National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations

Summary of Rule Requirements

Rule Purpose

The National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations (OSWRO) are a set of rules promulgated under 40 CFR part 63. These rules provide for the control of hazardous air pollutants (HAP) emissions from selected waste management and recovery operations that are not subject to federal air standards under other subparts in Part 63.

Rule Impacts

Emissions of organic air toxics, such as benzene and methylene chloride, from the source category are estimated to be reduced by approximately 43,000 megagrams (47,000 tons) annually, representing an 82 percent reduction from the baseline level. This based on an estimate that approximately 250 facilities nationwide are subject to the rule.

Rule Citations in 40 CFR Part 63

The applicability, general standards, compliance requirements, test methods and procedures, reporting, recordkeeping, and some unit-specific air emission control requirements are specified in Subpart DD - National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations. In addition, Subpart DD cross-references the following other subparts in Part 63 for the air emissions control requirements to be applied to specific types of affected sources.

Subpart OO	National Emission Standards for Tanks - Level 1
Subpart PP	National Emission Standards for Containers
Subpart QQ	National Emission Standards for Surface Impoundments
Subpart RR	National Emission Standards for Individual Drain Systems
Subpart VV	National Emission Standards for Oil-Water Separators and Organic-Water Separators

Key Dates

Rule Proposed: October 13, 1994 (see 59 FR 51913)
Rule Promulgated: July 1, 1996 (see 61 FR 34140)
Initial Notification for existing sources: October 29, 1996
Compliance Dates:
Existing Sources: July 1, 1999 (source before 10/13/94)
New Sources: July 1, 1996 or upon initial startup.

Applicability

The OSRWO NESHAP is applicable to the owner and operator of a plant site that meets all 3 of the following conditions. If any one of these conditions does not apply to the plant site, then the owner and operator of the plant site are not subject to the rule.

Condition 1 - The plant site is a "major source" of HAP emissions as defined in General Provisions to 40 CFR Part 63.

Condition 2 - "Off-site material" is shipped to transferred to the plant site. An "off-site material" is specified in the rule as a material that meets all of the following criteria:

1. The material is one of the following as defined in rule:

Waste as defined consistent with other NESHAP with the exception of certain specific types of wastes listed in the rule.

Used oil - any oil refined from crude oil or any synthetic oil that has been used and as a result of such use is contaminated by physical or chemical impurities. (Same definition of "used oil" by RCRA in 40 CFR 279.1)

Used solvent - a mixture of aliphatic hydrocarbons or a mixture of one and two ring aromatic hydrocarbons that has been used as a solvent and as a result of such use is contaminated by physical or chemical impurities.

2. The waste, used oil, or used solvent is not generated at the plant site but instead shipped or transferred to the plant suite from another location.

3. The waste, used oil, or used solvent contains one or more of the specific organic chemical compounds, isomers, and mixtures listed in Table 1 in the rule.

Applicability (continued)

Condition 3 - The "off-site material" is managed at the plant site in a waste management operation or recovery operation listed below.

RCRA hazardous waste management operation regulated as a hazardous waste treatment, storage, and disposal facility (TSDF) under 40 CFR parts 264 or 265.

RCRA hazardous wastewater treatment operation exempted from air emission control requirements under 40 CFR parts 264 or 265.

Non-hazardous wastewater treatment operation where this operation is the predominate function conducted at the plant site and the plant site is not a publicly-owned treatment works RCRA-exempt hazardous waste recycling facility, Used solvent recovery operation,Used oil recovery operation

Affected Sources

At a plant site subject to the rule, the affected sources are:

Tanks used to manage "off-site material"

Surface impoundments used to manage "off-site material"

Containers used to manage "off-site material"

Oil-water and organic-waste separators used to manage "off-site material"

Individual drain systems and other material conveyance systems used to manage "off-site material"

Process vents on units used to treat "off-site material"

Leaks from equipment components (e.g., pumps and valves) that contain or contact "off-site material" having an organic HAP concentration ò 10%

Application of Standards to Affected Sources:

In general, air emission controls required on those affected sources (other than equipment leaks) receiving "off-site material" having a volatile organic HAP (VOHAP) concentration ò 500 ppm mass weighted average.

