

MEMORANDUM

To: MM2A Docket No. EPA–HQ–OAR–2019–0282
From: Elineth Torres, U.S. EPA/OAQPS
Date: May 2019
Subject: Documentation of the emission impacts analysis for the proposed rulemaking “Reclassification of Major Sources as Area Sources under Section 112 of the Clean Air Act.”

The purpose of this memorandum is to document the EPA’s analysis of the potential emission impacts of the proposed rulemaking titled “Reclassification of Major Sources as Area Sources under Section 112 of the Clean Air Act (also known as Major MACT to Area [MM2A] rule). The MM2A rulemaking implements the plain language reading of the Clean Air Act (CAA) section 112 definitions of “major” and “area” source and allows major sources to reclassify to area source status at such time the source takes enforceable limits on its potential to emit (PTE) hazardous air pollutants (HAP) below the major source thresholds of 10 tons per year (tpy) of any single HAP or 25 tpy of any combination of HAP. Upon reclassification to area source status, a source must comply with any applicable area source requirements and would no longer be subject to major source national emission standards for hazardous air pollutants (NESHAP) requirements or other major source requirements that were applicable to it as a major source under CAA section 112.

There has been much speculation about what could happen to emissions if sources that once were major sources subject to major source NESHAP requirements were to reclassify to area sources and no longer be subject to the major source NESHAP requirements. In contrast to other rulemakings in which sources must comply with certain requirements, this action does not require sources to reclassify. Any action a source takes to reclassify as an area source would be voluntary on the part of the source.

To realistically assess the potential emission impacts of the reclassification of sources, one must identify each source that will reclassify and the methods of HAP emission reductions that will be made enforceable by the permit conditions for those sources. Therein lies the difficulty in assessing the potential emission impacts of the rulemaking.

However, to take the first steps toward assessing the potential emission impacts of this rulemaking, we evaluated the sources that EPA knows have reclassified to area source status consistent with the EPA’s plain language reading of the CAA section 112 definitions of “major” and “area” source, since January 2018.¹

¹ On January 25, 2018, the EPA issued a guidance memorandum from William L. Wehrum, Assistant Administrator of the Office of Air and Radiation, to the EPA regional air division directors titled “Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act” (MM2A memorandum). See notice of issuance of this guidance memorandum at 83 *FR* 5543 (February 8, 2018).

As of March 2019, EPA knew of 34 sources that had reclassified to area source status or were in the process of reclassifying to area source status since January 2018.² Focusing our analysis on the sources that have reclassified provides a representation of the potential real-world impact of the reclassification of sources by looking at the facts and circumstances of actual reclassification actions. Any other analyses may be informative in some respects but are only illustrative and speculative in nature and can only present a range of possible outcomes.

Section I of this memorandum presents a review and analysis of the reclassification actions. In addition to this review, EPA performed an illustrative analysis of emissions impacts for six source categories; Section II of this memorandum presents this illustrative analysis. Each section presents the methods EPA used to assess potential emission impacts and the results of the analyses.

I. Review of Reclassification Actions

As of March 2019, EPA knew of 34 sources that had reclassified to area source status or were in the process of reclassifying to area source status since January 2018. Table 1 presents a list of sources reviewed for this analysis and the status of their reclassification as of April 2019. Of the 34 sources reviewed for this analysis, 21 sources can be classified as coating type sources; five as oil and gas sources; four as fuel combustion/boiler sources; three as chemical sources and one as heavy industry.

Table 1: List of Reclassifications

Facility Name	Status of Reclassification
Coating Sources	
1) 2700 Real Estate Holdings	Final
2) Arkwright Advanced Coatings Inc.	Final
3) Bemis Films	Final
4) Bemis Wisconsin, LLC - New London	Draft
5) Fairhaven Shipyard Companies, Inc., North Shipyard	Final
6) Geiger International, Inc.	Final
7) Heritage Home Group, LLC – Hickory NC	Final
8) Heritage Home Group, LLC - Lenoir Plant	Final
9) Herman Miller, Inc.	Final
10) Highland Industries Inc. Cheraw	Final
11) IAC Iowa City, LLC	Final

² The EPA had an initial list of 37 reclassifications. Per the review of these actions, we determined that for one source the plain language reading of the CAA section 112(a)(1) and (a)(2) discussed in the MM2A memorandum and the withdrawal of the 1995 “Once-In, Always-In” policy had no impact on whether the source could have reclassified. We also determined that two other facilities originally included were never major sources for HAP, and as such did not actually reclassify under MM2A. Therefore, we do not include these three sources in the analysis presented here.

