**Air Regulations in the Hazardous Waste Standards? Taking a Look at the RCRA Air Standards**

In our [blog article about EPA’s compliance initiatives](https://isienvironmental.com/epa-compliance-priorities-blog/), EPA said a number of facilities were not complying with RCRA air requirements and as a result, inspectors were being directed to look at these items in inspections. So, what are the RCRA air requirements, and who is affected by them?

RCRA air regulations pertain to organic air emissions from equipment used for hazardous waste. There are 3 different standards – Subparts AA, BB and CC – and each are specific to the type of equipment being used.

Subpart AA deals with process vents used for treating/recycling hazardous waste, Subpart BB deals with equipment leaks and Subpart CC deals with emissions from tanks, containers and [surface impoundments](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=2a77c749315031342fd6c14af611b65a&term_occur=999&term_src=Title:40:Chapter:I:Subchapter:I:Part:265:Subpart:B:265.19).

**Subpart AA**

Some equipment examples for this subpart would include vents associated with solvent extraction, air stripping, steam stripping, thin-film evaporation, distillation and fractionation.

**To be regulated**, the unit must:

* Be permitted or in interim status;
* Be a recycling unit at a facility that has a RCRA permit or is operating under an interim status due to some other hazardous waste management operation (such as a RCRA-permitted storage tank); or,
* Be a 90-day container or tank.

The hazardous waste being treated or recycled must contain at least 10 ppmw total organics.

**Exemptions:**

* The recycling unit is at a facility that has no RCRA permit and is not operating under an interim status; or,
* Your facility is equipped and operating with air emissions controls complying with other air regulations (CAA, NSPS, NESHAP, MACT) in 40 CFR Parts 60, 61 or 63 for each affected process vent.

**Requirements:**

If this regulation applies to you, then you’re required to first determine the emissions from all of those vents and if it’s less than 3 lbs/hour and 3.1 tons/year, no controls are required. However, if it’s that rate or more, your facility must either find a way to reduce those emissions or use control devices that will reduce total organic emissions from all affected events by 95%.

**Subpart BB**

This subpart is about equipment found in hazardous waste pipelines or the ancillary equipment associated with a hazardous waste tank. These can be valves, pumps, compressors, pressure-relief devices, flanges, connectors, sampling connection systems or open-ended lines/valves.

**To be regulated**, the equipment must:

* Be part of a permitted or in interim status unit;
* Be part of a recycling unit at a facility that has a RCRA permit or is operating under an interim status due to some other hazardous waste management operation (such as a RCRA-permitted storage tank); or,
* Be part of a 90-day container or tank.

The hazardous waste in the equipment must contain at least 10% total organics by weight.

**Exemptions:**

* The recycling unit is at a facility that has no RCRA permit and is not operating under an interim status;
* The equipment is operated, monitored or repaired in accordance with air regulations (CAA, NSPS, NESHAP, MACT) for fugitive equipment leaks from 40 CFR Part 60, 61 or 63; or,
* The equipment is in vacuum service because leaks would go back into the equipment.

**Requirements:**

If this regulation applies to your company, you’ll be required to implement an LDAR program (Leak Detection and Repair) for the applicable equipment. LDAR programs are a significant effort and have their own design standards, tagging, and recordkeeping, reporting, inspection and monitoring requirements.

**Subpart CC**

This regulation applies to hazardous waste tanks, containers and surface impoundments (lagoons, holding/storage pits, ponds, etc).

**To be regulated**, the equipment must:

* Be part of a permitted or in interim status unit; or,
* Be a 90-day container or tank.

Units must receive hazardous waste containing greater than or equal to 500 ppmw volatile organics at the *point of waste origination*. For generators, the point of origination is the same as the point of generation. For TSDF facilities, the point of origination is where the owner accepts delivery/takes possession of hazardous waste.

**Exemptions:**

* Satellite accumulation containers;
* Small Quantity Generators’ 180/270 day tanks and containers;
* Containers with a design capacity of less than or equal to 26.4 gallons;
* Units used solely for the onsite treatment or storage of remediation wastes under state or RCRA corrective action or CERCLA;
* Units not subject to substantive RCRA standards, including wastewater treatment units, elementary neutralization units, immediate response units and totally enclosed treatment units;
* Units that receive radioactive mixed wastes; or,
* Equipment with air emissions controls in accordance with air regulations (CAA, NSPS, NESHAP, MACT) in 40 CFR Part 60, 61 or 63.

**Requirements:**

If this regulation applies to your company, you’ll first need to determine the volatile organic concentration for every hazardous waste managed in one of these units. If the concentration of every waste entering a unit is less than 500 ppmw, no emission controls will be required.

Even if your tank contains less than 500 ppmw, if anywhere along the way to the tank from point of origination is 500 ppmw or more, you’ll need the emissions controls.

*Tanks*

For low vapor pressure wastes, a tank with a fixed roof with no gaps or openings between the roof edge and tank wall can be used. For all other wastes, there are several options (floating roof, fixed roof with control device, enclosure vented to enclosed combustion device or pressurized tank). Control devices can be a flare or carbon adsorbers.

*Containers*

There are 3 levels of standards, based on container size. Level 1 is low vapor pressure wastes in small capacity containers (26-121 gal), 55 gal drums, roll off boxes for soil, and containers greater than 121 gal. For this level you must use DOT containers, they must have tight fitting covers with no visible holes or gaps, and they need to be closed.

Level 2 is for more volatile wastes in greater than 121 gal containers. An example would be a tank truck with spent solvent. Here, use DOT containers, they must be closed having no detectable organic emissions, and you must prove they’re vapor tight on an annual basis.

Level 3 is where hazardous waste is being stabilized. They must be connected to a closed vent system to a control device and meet special requirements for being managed in an enclosure.

*Surface Impoundments*

Emission controls for surface impoundments must have an air-supported or rigid cover that’s vented to a control device or be an HDPE or similar floating membrane with a minimum thickness of 2.5 mm.

**Does This Apply to You?**

iSi can help you determine if you’re subject to RCRA Air regulations, and which Subpart you’re required to follow. [Contact us today](https://isienvironmental.com/pricing/) for a price quote!