The air standards under the rule do not apply to either of the following units at the plant site:

A unit that does not manage "off-site material"

A unit that is not part of one of the six types of affected waste management and recovery operations specified in the rule

General Standards for Affected Sources:

For each affected source other than equipment leaks, owner or operator comply with one of the following alternatives:

1. Determine that the average VOHAP concentration of "off-site material" managed in the affected source is <500 ppmw mass weighted average.

Determination of VOHAP concentration is made based on "off-site material" composition at point where it enters the plant site ("point-of-delivery" as defined in the rule).

VOHAP concentration measured using Method 305 in 40 CFR 63 Appendix A.

1. As an alternative to using Method 305, an owner or operator may determine the HAP concentration of an "off-site material" using any one of the several alternative test methods and then adjust the test results using factors specified in the rule to determined the VOHAP concentration.

2. Install and operate air emission controls in accordance with applicable control requirements specified in rule (see next section)

3. Treat the "off-site material" prior to placement in the affected source to remove or destroy the HAP in accordance with one of the alternative treatment standards specified in the rule

4. Meet one of the unit-specific control requirement exemptions specified in the rule.

Air Emission Control Requirements for Affected Sources:

Tanks

Use required control level (Level 1 or 2) as determined by tank capacity and vapor pressure of material. Tank control level categories specified in rule in Table 3 (for existing tanks) and Table 4 (for new tanks).

Level 1 - use air emission controls per 40 CFR 63 subpart OO .

Level 2 controls - use any one of five alternatives:
Fixed-roof with internal floating roof
External floating roof
Vapor-tight cover vented to ò95% control device
Pressure tank
Tank inside enclosure vented to combustion control device

Oil-Water and Organic-Water Separators

Use air emission controls per 40 CFR 63 subpart VV.

Surface Impoundments

Use air emission controls per 40 CFR 63 subpart QQ.

Containers

Use required control level (Level 1, 2, or 3) as determined by container size, organic content of the off-site material, and how container is used.

No controls required by rule for containers ó 0.1 m3 (÷26 gal)

Use Level 1 controls per 40 CFR 63 subpart PP for containers ó 0.46 m3 (÷ 119 gal),and for containers > 0.46 m3 not in "light material service" as defined in rule.

Use Level 2 controls per 40 CFR 63 subpart PP for containers > 0.46 m3 in "light material service" as defined in rule.

Use Level 3 controls per 40 CFR 63 subpart PP for containers > 0.1 m3 used for wastestabilization process.

Air Emission Control Requirements for Affected Sources (continued):

Transfer Systems

Individual drain systems - use air emission controls per 40 CFR 63 subpart RR.

Other types of transfer systems - cover and vent to ò95% control device or use a closed system (e.g., hard piping).

Process Vents

Vent through a closed-vent system to ò95% control device.

Air Emission Control Requirements for Equipment Leaks:

Apply to leaks from equipment components (e.g., pumps and valves) that contain or contact "off-site material" having an organic HAP concentration ò 10%.

Implement leak detection and repair (LDAR) program and meet applicable equipment standards in accordance with either:

Fugitive Emission Sources NESHAP under 40 CFR 61 Subpart V
or
Hazardous Organic NESHAP (HON) under 40 CFR 63 Subpart H

Notification, Recordkeeping, and Reporting Requirements

Follow requirements in General Provisions under 40 CFR 63 subpart A.

Relationship to Other Air Rules

No overlap of air emission control requirements.

Unit subject to both Subpart DD and another NESHAP standard compliance with organic HAP emission control requirement under other NESHAP standard exempts unit from Subpart DD controls.

Unit subject to both Subpart DD and RCRA air rules compliance with Subpart DD exempts unit from RCRA rules.