12) Kimball Office Salem Wood Office Furniture	Final
13) Mapes Panels, LCC	Final
14) Meridian Manufacturing Group	Final
15) Novel Iron Works	Final
16) Shelburne Shipyard Incorporated	Final
17) Talaria Company, LLC d/b/a The Hinckley Company	Final
18) Tower Industries, Ltd	Final
19) TruStile Doors of Iowa	Final
20) Vacuum Orna-Metal, Inc	Final
21) Vanguard National Trailer Corporation	Final
Oil and Gas	
22) Andeavor Field Services, LLC Ponderosa Compressor Station (Ponderosa)	Final
23) Catamount Energy Partners, LLC - Ignacio Gas Treating Plant	Final
24) Crescent Point Energy Corporation - Ute Tribal Compressor Station	Draft
25) Denbury Onshore LLC, Little Creek EOR Facility	Final
26) WGR Operating, LP's Granger Gas Plant, Section 16 (sweet gas processing)	Final
Fuel Combustion/Boilers	
27) City of Columbia - Municipal Power Plant	Final
28) Holland Board of Public Works - James DeYoung Generating Station and Wastewater Treatment Plant	Final
29) MidAmerican Energy Company - Riverside Generating Station	Final
30) UniFirst Corporation Pontiac MI	Final
Chemicals	
31) Citgo Petroleum Corporation	Final
32) Ross Incineration Services	Final
33) Transmontaigne, Evansville Terminal	Final
Heavy Industry	
34) Mississippi Lime Company - Verona Plant	Final

A. Methods

Below we present the methods used to assess potential emission impacts from the reclassification of the 34 facilities presented in Table 1. We compiled the list in Table 1 primarily from the reclassification actions (i.e., permit actions) received by EPA's regional offices and shared with the EPA's Office of Air and Radiation as of March 2019.³

1) Facility Matching

- EPA matched the facilities in Table 1 to their corresponding EPA Facility Registry Service identification number (FRS ID) and Emissions Inventory System (EIS) ID.
- Consistent with the cost analysis for the rulemaking⁴, EPA obtained whole-facility HAP emissions data for each facility, where available. Emissions data were obtained from the 2014 NEI and from the RTR modeling file if available for a particular source. EPA also obtained more recent emissions data for some facilities if data were available in the Emissions Inventory System (EIS) Gateway.
- We were not able to find/match the FRS ID/EIS ID for the following two facilities: Crescent Point Energy Corp - Ute Tribal Compressor Station; and Geiger International, Inc.
- No NEI emissions data were available for the following 9 facilities: Bemis Films; Bemis Wisconsin, LLC; Crescent Point Energy Corp - Ute Tribal Compressor Station; Geiger International, Inc.; Mapes Panels, LLC; Shelburne Shipyard, Inc.; Tower Industries, Ltd., Transmontaigne Evansville Terminal; and Vacuum Orna-Metal, Inc.

2) Permit Review

- EPA reviewed the documents associated with the reclassification of these sources. Reclassification documents included: Minor Source Permits, Tribal New Source Review Permits, Federally Enforceable State Operating Permits, Title V Permits, Permit Revocation Letters and their corresponding statement of basis (where available).
- The following information was obtained from the permit documents, where available:
 - i) Any previous applicable major source NESHAP subparts and major source NESHAP compliance method/strategy (i.e., control technology, work practice, process design, use of compliant materials, etc.) used to meet the major source requirements.
 - ii) Any previous applicable area source NESHAP subparts and any new applicable area source NESHAP subparts.
 - iii) Unrestricted HAP PTE prior reclassification and restricted HAP PTE post-reclassification.
 - iv) Any enforceable HAP PTE limitations existing prior to the MM2A memo (including the method to determine compliance and corresponding monitoring, recordkeeping and reporting (MRR) requirements).
 - v) New enforceable HAP PTE limitations (including the method to determine compliance and corresponding MRR) and whether the facilities will continue to use

³The review of the permit actions presented in this memorandum for purposes of the MM2A rulemaking does not represent a formal review on the part of EPA for these permit actions.

