



Supply Chain & Operations
Environment, Health & Safety

Major HAP Source Once-In, Always-In Withdrawal

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Outline

History of EPA's Once-In, Always-In Policy

EPA next steps

Mechanisms to take federally-enforceable HAP limit in Missouri

**Major HAP emission sources also covered by Area Source
NESHAPs**

History of EPA's Once-In, Always-In Policy

May 16, 1995 Memorandum to EPA Regions from John Seitz, Director of Office of Air Quality Planning and Standards

- **Facilities that are major sources of HAP on the “first compliance date” of a relevant MACT standard are required to comply permanently with the MACT standard**
 - First compliance date is first date a source must comply with an emission limitation or other substantive requirement (not Initial Notification)
- **If a major source took a federally enforceable HAP limit (<10 tons individual HAP and <25 tons aggregate) prior to MACT first compliance date, it would be an area source, subject only to applicable Area Source NESHAPs**
 - 6 page memo addressed new sources, PTE based on physical limitations, sources subject to multiple MACT rules, etc.

History of EPA's Once-In, Always-In Policy

Jan. 3, 2007 Proposal to Replace Seitz memo with Amended NESHAP General Provisions

- **Major HAP source may become an area source at any time by limiting its HAP PTE below 10/25 tpy threshold**
 - In 2007, William Wehrum was Acting Assistant Administrator for Air
 - Eleven years later, Wehrum is Assistant Administrator for Air
 - Proposed rule addressed details:
 - Until a permit containing the PTE limit is effective, the source remains subject to major source NESHAP
 - If source later exceeds HAP major source thresholds, it must comply immediately with major source NESHAP, except
 - Additional time possible if the NESHAP has been revised (ex. Risk & Technology Review) and/or additional controls are needed

History of EPA's Once-In, Always-In Policy

Jan. 3, 2007 Proposal to Replace Seitz memo with Amended NESHAP General Provisions

- **Despite supportive comments from industry, some states, and Small Business Administration, the proposal was not finalized**
- Strong resistance from John Dingell, Chair of House Committee on Energy & Commerce
 - Emissions impact difficult to quantify.
 - Net increase due to escape from MACT controls? or
 - Net decrease due to facilities taking HAP limits less than 10/25 tpy?
 - In 2007, most Area Source NESHAPs were not yet written
- **FY 2008 omnibus spending bill included a rider to prohibit EPA from rescinding its Once-In, Always-In policy**

EPA Next Steps

On Jan. 25, 2018, William Wehrum signed a memo to EPA Regional Air Directors

- **New guidance supersedes the 1995 Seitz Memo**
- **Major HAP sources may become an area source at such time that the source takes an enforceable HAP limit below 10/25 tpy**
 - Once the HAP limit is effective, source is no longer subject to the major source NESHAP
 - Could be subject to an area source NESHAP, however

Public notification of new guidance published in Feb. 8, 2018 *Federal Register*

- “EPA anticipates that it will soon publish a *Federal Register* document to take comment on adding regulatory text...”
- NESHAP General Provision rulemaking, as in 2007?
 - Could clarify status of facilities that move in and out of major source status
 - Rulemaking is more stable over time than guidance, but also more vulnerable to judicial challenge, already threatened by NGOs

Mechanisms to take Federally-Enforceable HAP limit

Revised Construction Permit(s)

Most usable if the facility has only a few emission units and they all have construction permits

Missouri DNR generally prefers to revise construction permits when there is a physical change to the emission unit

- However, 10 CSR 10-6.060 is in DNR review and revision
- Permit reopening for a lower emission limit could be anticipated in a revised rule

St. Louis County issues both construction and “operating” permits on individual emission units

- **County emission unit operating permits could be reopened to set HAP limits**

Mechanisms to take Federally-Enforceable HAP limit

Revised Operating Permit

Better suited to facilities with many emission units or emission units that are exempt from construction permitting

Intermediate (synthetic minor) Permit

- **Could convert to Intermediate (synthetic minor) permit if both HAP and criteria pollutants can be limited to below major source thresholds**

Revised Part 70 Permit

- **If facility would remain major for a criteria pollutant, but can limit HAP to less than 10/25 tpy, the HAP limit can be taken in a Part 70 operating permit**

Comparison of Major Source MACT with Area Source NESHAP

Overview of Area Source NESHAPs

- Any source that is not a major HAP source
- For area sources, EPA not required to set limits that equate to MACT, but can set GACT.
- Developed under the Urban Air Toxics Strategy.
- Approximately 70 area source categories identified and ~50 current area source standards.

