

1.0 INTRODUCTION

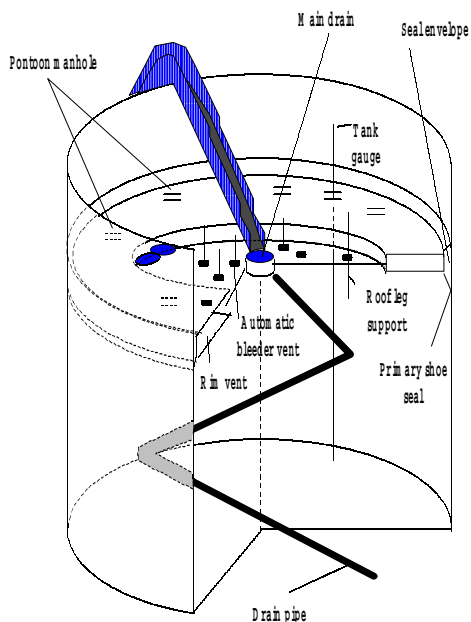
1.1 Purpose of this Handbook

RCRA air rules for process vents and equipment leaks have been in effect since June 1990. These RCRA air rules are referred to respectively as Subpart AA and Subpart BB standards in this manual based on their location in 40 CFR 264 and 265, Subpart AA (Air Emission Standards for Process Vents) and Subpart BB (Air Emission Standards for Equipment Leaks). RCRA air rules which regulate organic air emissions from tanks, surface impoundments and containers were published on [December 6, 1994](#). These air rules are referred to as Subpart CC standards based on their location in 40 CFR 264 and 265, Subpart CC (Air Emission Standards for Tanks, Surface Impoundments, and Containers). The compliance deadline for the RCRA Subpart CC standards was December 8, 1997.

The regulations in Subpart AA affect process vents on any of the following equipment which processes hazardous waste with an annual average total organics concentration of greater than or equal to 10 ppm by weight: distillation columns, fractionation units, thin film evaporators, solvent extractors, and air or steam strippers. Subpart BB affects any pumps, valves, compressors, pressure relief devices, sampling connection systems, open-ended vales or lines, and flanges or other connectors, which contain or contact hazardous waste streams with equal or greater than 10 percent by weight total organics. All facilities subject to the Subpart AA and BB standards are required to submit the information specified in 40 C.F.R. §§ 270.24 and 270.25 upon request from EPA. The information required includes an identification and specification of the location of affected vents and equipment, the proposed method of compliance with the new standards, and documentation of compliance with the standards.

Subpart CC requires air emission controls be used for tanks, containers, miscellaneous units and surface impoundments which manage hazardous wastes containing an average organic concentration of greater than or equal to 500 ppmw at the point of waste origination. Specific exemptions to these requirements are outlined in the rule.

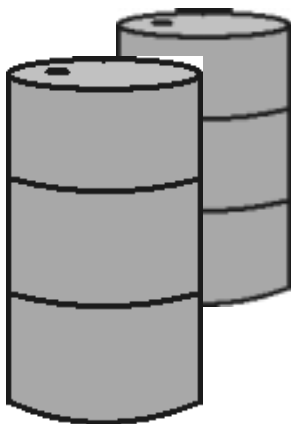
RCRA Subparts AA and BB standards apply only to treatment, storage and disposal facilities (TSDFs) that are subject to the permitting requirements of RCRA. However, the RCRA Subpart CC standards apply to both TSDFs and large quantity hazardous waste generator facilities that have on-site tanks and



containers used to accumulate hazardous waste for less than 90 days prior to its transfer to a permitted TSDF. As of December 8, 1997, each TSDF owner or operator and each hazardous waste generator subject to the RCRA Subpart CC standards must either install and operate the specified air emission control requirements on all affected tanks, surface impoundments, and containers, or begin performing the specified waste determinations and recordkeeping to indicate that the waste management units are exempted from these requirements.

This Book of Knowledge presents information on RCRA Subpart AA, BB and CC standards. Since Subparts AA and BB standards have been in effect since 1990, several other sources of guidance have been published to assist TSDFs with Subparts AA and BB compliance. Section 1.3 of this guidance manual contains a listing of other sources of guidance. Nevertheless, some information on Subparts AA and BB standards are presented in this guidance handbook. However, Subpart CC standards are covered in greater detail in this guidance handbook based on their more recent effective date and responses from industry which indicate more demand for Subpart CC guidance materials.

RCRA Air Rules Guidance Modules have been produced to complement the regulatory guidance that is presented in this Book of Knowledge Guidance. The guidance modules were developed to provide Subpart CC inspection and permitting assistance for waste management units which implement control option alternatives as provided for in Subpart CC. Guidance modules for many of the most common waste management unit/control option combinations have been prepared including:



- A fixed roof tank equipped with a closure device;
- A fixed roof tank connected to a closed-vent system that is vented to a vapor recovery/vapor reduction system (such as carbon adsorption or condenser system);
- A fixed roof tank connected to a closed-vent system that is vented to an enclosed combustion device (such as thermal vapor incinerator, boiler, or process heater);
- A fixed roof tank connected to a closed-vent system that is vented to a flare;
- A fixed roof tank connected to a closed-vent system that is vented to a control device other than a thermal vapor incinerator, flare, boiler, process heater; condenser, or carbon adsorption system;
- A fixed roof tank equipped with an internal floating roof;
- An external floating roof tank;

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- A pressure tank;
- A tank located inside an enclosure system vented to an enclosed combustion device;
- A container meeting U.S. DOT regulations;
- A container equipped with a cover and closure device;
- A container operating with no detectable organic emissions;
- A container using an organic-vapor suppressing barrier;
- A vapor-tight container;
- A container vented directly through a closed-vent system to a carbon adsorption system;
- A container vented directly through a closed-vent system to an enclosed combustion device;
- A container vented directly through a closed-vent system to a flare; and
- A container vented directly through a closed-vent system to a control device other than a thermal vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system.

Definitions for the terms used in Subparts AA, BB, and CC regulations are provided in 40 CFR 264.1031 and 265.1081. A copy of these regulations can be found on the EPA website at http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr264_00.html and http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_40/40cfr265_00.html.