⁴ See Cost Analysis Memorandum, Brian Palmer, Eastern Research Group (ERG) to Eric Goehl, Elineth Torres, Brian Shrager, and Larry Sorrels, U.S. EPA. Documentation of the cost savings analysis for the proposed rulemaking "Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act." May 2019.

the same method of compliance they used to meet the applicable major source requirements after reclassification.

- A summary of information obtained from the review of permit actions can be found Appendix A.

3) **Assessing Potential for Emission Impacts**

- To assess potential for emission impacts due to the reclassification, EPA focused the review on the enforceable conditions associated with the HAP PTE limitations for the emission units previously subject to major source NESHAP requirements and whether the sources that reclassified will continue to use the major source NESHAP compliance method/strategy for these emission units as an enforceable condition on the source's PTE after reclassification.
- Below we present the main compliance methods/strategies and how we assessed potential for emission impacts due to the reclassification for the sources under review.
 - i) **Use of compliant materials** (i.e., use of low-HAP/no-HAP coating/resins formulations, pollution prevention measures)
 - The use of compliant materials is one of the compliance options sources use to comply with many major source NESHAP requirements. This compliance method is more prevalent for coating source NESHAP categories. In general, sources comply by applying materials that meet the emission limits, either individually or collectively, during each compliance period. Sources demonstrate compliance by showing that the organic HAP content of each coating/thinners/additives/resin used is less than or equal to the applicable limitation.
 - A discussion with EPA's technical lead for the coating source categories indicated that a source that reclassifies to area source status after being in compliance with major source NESHAP requirements through the use of compliant materials is highly unlikely to change their formulations from a low/no HAP content to a higher HAP content (e.g., switching from powder coatings back to liquid coatings). This change is unlikely because a change to higher HAP content formulation could also lead to an increase in VOC emissions, to VOC regulations and OSHA regulations being applicable to the source and to an increase in costs associated with the disposal of the hazardous waste.
 - EPA has no reason to believe and does not expect that sources that have employed the use of pollution prevention measures (low-HAP/no-HAP coatings) as their compliance method to meet previous applicable major source NESHAP requirements and have reformulated their products accordingly will change their formulations and products as a result of a change in status.
 - For these types of sources, if permits reflect the use of compliant materials (i.e., low-HAP or no-HAP coatings/resins) as the method of compliance with the PTE limitations, EPA assumed no potential for emissions increases due to the reclassification.
 - ii) **Use of add-on emission control equipment** (i.e., fabric filters, catalytic oxidizers, regenerative thermal oxidizers [RTO])
 - The use of add-on control equipment is one of the compliance options sources can use to comply with major source NESHAP requirements. In general, sources that

comply using an add-on control demonstrate compliance by meeting certain operating limits/parameters established during performance tests.

- For sources relying on emission control equipment, EPA focused the review on those sources that used “adjustable” emission control equipment as the compliance method for previously applicable major source NESHAP requirements.
 - Adjustable controls are those for which important operating parameters (e.g., combustion temperature) can be potentially adjusted, which could lead to a potential change in the HAP emission control level.
 - For our analysis, we viewed particulate controls for inorganic HAP (e.g., fabric filters, electrostatic precipitators) as not adjustable, but controls for organic HAP or acid gases (e.g., RTO, caustic scrubbers, wet scrubbers) as controls that potentially could be adjustable.
 - For sources employing adjustable emission controls, EPA reviewed the permit enforceable limitations associated with the use of the emission control, including operating parameters.
 - If the permit conditions reflect the use of the same control equipment and operating parameters as when the source was subject to major source NESHAP requirements, EPA assumed no potential for emissions increases due to the reclassification.
 - If permit conditions reflect the use of the same control equipment but a change in operating parameters (e.g., change in monitoring device, change in monitoring frequency), EPA assessed whether the change in operating parameters could potentially lead to a change in HAP emission control level and could potentially lead to an increase of HAP emissions.
- iii) **Use of work practices** (i.e., tanks design, leak detection and repair)
- The use of work practices is another form of compliance that is used for some major source NESHAP requirements.
 - For sources employing work practices, EPA focused on whether the work practice requirements previously applicable to the source changed when the source reclassified.
 - If the permit conditions reflect the same work practice requirements, EPA assumed no potential for emissions increases due to the reclassification.
 - If the permit conditions reflect a change in the work practice requirements, EPA assessed whether the change could potentially lead to a change in HAP emission control level and could potentially lead to an increase of HAP emissions.
- iv) **Operational restrictions** (i.e., restriction on amount of fuel burned)
- When reclassifying, a source can opt to place new operational limitations into their operation that were not required for the source to comply with previously applicable major source NESHAP requirements.
 - For these types of reclassifications, EPA assessed whether these new operational restrictions will lead to additional emission reductions.
- v) **Process changes** (i.e., removal of processes, change in fuel)
- Many sources have made process changes and have reclassified as true area sources (HAP PTE is below the major source thresholds and source does not rely

