification, unless authorized by a permit modification approved by EPA.

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7. Procedure "T" testing to verify that the bulk solids building meets the criteria for a Permanent Total Enclosure, must be conducted in accordance with the procedure specified in 40 CFR 52.741, Appendix B. This testing, initially conducted on April 14, 1998, must be re-conducted annually, as specified by 40 CFR 264.1084(i)(1).
 8. Carbon adsorption unit inlet VOC concentrations must be monitored by an FID detector annually to verify that the inlet VOC concentration remains similar to the concentration used in the April 7, 1998 Design Analysis Report. The annual monitoring shall consist of daily one-hour tests for a period of one week.
 9. All spent carbon shall be incinerated on-site in the kiln/ABC, or at another approved incineration or recycling facility. Records of the dates the carbon is removed, placed in permitted storage, and treated must be maintained in the operating record.
 10. The Permittee is not allowed the 240 hours of control device downtime for planned maintenance specified in 40 CFR 264.1087(c)(2)(i). During planned maintenance either the ABC or the carbon adsorption system must be operational and on-line.
- VII.B. Liquid Tanks (T-321, T-322, T-323, T-324, T-301, T-302, T-303, T-304, T-305, T-306, T-307, T-308, T-309, T-310, T-311, T-312, and T-401):

The liquid tanks must comply with the control requirements specified by 40 CFR 264.1084(d)(3) (tank level 2 controls - tanks that are vented through a closed vent system to a control device). Two control devices will be used, the ABC and carbon adsorption canisters. When the incinerator afterburner chamber (ABC) is less than 1400 degrees F. or when the fume management system cannot accept the volume of vapor generated from the liquid tanks, the backup carbon adsorption canisters must be used.

1. The carbon adsorption canister outlets must be monitored for breakthrough every three hours of accumulated control device operation. This includes periods when vapors from the liquid tanks are vented to both the ABC and the carbon canisters. A result of 100 ppm or greater of total hydrocarbons will indicate breakthrough.

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2. The Permittee must immediately replace (not to exceed 30 minutes) any carbon adsorption canisters in which breakthrough has occurred.

VII.C. Container Storage Areas

1. Level 2 containers not in DOT approved containers must be verified as having no detectable emissions (as defined in 40 CFR 265.1081) within 24 hours of receipt and every 3 months thereafter. Containers that have been demonstrated, within the preceding 12 months, to be vapor-tight, as specified by 40 CFR 264.1086(h), are exempt from this condition (e.g., tankers, direct burn vessels, etc.).

2. The addition of solidification agent to containers must not involve the active mixing of waste and agent, unless authorized by a permit modification approved by EPA.

VII.D. Inspection and Monitoring Requirements

1. The closed vent system between the outlet of the bulk solids and sludge receiving tanks and the inlet of the ID fans (both kiln/ABC combustion air fans and bulk solids carbon adsorption unit ID fan) will be inspected in accordance with the requirements of 40 CFR 264.1033(l)(2). These sections of the closed vent system are operated below atmospheric pressure.

2. The closed vent system between the outlet of the ID fans (both kiln/ABC combustion air fans and the bulk solids carbon absorption unit ID fan) and the control devices (ABC and carbon adsorption unit) will be inspected in accordance with the requirements of 40 CFR 264.1033(l)(1). These sections of the closed vent systems are operated at, or above, atmospheric pressure.

3. The closed vent system between the outlet of the liquid tanks(T-321, T-322, T-323, T-324, T-301, T-302, T-303, T-304, T-305, T-306, T-307, T-308, T-309, T-310, T-311, T-312, T-401) and the control devices (carbon adsorption canisters and the ABC) will be inspected in accordance with the requirements of 40 CFR 264.1033(l)(1). These sections of the closed vent systems are operated at, or above, atmospheric pressure.

4. Any defects detected by inspections and monitoring conducted under conditions VII.D.1 through 4 must be repaired in accordance with the requirements of 40 CFR 264.1033(l)(3).

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VII.E. Record Keeping Requirements

1. The air emission control equipment design documentation must be maintained in the operating record until it is replaced or otherwise no longer in service.
2. The Permittee must maintain the records specified by 40 CFR 264.1089 (b) and (e) in the operating record for a period of at least three years.

VII.F. Reporting Requirements

1. As specified by 40 CFR 264.1090(b), the Permittee must submit a written report within 15 calendar days of the time that the Permittee becomes aware of any instances in which hazardous waste is managed in tanks not in compliance with the air emission controls of subpart CC,.
2. As specified by 40 CFR 264.1090(b), the Permittee must submit a semi-annual written report describing each occurrence of non-compliance with the operating values specified by 40 CFR 264.1035(c)(4). A report is not required for the six month period if no non-compliance with 40 CFR 264.1035(c)(4) has occurred.