



IOWA DEPARTMENT OF NATURAL RESOURCES

Air Quality News

Environmental Services

Air Toxics Update: Ethylene Production and Organic Liquids Distribution

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 sixth 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 Ethylene Production and Organic Liquids Distribution

On July 6, 2020, EPA published final [NESHAP RTR amendments](#) for **Ethylene Production**. This source category includes ethylene production facilities with the following emission sources: storage vessels, ethylene process vents, transfer racks, equipment leaks, heat exchange systems, waste operations and ethylene cracking furnaces (and associated decoking operations). DNR estimates that one Iowa facility is currently subject to this NESHAP.

On July 7, 2020, EPA published final [NESHAP RTR amendments](#) for **Organic Liquids Distribution (Non-Gasoline)**. This source category includes organic liquids distribution (non-gasoline) operations, which are located at storage terminals, refineries, crude oil pipeline stations, and various manufacturing facilities. For a more complete explanation of the source category, see [source category definition](#). DNR estimates that three Iowa facilities are currently subject to this NESHAP.

New Requirements

Ethylene Production (published in [40 Code of Federal Regulations \(CFR\) Part 63 Subpart YY](#))

- EPA evaluated the risks remaining after fully implementing the NESHAP and determined that risks from this source category are acceptable and that the standards provide an ample margin of safety to protect public health and the environment.
- EPA's technology review identified cost-effective developments for heat exchange systems that would reduce air toxics emissions, so the amendments include new requirements for these systems.
- EPA also added monitoring and operational requirements for flares.
- The amendments clarify that the requirements are applicable during periods of startup, shutdown and malfunction (SSM) and include alternative work practice standards for certain SSM events including for releases from pressure relief devices, visible emissions from flares operating above their smokeless capacity, decoking of ethylene cracking furnaces, and storage vessel degassing operations.

- 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.

Organic Liquids Distribution (Non-Gasoline) (published in [40 CFR Part 63 Subpart EEEE](#))

- EPA evaluated the risks remaining after fully implementing the NESHAP and determined that risks from this source category are acceptable.
- EPA's technology review identified new, cost-effective developments for storage tanks that would reduce air toxics emissions, so the amendments include new requirements for these tanks.
- The revisions also include new operational requirements for flares used as control devices; the retention of a standard and the removal of an exemption for pressure relief devices; the adoption of a work practice standard for tank degassing; and several rule clarifications.
- The amendments clarify that the requirements are applicable during periods of SSM, and remove an exemption for transfer of operations during periods of planned, routine maintenance of a control device.
- 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

- **Ethylene Production:** Affected sources that commenced construction or reconstruction on or before Oct. 9, 2019, must comply with the new amendments upon initial startup or by July 6, 2023, whichever is later. Affected sources that commenced construction or reconstruction after Oct. 9, 2019, must comply with all requirements upon initial startup or July 6, 2020, whichever is later.
- **Organic Liquids Distribution (Non-Gasoline):** Affected sources that commenced construction on or before Oct. 21, 2019, must comply with the new amendments upon initial startup or by July 7, 2023, whichever is later. Affected sources that commenced construction after Oct. 21, 2019, must comply with all requirements upon initial startup or July 7, 2020, whichever is later.

For more information:

- [Ethylene Production](#)
- [Organic Liquids Distribution](#)

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 NESHAP RTR changes. DNR is available to answer questions about the new amendments and will work with EPA Region 7 to assist facilities.

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 NESHAP. However, potentially affected facility should carefully review the updated federal standards to be aware of any new requirements and compliance dates. An affected facility must still comply with the NESHAP 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; phone: 515-725-9577). For general questions, please contact Christine Paulson (email: 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.



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