on any physical or operational limits, including the use of pollution control equipment to constrain their emissions). EPA determined that the reclassification of such sources will not lead to emissions increases.

B. Results from the Review of Reclassification Actions

As described in the previous section, EPA focused the review of the reclassification actions on the enforceable conditions associated with the method of compliance for the HAP PTE limitations for the emission units previously subject to major source NESHAP subparts. EPA reviewed the reclassification actions to determine whether the sources will continue to use the same method of compliance used to meet major source NESHAP requirements as an enforceable condition after reclassification. Our review of these permitting actions supports the conclusion that sources that reclassify to area source status would in most cases achieve and maintain area source status by operating the emission controls or continuing to implement the practices they used to comply with the major source NESHAP requirements.

Below are the general observations from the review and analysis of these 34 reclassifications. A summary of the findings from the review of permits associated with the reclassification of these 34 sources is presented in Table 2 and in more detail in Appendix A. Even though these 34 reclassifications represent a small subset of the sources that could potentially reclassify, the general findings provide information regarding the type of sources that most likely will be interested in pursuing reclassification to area source status, their potential compliance methods, and potential impact on emissions resulting from the reclassification to area source status.

- Of the 34 sources reviewed for this analysis, 21 can be classified as coating type sources (*see* Facilities # 1-21 on Table 2); five as oil and gas sources (Facilities # 22-26 on Table 2); four as fuel combustion/boiler sources (Facilities # 27-30 on Table 2); three as chemical sources (Facilities #31-33 on Table 2) and one as heavy industry (Facility #34). Coincidentally, 11 of the sources are owned by small businesses or entities as defined by the Small Business Administration (SBA).⁵
- Of the 25 sources for which we had 2014 NEI emissions data, 22 had actual emissions below the major source thresholds prior to the reclassification. For the three sources with HAP emissions above the major source thresholds per 2014 NEI data, more recent emissions data available show HAP emissions were below the major area source thresholds at the time of the reclassification.
- Of the 21 coating sources, 20 used compliant materials (low-HAP/no-HAP) to meet applicable major source requirements before reclassification, and their continued use of compliant materials is an enforceable condition after reclassification. Only one source (Facility #13) used an RTO to meet applicable major source requirements and maintain compliance before and after reclassification.
- All five oil and gas sources relied on the use of control technologies (oxidation catalyst [enclosed combustion device] and flares) to meet applicable major source requirements before reclassification, and their continued use is an enforceable condition to maintain compliance after reclassification. One of these sources (Facility #25) took additional

⁵ The details of our analysis of business and entity size are included in the spreadsheet titled, *Analysis of MM2A Reclassifications for Small Business Determination*.

restrictions on the amount of gas vented to the atmosphere to reclassify to area source status.

- Of the four fuel combustion/boiler sources, one ceased combustion of coal, one ceased operation of boilers, and two had restrictions on the usage of natural gas as their mechanism to meet applicable major source standards before reclassification and as an enforceable condition to maintain compliance after reclassification.
- Of the three chemical sources, two are gasoline distribution sources (Facilities #31 and #33) that relied on vapor flare/vapor combustion to meet applicable major source requirements before reclassification, and these controls are enforceable conditions to maintain compliance after reclassification. The remaining source is an incinerator (Facility #32). The incinerator is still subject to the same requirements for 40 CFR 63 subpart EEEE and reclassified for purposes of applicability with 40 CFR subpart DD (off-site waste recovery operations). For purposes of the reclassification, this source relied on control technologies (fixed roofs with closed vents systems routed to carbon absorption units) to meet applicable major source requirements before reclassification, and the source will continue to use these technologies under an enforceable condition to maintain compliance after reclassification.
- The source of the heavy industry type is a lime manufacturing plant (Facility #34). After reclassification, this source remains subject to other regulatory requirements, including PM emission limitations, use of a baghouse, and monitored opacity as an operating limit via operation of a continuous opacity monitoring system (COMS).
- Of the 34 reclassifications, six sources are now classified as true area sources⁶ because these sources are no longer physically or operationally able to emit HAP above the major source thresholds.
- Of the 28 sources with PTE limitations, six sources had obtained HAP PTE limitations before January 2018 (existing PTE limitations) while 22 obtained the limitations after January 2018 (aka new PTE limitations).

