

MATS and RSR Update

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CAA Section 112 (US Code §7412) MACT Standards for HAPS

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|--|--|
| (a) Definitions | (g) Modifications |
| (b) List of pollutants | (h) Work practice standards and other requirements |
| (c) List of source categories | (i) Schedule for compliance |
| (d) Emission standards | ... |
| (e) Schedule for standards and review | (n) Other provisions |
| (f) Standard to protect health and environment | ... |

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CAA MACT Review Requirements

❖ Ongoing Technology Review

§112 (d) (6): “The Administrator shall review, and revise as necessary (taking into account developments in practices, processes, and control technologies), emission standards promulgated under this section no less often than every 8 years.”

❖ Residual Risk Review

§112 (f)(2)(A): Requires the EPA to assess the remaining health risk within 8 years after promulgating HAP standards and to set more stringent standards “if promulgation of such standards is required in order to provide an ample margin of safety.”

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Emission Limits v. Work Practices

❖ 42 USC § 7602(k) “Emission standard” is a numeric limit on “quantity, rate, or concentration of emissions of air pollutants on a continuous basis.”

❖ 112 (h)(1) In of a numeric emission limit, work practice standards can only be applied if “it is not feasible ... to prescribe or enforce an emission standard.”

❖ Not feasible limited to two situations where:

- “Pollutants cannot be emitted through a conveyance” or
- “Measurement” of the pollutant (or surrogate) “is not practicable due to technological and economic limitations.”

❖ Sierra Club v. EPA, DC Circuit Court (2008) - Vacated blanket Part 63 SSM exemptions on basis that such exemptions violate requirement that standards apply continuously.

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Section 112 – EGUs and Delisting

- ❖ §112(n)(1)(A) - Required EPA to determine if it was “appropriate and necessary” to regulate EGUs under Section 112 once Acid Rain Program is applied
- ❖ §112 (c)(9)(B) – EPA may delist source category if cancer risk of “most exposed” individual is less than one in a million
 - New Jersey v. EPA, DC Circuit Court (2008) - Vacated CAMR because EPA had not met delisting requirements

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MATS Related Rulemaking

- ❖ 11/19/2014 - SU/SD Reconsideration Revisions Finalized
- ❖ 03/24/2015 - MATS Interim Reporting Until April 16, 2017
- ❖ 04/06/2016 - MATS Technical Corrections
- ❖ 09/29/2016 - Proposed MATS Electronic Reporting Revisions
- ❖ 04/04/2017 - MATS Interim Reporting Extended to July 1, 2018
- ❖ 07/02/2018 - MATS Interim Reporting Extended to July 1, 2020
- ❖ 02/07/2019 - Proposed MATS RTR Finding and Revised Appropriate and Necessary Determination

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Reconsideration of SU/SD Issues

- ❖ Considerably different from proposal
 - Second definition for end of startup – 4 hours after initial generation or 4 hours after making useful steam
 - Use Definition 2 triggers numerous additional reporting and/or recordkeeping requirements
 - Single vs. Dual Hg Sorbent Trap System Requirements

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MATS Technical Corrections

- ❖ Numerous “clarifications” and revisions
- ❖ New interval between test requirements (e.g., quarterly testing now at least 45-day separation)
- ❖ Revised Alternate Hg RATA Spec ($\leq 0.5 \mu\text{g}/\mu\text{scm}^*$)
- ❖ Emergency Bypass Reporting Requirements
- ❖ Restrictions on Switching Between Heat Input and Output Based Limits

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EGU Reconsideration & RTR Proposal

- ❖ Proposed to find that it is **not** “appropriate and necessary” to regulate HAP emissions from EGUs
 - \$7.4 to \$9.6 billion/year costs vs. \$4 to \$6 million/year quantifiable HAPS related benefits
- ❖ Proposed rule does not remove EGUs CAA §112(c) list and proposes keeping MATS in place
 - But EPA requested comments on whether it should get rid of MATS given that rule is not “appropriate and necessary.”
 - Is it a possibility? Does Michigan v. EPA, Supreme Court (2015) circumnavigate New Jersey v. EPA, DC Circuit Court (2008)

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EGU Reconsideration & RTR

- ❖ Results of EPA’s residual risk analysis indicate acceptable risks, and the current standards provide ample margin of safety
- ❖ No new developments in HAP emission controls identified by EPA’s technology review
- ❖ Agency proposed to maintain the MATS rule as is

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Proposed MATS Reporting Revisions

- ❖ Appendix B Revisions - HCl CEMS QA
- ❖ New Appendices C & D (PM CEMS & PM CPMS)
- ❖ New Appendix E
 - Quarterly Compliance Report (Sections 2 – 13)
 - Replaces Semi-Annual Report
 - 30 - (or 90 -) Day CEMS Compliance Averages
 - Performance Test Results/Critical QA Data
 - Supplemental XML Stack Test Data (Sections 14 – 21)
 - Included Draft Reporting Instructions for Compliance Report but Not Supplemental Stack Test Data

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Recent RSR Related Rulemakings

- ❖ **12/01/2015 - RTR and SU/SD Revisions**
 - Major Rule Overhaul
 - New Flare Monitoring Requirements
 - Added Fence-line Monitoring Provisions (categorized as “management of fugitive emissions”)
 - Substantial Workpractice Standards Revisions
 - New Reporting Requirements

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Recent RSR Related Rulemakings

❖ Final Amendments (07/13/2016 & 11/26/2018)

