



IOWA DEPARTMENT OF NATURAL RESOURCES

# Air Quality News

## Environmental Services

### **Air Toxics Update: Miscellaneous Organic Chemical Manufacturing (MON)**

EPA recently updated several federal regulations for hazardous air pollutants (also known as HAP or air toxics). EPA's actions address the Risk and Technology Review (RTR) required under the U.S. Clean Air Act.

This is the seventh in a series of articles covering EPA's updates to air toxics regulations (also known as National Emission Standards for Hazardous Air Pollutants or NESHAP). Find background on the NESHAP RTR requirements and a general overview of the recent changes in the [Air Toxics Update](#). In the following weeks, Iowa DNR will address changes to specific regulations affecting Iowa businesses.

#### **Updates to the Standards for Miscellaneous Organic Chemical Manufacturing (MON)**

On Aug. 12, 2020, EPA published final [NESHAP RTR amendments](#) for the MON. This source category applies to miscellaneous specialty chemical production and includes the following emission sources: process vents, storage tanks, equipment leaks, wastewater streams, transfer racks and heat exchange systems. DNR estimates that 19 Iowa facilities are currently subject to this NESHAP.

#### **New Requirements for MON (40 Code of Federal Regulations (CFR) Part 63, Subpart FFFF)**

The changes to the MON include, but are not limited to, the following:

- **Risk Assessment:** EPA evaluated the risks remaining based on the completed risk assessment, available health information and associated uncertainties, and determined the risks from the MON source category to be unacceptable. EPA finalized requirements for storage tanks, process vents and equipment leaks with emissions of ethylene oxide and concluded that these controls will reduce cancer risks to an acceptable level that also achieves an ample margin of safety to protect public health.
- **Technology Assessment:** EPA's technology assessment identified cost-effective developments in practices, processes and control technologies for heat exchange systems and equipment leaks and finalized amendments under the technology review to control these emission sources further.
- **Storage Tanks, Process Vents, Heat Exchange Systems and Equipment Leaks:** EPA also added requirements for ethylene oxide emissions from storage tanks, process vents and equipment leaks and strengthened requirements for heat exchange systems and equipment leaks not in ethylene oxide service.
- **Flares:** The rule changes add monitoring and operational requirements for flares that control ethylene oxide emissions and flares used to control emissions from processes that produce olefins and polyolefins, and also allow facilities outside of this subset to opt into these flare requirements in lieu of complying with the current flare standards.
- **Storage Vessels Degassing:** EPA finalized a separate standard for storage vessel degassing for storage vessels subject to control requirements in Table 4 of the MON.

- **Adsorber Control Equipment:** For owners or operators using adsorbers that cannot be regenerated and regenerative adsorbers that are regenerated offsite, EPA is requiring use of dual (two or more) adsorbent beds in series and monitoring of HAP or total organic compound on the outlet of the first adsorber bed in series using a sample port and a portable analyzer or chromatographic analysis.
- **Startup, Shutdown, and Malfunction:** The amendments correct and clarify regulatory provisions related to emissions during periods of startup, shutdown and malfunction (SSM), including eliminating exemptions during periods of SSM and finalizing alternative work practice standards for certain SSM events including for pressure relief device releases, visible emissions from flares operating above their smokeless capacity and storage vessel degassing operations.
- **Electronic Reporting:** The updated standards also include electronic reporting of compliance reports and performance test results and reports through EPA's Central Data Exchange, using the Compliance and Emissions Data Reporting Interface. **Note:** Affected facilities must also comply with Iowa requirements for submitting reports, as specified in Iowa administrative rules or in air permits.

### Compliance Deadlines

Affected sources that commenced construction or reconstruction **after** Dec. 17, 2019, must comply with all new requirements upon initial startup, or by Aug. 12, 2020, whichever is later.

Affected sources that commenced construction or reconstruction **on or before** Dec. 17, 2019, must comply with the new requirements by the compliance dates specified below.

- For electronic reporting of performance test reports and performance evaluations, upon startup or no later than Oct. 11, 2020, whichever is later.
- Upon initial startup or by Aug. 12, 2021, whichever is later, for the amendments specified in [40 CFR 63.2445\(h\)](#), which include the requirements for equipment leaks.
- Upon initial startup or by Aug. 12, 2022, whichever is later, for the amendments specified in [40 CFR 63.2445\(i\)](#), which include the requirements for process vents, storage tanks, and equipment that are in ethylene oxide service.
- Upon initial startup or by Aug. 12, 2023, whichever is later, for the following amendments:
- The requirements specified in [40 CFR 63.2445\(g\)](#), which include the heat exchange systems amendments;
- The requirements related to SSM at 40 CFR 63.2420(e)(4) and 63.2525(j); and
- The requirements related to electronic reporting of flare management plans at [40 CFR 63.2450\(e\)\(5\)\(iii\)](#) and compliance reports.

### [For more information \(EPA's MON webpage\)](#)

#### Implementation in Iowa

DNR plans to begin rulemaking to incorporate the updated standards—which will give DNR authority to administer the rules. In the interim, EPA will implement the changes to the MON. DNR is available to answer questions about the new amendments and will work with EPA Region 7 to assist facilities.

Because the rule includes substantive changes, especially the amendments regarding ethylene oxide emissions, all facilities subject to the MON should review the changes. DNR staff will review the changes and contact facilities that we know are impacted and have

substantively different requirements in their permits from the updated MON. An affected facility must still comply with the MON requirements even if the requirements are not included in an Iowa air permit.

In the upcoming weeks, please keep an eye on your inbox for **Air Toxics** updates on other individual source categories.

If you have technical questions about the NESHAP changes, please contact Michael Hermsen (email: [michael.hermsen@dnr.iowa.gov](mailto:michael.hermsen@dnr.iowa.gov); phone: 515-725-9577). For general questions, please contact Christine Paulson (email: [christine.paulson@dnr.iowa.gov](mailto:christine.paulson@dnr.iowa.gov); phone: 515-725-9510).

## A note on Iowa DNR and COVID-19

The Iowa Department of Natural Resources is working with state and local officials to reduce the spread of COVID-19 and has transitioned employees to work remotely. DNR offices are closed to the public during this time and only available by appointment.

In another effort to further reduce the spread of COVID-19, the DNR is encouraging the use of the online services for submitting applications, payments and other daily tasks and interaction with DNR staff.

- [Full list of DNR's online services](#)
- [Up-to-date information on DNR services, facilities and events impacted by COVID-19](#)
- [Technical information for regulated businesses in regards to COVID-19](#)

We thank you for your patience and flexibility during this time. If you need to contact DNR staff you can reach them by email or phone or by calling 515-725-8200

DNR's Air Quality News listserve is targeted to the regulated public and consultants to deliver timely regulatory news, program updates, and technical guidance to your email. If you have difficulty, please contact DNR's Wendy Walker at 515-725-9570.