In general, we don't expect emissions increases from those sources using compliant materials (low-HAP/no-HAP) to maintain compliance after reclassification. In our permit review, we found one permit for one source previously subject to 40 CFR 63 subpart MMMM using compliant coatings to maintain compliance that indicated the source wanted to leave open the option to use paints containing metal fabrication HAP (MFHAP). 40 CFR 63 subpart MMMM only regulates organic HAP. The permit for this source includes operational limitations (limits on amount of paint used at the facility) and HAP emission limits from the previously affected subpart MMMM sources of 3.8 tpy single HAP and 4.8 tpy total HAP and total facility HAP limits of 4.9 tpy single HAP and 5.9 tpy total HAP. In addition to these HAP PTE limitations, this source is now subject to the metal fabrication and finishing area source NESHAP (40 CFR 63 subpart XXXXXX [subpart 6X]), whenever using spray material containing MFHAP as defined in 40 CFR §63.11522. Subpart 6X includes monitoring and work practice requirements for the spray booths, work practice and opacity monitoring requirements for welding areas and work practice requirements for their plasma table. All potential metal HAP emissions are controlled because the equipment standards and management practices requirements of subpart

⁶ Any source that needs a physical or operational limit on its maximum capacity to emit, including requirements for the use of air pollution control equipment or restrictions on the hours of operations or on the type or amount of material combusted, stored, or processed, is not a true area source.

6X control particulate matter as a surrogate for MFHAP. Subpart 6X requires spray booths to be fitted with filter technology demonstrated to achieve at least 98% control efficiency of paint overspray (arrestance). Given these requirements, we don't expect emission increases from the reclassification of this source.

For the coating source using an RTO (Facility #13) to maintain compliance, we reviewed the operating parameters associated with the enforceable conditions in the permit. We found that the operating parameters for the use of the RTO were the same before and after reclassification, ensuring a HAP destruction efficiency of 95%. The permit for this source requires the use of an RTO as a federally enforceable permit requirement. The average combustion chamber temperature must remain at or above the level established during a manufacturer performance test or at the level recorded during the most recent valid performance test. This will require the source to maintain the RTO combustion chamber temperature at a level that ensures adequate control to remain a minor HAP source. We don't expect emissions increases resulting from the reclassification of this facility.

The five oil and gas sources (facilities #22-26) that reclassified relied on the use of control technologies to meet emissions requirements before and maintain compliance after reclassification. Four of these facilities (#22, #24, #25 and #26) were subject to the major source requirements of the Oil and Natural Gas Production NESHAP while one facility (#23) was subject to the major source requirements of the Stationary Reciprocating Internal Combustion Engines (RICE) NESHAP. The facility (#23) subject to the major source RICE NESHAP requirements replaced old engines with new engines equipped with an enclosed combustion device designed to reduce HAP emissions (formaldehyde) by 90%. We don't expect emissions increases resulting from the reclassification of this facility. Of the four facilities that were subject to the major source requirements of the Oil and Natural Gas Production NESHAP, two (#22 and #26) relied on the use of flares and enclosed combustion devices to meet the applicable major source emissions requirements before reclassification, and their continued use of these control technologies is required as an enforceable condition to maintain compliance after reclassification. The permit for another facility (#24) as proposed will impose enforceable emissions restrictions for an existing installed and operating emissions unit and associated voluntarily installed and operated control device. The enforceable conditions include the operation of an enclosed combustor to control the Volatile Organic Compound (VOC) and HAP emissions from a triethylene glycol (TEG) dehydrator still vent. If the enforceable conditions are finalized, we don't expect emissions increases resulting from the reclassification of this facility. The last facility in the oil and gas category (#25) took additional enforceable limits on the amount of low-pressure relief gas vented to the atmosphere to ensure emissions of the individual HAP 2,2,4-trimethylpentane (largest individual HAP for the gas compression/venting operation) emissions are below 10 tpy. This enforceable limitation ensures HAP emissions do not increase because of the modification to vent the low-pressure gas directly to the atmosphere instead of being recovered in a vapor recovery unit. Without the enforceable limitations in the amount of low-pressure relief gas vented to the atmosphere, emissions from the gas compression/venting would have increased (uncontrolled PTE) to 10.3 tpy for largest individual HAP. The actions taken by this facility to reclassify to area source status resulted in emission reductions.

