



Miscellaneous Organic Chemical NESHAP (MON)

William Nipper

The Dow Chemical Company

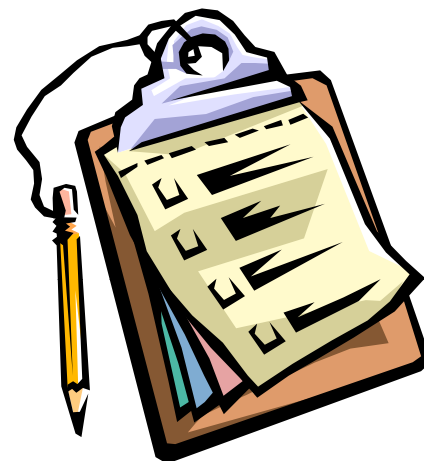
November 19, 2008





MON Overview

- Background Information
 - Applicability
 - Rule requirements
 - Control requirements
 - Initial Compliance Demonstration
 - Reporting
- Proposed Rule Changes





General Applicability

- Subpart FFFF of 40 CFR part 63 (MON) regulates miscellaneous organic chemical manufacturing.
 - Promulgated on November 10, 2003
 - Amendments published in 2005 and 2006
 - Proposed amendments in August 2008
- Compliance date for existing sources was May 10, 2008.
- MON is the MACT standard for organic chemical processes that have not been regulated under other standards.





General Applicability, contd.

- An organic chemical manufacturing process will most likely be subject to MON if it:
 - uses, generates, or processes HAP,
 - is located at a major source site, and
 - is not part of affected source under another Part 63 NESHAP
- The MON also covers:
 - HON batch process vents,
 - Sources that were excluded from HON that have only HAP solvent emissions





Rule Requirements

- Emission standards potentially apply to:
 - Continuous process vents
 - Batch process vents
 - Hydrogen Halides and Halogen HAPs
 - Process and maintenance wastewater streams
 - Process condensers
 - Storage tanks
 - Equipment leaks
 - Heat exchange systems
 - Transfer racks





Control Requirements

- For most emission point types, there are group determination procedures / cut-offs
 - In general, Group 1 emission points must be controlled.
 - Group 2 emission points are not subject to control but may have monitoring, recordkeeping, reporting requirements.
- Control options and level of control vary based on emission point type





Initial Compliance Demonstration

- Emission Calculations for batch vents using specified calculations or other approved methods
- Either performance testing or design evaluation is required on control devices depending on:
 - Emission point type
 - Size of control device
 - Control device type
- Operating parameters must be established during test or design evaluation.





On-going Compliance Requirements

- Continuous parameter monitoring is required on control / recovery devices
- Fugitive monitoring
- Heat exchange system monitoring
- Startup / Shutdown / Malfunction (SSM) recordkeeping / reporting
- Equipment inspections / Recordkeeping / Reporting, etc.





Semi-Annual Compliance Reports

- REMINDER - First semi-annual compliance reports for Subpart FFFF are due on February 28, 2009.
- NOTE: You can also follow the Title V reporting schedule. Reports would be due at the end of March.





Proposed Rule Changes

- On August 6, 2008, EPA published proposed rule changes to the HON (Subpart G) and MON (Subpart FFFF)
 - Comments were due on September 22, 2008





Proposed Rule Changes ...

- HON Subpart G wastewater tanks (63.133)
 - When using a fixed roof tank with a closed vent system and control device to control Group 1 wastewater stream, the proposed rule would allow use of a fixed roof tank with openings provided it is operated under negative pressure and controlled by a closed vent system and control device.
 - Previously, only allowed for openings to be maintained in controlled position with no detectable emissions, etc.
- Since the MON references this portion of the HON, this change potentially could impact MON units as well.





Proposed Rule Changes ...

- Brief overview of the nine proposed changes to Subpart FFFF
- 63.2450(o) - adds clarification text
 - if Group 1 hydrogen halide or halogen HAP vent stream, then that vent stream cannot be vented to a flare. The new text allows non-Group 1 vent streams that contain hydrogen halide and halogen HAP to be vented to a flare.
- 63.2460(a) - adds clarification text
 - any combination of emission limits (Table 2) for batch process vents (BPV) may be applied to BPV.
 - demonstrate that a process condenser is properly operated applies only in the case where a HAP is heated above its boiling point.





Proposed Rule Changes ...

- 63.2465(b) - amended
 - proposing to define outlet concentration limit to controlled and uncontrolled process vents.
- 63.2470(c) - amended
 - For nonregenerative carbon adsorbers, allows compliance with Pharma MACT provisions instead of Subpart SS
- 63.2485(n)(1) - amended alternative requirements
 - Added neutralization units. Hard-piping may be required.





Proposed Rule Changes ...

- 63.2520(c)(2) - corrected text
 - reference to non-existent 63.2460(c)(5) updated to (k)(6).
- 63.2550(i) - new text and amendments
 - added a definition for the term "bench-scale process" from HON Subpart H
 - Update definition of term "miscellaneous organic chemical manufacturing process" by removing extruder as an endpoint for processes without an extruder (circular reference).
- Table 6 - correcting text
 - Deleting bullet 2 as it was redundant
- Table 7 - amended
 - Proposed certain wastewater requirements as an alternative for liquid streams in open systems.





Questions?

