PROPOSED MISCELLANEOUS ORGANIC NESHAP

U.S. EPA has proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) for two source categories: Miscellaneous Organic Chemical Manufacturing (proposed part 63, subpart FFFF) and Miscellaneous Coating Manufacturing (proposed part 63, subpart HHHHH). The proposed rules are also collectively referred to as MON (for Miscellaneous Organic NESHAP). Key elements of the proposed rule are presented below.

Date the Rule Was Proposed

April 4, 2002 (Federal Register Vol. 67, No. 65, pp. 16154-16259).

Date Comment Period Ends

June 28, 2002.

Compliance Date

Three years from promulgation date.

Potentially Regulated Facilities

The rule applies to facilities that meet both of the following conditions:

- Facilities that manufacture organic chemicals and coatings under SIC Codes 282, 283, 284, 285, 286, 287, 289, and 386.; and
- Facilities that are a major source of Hazardous Air Pollutants (HAPs).

Examples of these facilities include producers of specialty organic chemicals, paints, coatings, adhesives, inks, explosives, certain polymers and resins, and certain pesticide intermediates. Some batch chemical processes that are excluded from Hazardous Organic NESHAP (a.k.a. HON rule) may be subject to the MON rule.

Proposed Standards

The proposed standards for the two source categories are summarized in Table 1 and Table 2 respectively.

Proposed Initial Compliance Demonstration

Engineering calculations or tests [e.g., uncontrolled emissions and total resource effectiveness (TRE)] may be necessary to demonstrate applicability and initial compliance with the applicable standards. Testing is required for control systems of batch vents and stationary vessels that treat greater than 10 tons per year (tpy) of HAPs. Testing is also required for each continuous process vent with a TRE less than or equal to 2.6.

Proposed Continuous Compliance Demonstration

Continuous compliance can be demonstrated by continuously monitoring HAP emissions reduction. Alternatively, the compliance can be demonstrated by measuring continuously or at 15-minute intervals a site-specific operational parameter, the value of which is established during the initial compliance demonstration. Continuous or 15-minute monitoring is not required for sources not equipped with control devices or falling below applicability trigger levels. For control devices that do not control more than 1 tpy of HAP emissions, only daily verification of the operating parameter is required.

Proposed Notification, Recordkeeping, and Reporting Requirements

Most of these proposed requirements are in part 63, subpart A. There are some requirements specific to the proposed NESHAP. Initial Notification is due within 120 days of the effective date. The Notification of Compliance Status (NCS) is due on the compliance date.

Table 1. Proposed Standards for Miscellaneous Organic Chemical Manufacturing Source Category

SOURCE TYPE	TRIGGER FOR CONTROL	STANDARD
Batch process vents	Uncontrolled emissions from the sum of all batch process vents within a process • ≥ 10,000 lb/yr for existing sources • ≥ 3,000 lb/yr for new or reconstructed sources	• Control 98% HAP emissions from all vents, • Control 95% HAP emissions from all vents if recovery devices are used, or • Use following control for some vents and reduce the sum of all the remaining vents within the process by 98%: control outlet total organic HAP [alternatively total organic compounds (TOC)] to ≤ 20 ppmv and total hydrogen halides and total halogens to ≤ 20 ppmv; use qualified flares (except for halogenated vent streams); or use control devices specified in §63.2455(f).
Continuous process vents	Total resource effectiveness (TRE) • ≤ 2.6 for existing sources • ≤ 5.0 for new or reconstructed sources	• Control 98% HAP emissions, • Control outlet total organic HAP (or TOC) to ≤ 20 ppmv and total hydrogen halides and total halogens to ≤ 20 ppmv [Ref as Std. A hereafter], • Use qualified flares (except for halogenated vent streams) [Ref as Std. B hereafter], or • Use control devices specified in §63.2455(f) [Ref as Std. C hereafter].
Storage tanks	• For existing sources, capacities ≥ 10,000 gal and HAP partial pressure > 1 psia • For new or reconstructed sources, capacities ≥ 10,000 gal and HAP partial pressure > 0.1 psia	• Control 95% HAP emissions, • Use a floating roof, • Use vapor balance, or • Std. A, B, or C.
Wastewater streams	• For existing sources, HAP listed on Table 9 of 40 CFR part 63, subpart G (Table 9 HAP) with concentration > 1,000 ppmw and flow > 10 lpm or with concentration > 10,000 ppmw at any flow rate • For new sources, in addition to above triggers, control is required if streams contain HAP listed on Table 8 of 40 CFR part 63, subpart G (Table 8 HAP) at concentration > 10 ppmw and the flow rate > 0.02 lpm	Same as Hazardous Organic NESHAP (HON).
Transfer operations	Load > 0.17 million gal/yr of liquid products that contain organic HAP with partial pressure ≥ 1.5 psia	Same as HON.
Maintenance wastewater and heat exchanger systems	N/A	A plan for minimizing emissions and a monthly leak detection program as was done in the HON rule.
Equipment leaks	N/A	Leak detection and repair (LDAR) program that is contained in 40 CFR part 63, subpart UU.

Table 2. Proposed Standards for Miscellaneous Coating Manufacturing Source Category

SOURCE TYPE	TRIGGER FOR CONTROL	STANDARD
Stationary and portable process vessels	Capacity > 250 gal	• For existing portable vessels, cover. • For existing stationary vessels, cover and control 75%; use Std A, B, or C; or use condensers with specified temperature. • For new or reconstructed sources (portable or stationary), cover and control 95%; use Std A, B, or C; or use condensers with specified temperature.
Storage tanks	• For existing sources, capacities ≥ 20,000 gal and partial pressure ≥ 1.9 psia • For new or reconstructed sources, capacities ≥ 20,000 gal but < 25,000 gal and partial pressure ≥ 1.5 psia and capacities ≥ 25,000 gal and partial pressure ≥ 0.1 psia	• For existing sources, reduce HAP emissions by 90% or more; use Std A, B, or C; or use a floating roof or vapor balancing. • For new or reconstructed sources, reduce HAP emissions by 90% or more; use Std B or C; or use a floating roof or vapor balancing.
Wastewater Streams	• For existing sources, Table 9 HAP ≥ 4,000 ppmw • For new source, Table 9 HAP ≥ 2,000 ppmw	Same as HON.
Transfer Operations	Load ≥ 3.0 million gal/yr of HAP with partial pressure ≥ 1.5 psia	• Use vapor balancing; • Control 75% HAP emissions; or • Use Std A, B, or C
Maintenance Wastewater and Heat Exchanger Systems	N/A	A plan for minimizing emissions and a monthly leak detection program as was done in the HON.
Equipment Leaks	N/A	LDAR program that is contained in 40 CFR part 63, subpart UU.

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For further questions concerning this rule and other air quality management issues, please contact Yousheng Zeng, Ph.D., P.E. using the following contact information.

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