Regarding the reclassification of the four fuel combustion/boiler sources (Facilities # 27-30 on Table 2), three (#27, #28, #29) had emissions above the major source thresholds as reported in the 2014 NEI. To reclassify, these sources either ceased combustion of coal, ceased operation of boilers, and/or obtained restrictions on the usage of natural gas. The actions taken by these three sources to reclassify resulted in a reduction of HAP emissions. Another source (#30) relied on material limits and operational restrictions on natural gas usage to meet the applicable major source requirements and the continued use of these compliance methods is required by an enforceable condition after the reclassification. Thus, the EPA does not expect emission increases from the reclassification of this source.

Two of the chemical sources are gasoline distribution facilities (Facilities # 31 and #33 on Table 2). These facilities were subject to 40 CFR 63 subpart R and relied on vapor flare/vapor combustion to meet emissions requirements before and maintain compliance after reclassification. Per the permit review, the operation of the vapor flare/vapor combustor is required at all times when the facility's loading racks are loading gasoline into transports. These sources are now subject to 40 CFR subpart 63 BBBBBB, the area source rule that regulates emissions from tanks, transfer racks, roof landings and maintenance. The permit for one of these two sources (#31) specifies that the vapor combustor unit (VCU) is no longer subject to continuous monitoring of temperature and removed the requirement to obtain approval prior to changing the minimum operating temperature of the VCU. The specific conditions of the permit require the facility to continuously monitor the presence of the VCU pilot flame and to automatically prevent truck loading operations at any time that the pilot flame is absent. For this facility, we reviewed the specific permit requirements, including for the VCU, to assess whether the changes in operating parameters could potentially impact emission control. The permit for this facility includes a requirement for annual periodic testing in addition to the continuous pilot flame monitoring to ensure that the enclosed combustor is operational when loading operations occur. The annual performance test in conjunction with the monitoring of the presence of the flame act together to ensure proper operation and performance of the emission controls. We therefore do not expect emission increases due to the reclassification of this source. The other gasoline distribution facility (#33) continues to be subject to flare operating and monitoring requirements in 40 CFR 60 subpart XX (New Source Performance Standards for Bulk Gasoline Terminals). The flare operating and monitoring requirements in 40 CFR 60 subpart XX are identical to those in 40 CFR 63 subpart R. This permit also requires testing for specific HAP associated with the vapor combustor to ensure operation and performance. We do not expect emission increases due to the reclassification of this source.

As for the incinerator (Facility #32 on Table 2), the source continues to be subject to the same requirements for 40 CFR 63 subpart EEEE and reclassified for purposes of applicability with 40 CFR subpart DD (off-site waste recovery operations), which covers emissions from tanks and equipment leaks. This source relied on control technologies (fixed roofs with closed vents systems routed to carbon absorption units) as their method of compliance before reclassification and is required by an enforceable condition to continue to operate the same control technologies after reclassification. The source is also subject to Resource Conservation and Recovery Act (RCRA) regulation/permit requirements. The RCRA permit for this facility requires the source to control emissions by venting the tanks through closed vent systems to carbon adsorption units designed and operated to recover the organic vapors vented to them with an efficiency of 95% or

greater by weight. The tanks must be covered by a fixed roof and vented directly through the closed vent system to a control device. Therefore, we don't expect emissions increases due to the reclassification of this source.

As for the lime manufacturing plant (Facility #34 on Table 2), after reclassification this source remains subject to other regulatory requirements, including PM emission limitations, the use of a baghouse, and a requirement to monitor opacity as an operating limit via a continuous opacity monitoring system (COMS). Because of the inherent scrubbing properties of lime and the requirements for the use of a baghouse, we don't expect emissions increases resulting from the reclassification of this facility.