- Technical corrections/minor revisions for work practice standards, recordkeeping and reporting requirements
- Compliance with various SU/SD requirements extended to August 1, 2017
- Sampling systems determined to be Group 1 miscellaneous process vents must comply with the Subpart CC requirements by January 30, 2019
- Compliance date for existing maintenance vents standards extended to December 26, 2018
- Compliance date for DCUs using water overflow alternative option extended to November 26, 2020

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Various Subpart CC and UUU Deadlines

- ❖ CCU performance testing - August 1, 2017
 - PM or Nickel - Every five years or annually if complying with Subpart J and > 0.80 g/kg coke burn-off
- ❖ One-time HCl test on CCUs - August 1, 2017
- ❖ New Flare requirements - January 30, 2019
- ❖ Most workpractice/recordkeeping changes in RTR rule revisions - August 1, 2017

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Various Subpart CC and UUU Deadlines*

- ❖ New Pressure Release Device/DCU Requirements – January 30, 2019
 - (11/26/2020 for certain DCU requirements)
- ❖ Fence-line Monitoring – January 30, 2018
- ❖ SU/SD Maintenance Venting Requirements - December 26, 2018
- ❖ CEDRI/ERT – February 1, 2016

*In some cases extensions may have been requested per §63.6(i)

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Subpart CC and UUU Reporting

- ❖ Notification of Compliance Status report
 - Design information, parameter ranges, performance test and certification data
- ❖ Performance test or performance evaluation (i.e, RATA)
 - ERT via CEDRI within 60 days after the date of completing each test
- ❖ Semi-Annual Reports
 - Typical Excess Emission, Downtime, Deviations, Etc.
 - Significant additional details depending on source. For example:
 - » Seal gap measurement for external floating roofs
 - » Averaging plan related details
 - » Leak/repair related details for heat exchanges, valves, etc.
 - » Details regarding “preapproved” maintenance on catalytic cracking units

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Subpart CC and UUU Reporting

- ❖ Flare Monitoring (15-minute Compliance Periods)
 - Pilot flame and visible emissions monitoring
 - Flare vent gas, steam/air assist flow rate monitoring
 - Flare vent gas composition monitoring
- ❖ Flare Reporting
 - Visible emission records (> 5 minute exceedances)
 - 15-minute block when operating limits not met
 - » Date/time for the period, net heating value, time flame tip velocity limit exceedances, etc.
 - Root cause analysis corrective actions

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Subpart CC and UUU Reporting

- ❖ Quarterly Fence-line monitoring reports (via CEDRI)
 - Due 45 days after end of quarter once 12 months of data is obtained
 - Report includes:
 - » Facility name and address; year and reporting quarter
 - » Sampler latitude/longitude, name and type
 - » Beginning and ending dates for each sampling period
 - » Benzene results in units of $\mu\text{g}/\text{m}^3$ (flagged if BDL)
 - » Data flags (BDL, outliers, skipped samples per §63.658(e)(3).)
 - » Evidence used to identify outliers (Section 9.2 of Method 325A)
 - Biweekly Δc and annual average Δc for benzene for each sampling period

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CEDRI Fence-Line Monitoring Report

40 CFR Part 63 - National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries - §63.655(h)(8) Fenceline Monitoring Report Spreadsheet Template

Report: (v) Individual sample results for benzene reported for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as below the det at the method detection limit. (vi) Data flags that indicate each monitor that was skipped for the sampling period, if the owner or operator uses an alternative sampling frequency under §63.655(e)(3). (vi) Data flags in accordance with Section 9.2 of Method 325A of appendix A of this part. For each outlier, the owner or operator must submit the individual sample result of the outlier, as well as the evidence used to conclude the outlier.

The asterisk (*) next to each field indicates that the corresponding field is required. There are comment boxes to assist with filling out this form. You can show/hide comment boxes by selecting "Review" from menu

Facility Record No. *	Sampling Period ID *	Sampler Name *	Passive Sampler Type (Select from dropdown list)	Sampling Period Benzene Concentration (µg/m ³) * (§63.655(h)(8)(v))	Corrected Sampling Period Benzene Concentration (e.g., if required by site-specific monitoring plan) (µg/m ³)	Below method detection limit (BDL) * (§63.655(h)(8)(v))	Lab Reported Benzene Concentration for BDL Sample (µg/m ³)	(If yes, attach evidence in Additional Information on Facility Information tab.) (§63.655(h)(8)(v))	Outlier? *	Skipped §63.65 (§63.655(h)(8)(v))
e.g.: 1	e.g.: 010219	e.g.: PS1	e.g.: Regular Monitor	e.g.: 0.52		e.g.: no			e.g.: no	e.g.
e.g.: ER01	e.g.: 2018-1	e.g.: ER-01	e.g.: Regular Monitor	e.g.: 0.140		e.g.: yes	e.g.: 0.112		e.g.: no	e.g.
e.g.: ER01	e.g.: 2018-1	e.g.: ER-03	e.g.: Duplicate	e.g.: 12.0	e.g.: 4.00	e.g.: no			e.g.: no	e.g.
e.g.: ER01	e.g.: 2018-2	e.g.: ER-01	e.g.: Regular Monitor	e.g.: 0.258		e.g.: no			e.g.: no	e.g.
e.g.: ER01	e.g.: 2018-2	e.g.: ER-03	e.g.: Duplicate	e.g.: 22.0	e.g.: 0.00	e.g.: no			e.g.: no	e.g.

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