

SUBJECT

DATE

1056.	Hazardous Waste Tanks and the Less than 90-Day Accumulation Time Limit	ENCORE	APR 23, 2015
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TWO MINUTE TRAINING

TO: CH2M HILL PLATEAU REMEDIATION COMPANY

FROM: PAUL W. MARTIN, RCRA Subject Matter Expert
CHPRC Environmental Protection, Hanford, WA

SUBJECT: HAZARDOUS WASTE TANKS AND THE LESS THAN 90-DAY ACCUMULATION TIME LIMIT

DATE: APRIL 23, 2015

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TWO MINUTE TRAINING

SUBJECT: Hazardous Waste Tanks and the Less than 90-Day Accumulation Time Limit

Q: A customer has a less than 90-day hazardous waste tank (10,000-gallon capacity), that continuously receives hazardous waste. On a routine basis 3,000 to 5,000 gallons are pumped from the tank to a tanker for transport to an offsite permitted RCRA facility. In order to ensure compliance with the 90-day accumulation time limit, the tank is completely emptied near the 90th day of accumulation. This system is presenting logistical issues since near the 90th day the tank may not contain enough hazardous waste for a full tanker load. The customer would like to go to a mass balance approach showing that the waste volume entering the tank as compared to the waste volume exiting the tank ensures that the waste resides in the tank for no more than 90 days. How can the customer demonstrate this mass balance approach to the less than 90-day requirement and in a manner that would be acceptable to EPA?

A: [40 CFR 262.34\(a\)\(1\)\(ii\)](#), [[WAC 173-303-200\(1\)\(b\)\(ii\)](#)] basically states that a generator may accumulate waste in tanks without a permit or interim status if the accumulation is for less than 90 days. There is no discussion of how the generator complies with the ≤ 90 -day accumulation requirement. However, an EPA guidance letter entitled, "[Turnover of Hazardous Wastes Stored in Generator Accumulation Tanks](#)", clarified that a generator may use any method to demonstrate compliance with the ≤ 90 -day accumulation requirement as long as the method is "reasonable and easily discernible to EPA or an authorized state".

The EPA guidance letter went on to state that tanks could be operated in one of two ways – in a batch process or in a continuous flow process (mass balance). With a batch process the tank is completely emptied within the 90-day timeframe. With the continuous flow process, the generator demonstrates that the hazardous waste residence time (turnover) is ≤ 90 days, even though the tank is never completely emptied. The key parameters are the volume of the tank, the throughput of hazardous waste, and the time the hazardous waste resides in the tank. Since our customer has a 10,000-gallon tank, if the total hazardous waste pumped out of the tank over the 90-day period is equal to or greater than 10,000 gallons, the residence time is less than 90 days. For waste that exits the tank on a daily basis, e.g., 500 gallons per day, the residence time is 20 days (10,000 gallon/500 gallons per day = 20 days).

Concerning [40 CFR 262.34\(a\)\(2\)](#), [[WAC 173-303-200\(1\)\(c\)](#)] and the required date of accumulation mark, the EPA guidance letter stated that the generator could mark both the tank volume and the estimated throughput to allow inspectors to determine the residence time of hazardous waste in the tank. Note that since the date of accumulation is a required mark, consulting with your State agency is highly recommended.

SUMMARY:

- A generator may accumulate hazardous waste in tanks for ≤ 90 days without a permit or interim status.
- To comply with the ≤ 90 -day time limit, EPA stated that a generator may use any method that is "reasonable and easily discernible to EPA or an authorized state".
- EPA has suggested using the batch or continuous flow processes to demonstrate compliance with the ≤ 90 -day accumulation limit and clarified the processes in a February 16, 2007 guidance letter.

Excerpts from 40 CFR 262.34(a) and WAC 173-303-200(1) are attached to the e-mail. If you have any questions, please contact me at "Paul_W_Martin@rl.gov" or at (509) 376-6620.

FROM: Paul W. Martin

DATE: 04/23/15

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TWO MINUTE TRAINING - ATTACHMENT

SUBJECT: Hazardous Waste Tanks and the Less than 90-Day Accumulation Time Limit

40 CFR 262.34 Accumulation time

(a) Except as provided in paragraphs (d), (e), and (f) of this section, a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status, provided that:

(1) The waste is placed:

(ii) In tanks and the generator complies with the applicable requirements of subparts J (*Tank Systems*), AA (*Air Emission Standards for Process Vents*), BB (*Air Emission Standards for Equipment Leaks*), and CC (*Air Emission Standards for Tanks, Surface Impoundments, and Containers*) of 40 CFR part 265 except §§265.197(c) (*Closure plans and secondary containment*) and 265.200 (*Waste analysis and trial test*); and/or

(2) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container;

(3) While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste"; and

(4) The generator complies with the requirements for owners or operators in subparts C (*Preparedness and Prevention*) and D (*Contingency Plan and Emergency Procedures*) in 40 CFR part 265, with §265.16 (*Personnel training*), and with all applicable requirements under 40 CFR part 268 (*Land Disposal Restrictions*).

WAC 173-303-200 Accumulating dangerous waste on-site.

(1) A generator, not to include transporters as referenced in WAC 173-303-240(3), may accumulate dangerous waste on-site without a permit for ninety days or less after the date of generation, provided that:

(b) The waste is placed:

(ii) In tanks and the generator complies with 40 C.F.R. Part 265 Subparts AA, BB, and CC incorporated by reference at WAC 173-303-400 (3)(a) and 173-303-640 (2) through (10), except WAC 173-303-640 (8)(c) and the second sentence of WAC 173-303-640 (8)(a). (Note: A generator, unless otherwise required to do so, does not have to prepare a closure plan, a cost estimate for closure, or provide financial responsibility for his tank system to satisfy the requirements of this section.) Such a generator is exempt from the requirements of WAC 173-303-620 and 173-303-610, except for WAC 173-303-610 (2) and (5); and/or

(c) The date upon which each period of accumulation begins is marked and clearly visible for inspection on each container;

(d) While being accumulated on site, each container and tank is labeled or marked clearly with the words "dangerous waste" or "hazardous waste." Each container or tank must also be marked with a label or sign which identifies the major risk(s) associated with the waste in the container or tank for employees, emergency response personnel and the public (note: If there is already a system in use that performs this function in accordance with local, state, or federal regulations, then such system will be adequate). The department may also require that a sign be posted at each entrance to the accumulation area, bearing the legend, "danger—unauthorized personnel keep out," or an equivalent legend, written in English, and legible from a distance of twenty-five feet or more; and...

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