Tank Management for Hazardous Waste Generators

What is a Tank?
Division Definition for a Tank

DWMRC Conditions for Tank

1. Tanks are devices that are portable and capable of being moved when empty, but can’t be transported or moved when full or in use

2. Tanks are located and in use in a fixed or stationary location for greater than 90 days,
Tank Management for Hazardous Waste Generators

What is a Tank?

- Hazardous waste storage tank
- IBC container
- Mobile tank truck
Small Quantity Generators – General Rules

R315-262-16(b)(3) – Accumulation of Hazardous Waste in Tanks

• Cannot place waste in tanks that could damage the tank or liner
• Uncovered tanks need 60 cm. of freeboard or some type of containment with the same capacity (e.g. containment structure, drainage control, diversion structure, etc.)
• If waste is continuously fed into a tank, there must be a method to stop the flow
• Incompatible wastes cannot be stored in the same tank
• Waste cannot be stored in an unwashed tank that previously held incompatible wastes
• Ignitable or reactive waste cannot be placed in tanks
Inspections are Daily or Weekly Depending on Facility Equipment

R315-262-16(b)(3) – Accumulation of Hazardous Waste in Tanks

• Daily
  • Discharge Control Equipment
  • Data from Monitoring Equipment
  • Level of Waste in each Tank
• Weekly
  • Integrity of the Tank
  • Integrity of the Secondary Containment

Document! Document! Document!
Inspections are Daily or Weekly Depending on Facility Equipment

If your facility has full secondary containment and leak detection equipment or workplace practices

- Daily
  - Discharge Control Equipment
  - Data from Monitoring Equipment
  - Level of Waste in each Tank
- Weekly
  - Integrity of the Tank
  - Integrity of the Secondary Containment

  - Daily
  - Weekly
    - Discharge Control Equipment
    - Data from Monitoring Equipment
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    - Integrity of the Secondary Containment

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Small Quantity Generators – Labeling

R315-262-16(b)(6)(ii) – Labelling and Marking of Tanks

• Mark or Label Tanks with the words “Hazardous Waste”

• Mark or Label Tanks with an Indication of the hazards
  • Hazardous Waste Characteristics
  • DOT, OSHA, or NFPA Hazard Communications

• Use inventory logs or equivalent to show hazardous waste is not in tank for more than 180 days

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Large Quantity Generators – General Rules

R315-262-17(a)(2) – Accumulation of Hazardous Waste in Tanks

- Tanks must be certified by Professional Engineer
- Tanks and Ancillary Equipment must have Secondary Containment
- Cannot place waste in tanks that could damage the tank or liner
- Inspections – Same as Small Quantity Generator
- Incompatible wastes cannot be stored in the same tank
- Waste cannot be stored in an unwashed tank that previously held incompatible wastes
- Ignitables or reactive waste cannot be placed in tanks
- Specific Spill/Leak Response Protocol
- Must manage all hazardous waste placed in tanks in accordance with the applicable requirements of 40 CFR 265 subparts AA, BB, and CC
• Subpart AA – Air Emission Standards for Process Vents
  (40 CFR 265.1030 through 1035)

• Subpart BB – Air Emission Standards for Equipment Leaks
  (40 CFR 265.1050 through 1064)

• Subpart CC – Air Emission Standards for Tanks, Surface Impoundments, and Containers
  (40 CFR 265.1080 through 1090)
Subpart AA Covers Process Vents for Hazardous Waste Recycling Systems

Applicability
1. Specific Hazardous Waste Recycling Processes
2. Organic Concentration > 10 ppmw
3. Specific Categories of Units
4. Specifically Vents
5. Vents fitted with devices that are in compliance with CAA requirements are Exempt
Figure 15-2: Determining If Subpart AA Process Vent Standards Apply

Do you treat or recycle hazardous waste via any of the following processes:
1. Distillation,
2. Fractionation,
3. Thin-film evaporation,
4. Solvent extraction,
5. Air stripping, or
6. Steam stripping?

Yes \[\rightarrow \] §§264/265.1030(b)
No \[\rightarrow \] Subpart AA emission control standards do not apply.

Does the hazardous waste contain at least 10 ppm by weight organics?
Yes \[\rightarrow \] §§264/265.1030(b)
No \[\rightarrow \] Subpart AA emission control standards apply to the process vents associated with the equipment previously noted.

Are any of the above-mentioned processes conducted in:
1. Units that have interim status, a RCRA permit, or are otherwise subject to the permitting requirements of Part 270;
2. Recycling units at a facility that has some other interim status or RCRA-permitted unit; or
3. A 90-day unit (e.g., a 90-day tank used for air stripping)?

Yes \[\rightarrow \] §§264/265.1030(b)(1–3)
No \[\rightarrow \] Are the process vents equipped with controls mandated by a Clean Air Act standard?
Yes \[\rightarrow \] §§264.1030(e), 265.1030(d)
No \[\rightarrow \] Are the total organic emissions from all process vents subject to Subpart AA at the facility ≥3 lb/hr (1.4 kg/hr) or ≥3.1 tons/yr (2.8 Mg/yr)?
Yes \[\rightarrow \] §§264/265.1032(a)(1)
No \[\rightarrow \] Vents on these units are subject to Subpart AA.
Subpart BB Covers Leaks from Process Equipment

Applicability

1. Specific Process Units in contact with Hazardous Waste
2. Organic Concentration > 10 ppmw
3. In contact with Waste for > 300 hours per year
4. 90 Day Unit
5. Units in compliance with CAA LDAR provisions can elect to use them as compliance with RCRA
Subpart CC Covers Volatile Organic Air Emissions from Tanks, Containers, and Impoundments

Applicability

1. 90 Day Tanks and Containers for LQG
2. Volatile Organic Concentration ≥ 500 ppmw
3. Units that meet Subpart AA Requirements are Exempt
4. Units that are fitted with devices that are in compliance with CAA requirements are Exempt
Figure 15-7: Determining If Subpart CC Emission Control Standards Apply

Do you handle hazardous waste in any of the following types of units?
1. Permitted or interim status tanks, containers, or surface impoundments
2. 90-day tanks or containers at large quantity generator sites
3. Part 264, Subpart X miscellaneous units

Yes

Do the units qualify for any of the following exemptions?
1. Exempt from permitting requirements [see §264.1(g) and §265.1(c)], including:
   - Totally enclosed treatment units
   - Elementary neutralization units
   - Wastewater treatment units
   - Immediate response units
   - Used oil tanks and containers
   - Units containing universal waste
2. Not subject to certain Parts 264/265, Subparts I, J, or K requirements, including:
   - Satellite accumulation containers
   - CESQG tanks and containers
   - SQG tanks and containers
   - Recycling units
3. Units that do not receive hazardous waste after 12/6/96
4. Containers smaller than 26.4 gallons (0.1 m³)

No

Subpart CC emission control standards do not apply.

Subpart CC emission control standards apply to the units. In some cases, requirements may be limited to waste determinations and recordkeeping.

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Now Back to Our Tanks!
Large Quantity Generators – Labeling

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Final Take-Aways

1. Any generator who stores hazardous waste in tanks needs to store the waste properly, inspect the tanks regularly, and properly label the tanks.

2. Be aware of Subpart AA, BB, and CC Emissions Regulations. Look through the flowcharts, and if you have questions please feel free to reach out to us.

3. Document! Being in compliance is only half the battle; you need to be able to prove you are in compliance.
References / Further Reading

- Utah Annotated Code R315-262
- 40 CFR 265