Comparison of Major Source MACT with Area Source NESHAP

Categories of Major Source/Area Source MACT Subparts

1. NESHAP Subparts that cover both major source and area source requirements e.g.
40 CFR 63 Subpart ZZZZ (NESHAP for Reciprocating Internal Combustion Engines (RICE))
2. NESHAP subparts where the major source and area source each have their own unique subpart for the source category e.g.
NESHAP for Industrial Commercial and Institutional Boilers and Process Heaters:
40 CFR 63 Subpart DDDDD (Major Source)
40 CFR 63 Subpart JJJJJJ (6J) (Area Source)

Comparison of Major Source MACT with Area Source NESHAP

Categories of Major Source/Area Source MACT Subparts cont'd

3. Major Source NESHAPs with no associated unique area source NESHAP categories e.g.

40 CFR 63 Subpart AAAAA (NESHAP for lime manufacturing)

4. Area Source NESHAPs with no associated unique Major source NESHAP subpart e.g.

40 CFR 63 Subpart PPPPP (NESHAP for Lead Acid Battery Manufacturing)

**Trinity's website includes tables summarizing these categories

Comparison of Major Source MACT with Area Source NESHAP

Example of Category 1 for 40 CFR Subpart ZZZZ facility

Scenario: Facility that is currently a major HAP source using a RICE engine with the following characteristics:

- Type = Compression ignition, non-black start
- Use = For non-emergency use
- Engine Rating = 200 HP
- Construction date = 2005

What will be the impacts if the facility was to become an area HAP source by taking a synthetic minor HAP limit?

Comparison of Major Source MACT with Area Source NESHAP

Example of Category 1 for 40 CFR 63 Subpart ZZZZ facility cont'd

Major source requirements

- During startup, minimize engine idle and limit startup period to less than 30 minutes.
- Limit CO in exhaust to 230 ppmvd or less (@15% O₂).
- Must conduct initial performance testing.
- Submit semi-annual compliance report per 40 CFR 63.6650.
- Notification per 40 CFR 63.6645.

Area source requirements

- During startup, minimize engine idle and limit startup period to less than 30 minutes.
- Change oil and filter every 1,000 hrs of operation or annually, whichever comes first OR use oil change analysis program to extend oil change frequencies per 40 CFR 63.6625(i)
- Inspect air cleaner every 1,000 hrs or annually, whichever comes first
- Inspect all hoses and belts every 500 hrs or annually, whichever comes first. Replace as necessary.
- Operate and maintain RICE according to manufacturer's instructions or implement a maintenance plan
- Maintain records to show work practices are met, per 40 CFR 63.6655(e)(3)
- No initial notification required, per 40 CFR 63.6645(a)(5)

Comparison of Major Source MACT with Area Source NESHAP

Example of Category 2 for 40 CFR 63 Subpart DDDDD/Subpart JJJJJJ

Scenario: Facility that is currently a major HAP source using a boiler with the following characteristics:

- Construction date = Before June 4, 2010
- Boiler rating = 200 MMBtu/hr
- Boiler type = Stoker
- Fuel used = Coal
- Existing controls = dry scrubber and baghouse
- Existing monitoring = Opacity, SO₂, NO_x and CO CEMs

What will be the impacts if the source was to become an area HAP source by taking a synthetic minor HAP limit?

Comparison of Major Source MACT with Area Source NESHAP

Example of Category 2 for 40 CFR 63 Subpart DDDDD/Subpart JJJJJJ
Cont'd

Requirement	SUBPART DDDDD	SUBPART JJJJJJ
Pollutant Limits	PM(fil) <0.04 lb/MMBtu, HCl <0.022 lb/MMBtu, Hg <5.7 lb/Tbtu; CO < 340 ppm (30 day Rolling avg); Opacity ≤10%	Hg < 22 lb/Tbtu CO <420 ppmdv Opacity ≤10%
Notifications	<ul style="list-style-type: none"> Initial notification NOCSR within 60 days of performance test 	<ul style="list-style-type: none"> Initial notification NOCSR within 60 days of performance test
Monitoring	<ul style="list-style-type: none"> CO CEMs Annual tune-ups Sorbent rate of dry scrubber One time energy assessment 	<ul style="list-style-type: none"> CO CEMs No tune-ups for boilers ≥10 MMBtu/hr Sorbent rate of dry scrubber One time energy assessment

Comparison of Major Source MACT with Area Source NESHAP

Example of Category 2 for 40 CFR Subpart DDDDD/Subpart JJJJJJ
Cont'd

Requirement	SUBPART DDDDD	SUBPART JJJJJJ
Testing	<ul style="list-style-type: none"> Annual Performance testing for PM, Hg and HCl with potential to move to every 3yrs if emissions \leq 75% of limit 	<ul style="list-style-type: none"> Performance testing for PM and Hg (if not using fuel sampling option) – Generally every 3 yrs unless $<$50% of limit Fuel sampling option for Hg+ quarterly fuel sampling
Reporting	<ul style="list-style-type: none"> Semi-annual compliance certification report 	<ul style="list-style-type: none"> Annual compliance certification report

Comparison of Major Source MACT with Area Source NESHAP

Key items to consider

If planning to make use of new policy to opt out of major source NESHAP standard:

- Consider implications of change
 - Removing emission controls may affect non-HAP pollutants e.g. VOC and PM → triggering NSR permitting due to emissions increase
- Impacts on Compliance Assurance Monitoring (CAM).
- Conduct detailed review of potentially applicable area source NESHAPs.
- Work with state permitting authority (MDNR).