Table 2 presents a summary of the findings from the review of permits associated with the reclassification of 34 sources. The table presents the status of the reclassification, the reported 2014 NEI emissions for each facility's single largest HAP and total HAP in tons per year (tpy), previously known applicable major source NESHAP and the main compliance strategy for the applicable major source NESHAP before the reclassification. Table 2 also shows whether the source reclassified as a true area source, whether the source had obtained HAP PTE limitations before January 2018 (existing PTE limitations) or whether the source obtained new HAP PTE limitations after January 2018, and the method of compliance stated in the permit to meet HAP PTE limitations after reclassification. The last column of Table 2 shows the results of EPA's assessment of emission changes due to the reclassification of these sources.

The detailed summary and assessment for each of the 34 reclassifications reviewed for this analysis can be found in Appendix A.

Table 2: Summary of the findings from the review of permits associated with the reclassification of 34 sources

Facility Name	Status of Reclassification	2014 Emissions (tpy): Single Largest HAP; Total HAP– 2014 NEI	Previously Applicable Major Source NESHAP - 40 CFR 63 Subpart	Method of Compliance for Major Source NESHAP Before Reclassification	Type of Reclassification (true area; existing PTE limitations; new PTE limitations)	Method of Compliance for HAP PTE Limitations	Results of Analysis of Emission Changes due to Reclassification
Coating Sources							
1) 2700 Real Estate Holdings, Elkhart, IN	Final	0.01; 0.01	Subpart MMMM (Surface Coating for Miscellaneous Parts and Products)	Compliant materials	True area	Permanent operational changes (removal of emission units) and use of compliant materials	No change
2) Arkwright Advanced Coatings, Fiskeville/Cove ntry, RI	Final	0.12; 0.15	Subpart JJJJ (Paper and Other Web Coating)	Compliant materials	True area	Permanent operational changes (removal of emission units)	No change
3) Bemis Films, Oshkosh, WI	Final	Not available (n/a)	Subpart KK- (Printing and Publishing) and subpart DDDDD (Boilers)	Compliant materials	New PTE limitations	Compliant materials	No change
4) Bemis Wisconsin LLC - New London, WI	Draft	n/a	Subpart KK- (Printing and Publishing) and subpart DDDDD (Boilers)	Compliant materials	New PTE limitations	Compliant materials	No change
5) Fairhaven Shipyard Companies, Inc., North Shipyard, Fairhaven, MA	Final	2.05; 2.05	Subpart II (Shipbuilding)	Compliant materials	Existing PTE limitations	Compliant materials	No change

6) Geiger International, Atlanta, GA	Final	n/a permit emission data (2018)- 0.4/0.4	Subpart JJ (Wood Furniture)	Compliant materials	New PTE limitations	Compliant materials	No change
7) Heritage Home Group LLC – Hickory, NC	Final	4.18; 6.48	Subpart JJ (Wood Furniture), Subpart DDDD (Plywood and Composite Wood Products)	Compliant materials	Existing PTE limitations	Compliant materials	No change
8) Heritage Home Group LLC - Lenoir, NC	Final	6.74; 14.48	Subpart JJ (Wood Furniture), Subpart DDDD (Plywood and Composite Wood Products), and case-by-case MACT (Boilers)	Compliant materials	New PTE limitations	Compliant materials	No change
9) Herman Miller, Inc., Zeeland, MI	Final	0.37; 0.47	Subpart JJ (Wood Furniture)	Compliant materials	New PTE limitations	Compliant materials	No change
10) Highland Industries, Inc. Cheraw, SC	Final	0.32; 0.80	Subpart OOOO (Printing, Coating, and Dyeing of Fabric and Other Textiles)	Compliant materials	True area	Compliant materials	No change
11) IAC Iowa City LLC, Iowa City, IA	Final	2.16; 2.50	Subpart PPPP (Plastic Parts and Products)	Compliant materials	New PTE limitations	Compliant materials	No change
12) Kimball Office Salem Wood Office Furniture, Salem, IN	Final	0.05; 0.05	Subpart JJ (Wood Furniture)	Compliant materials	New PTE limitations	Compliant materials	No change
13) Mapes Panels, LCC, Lincoln, NE	Final	n/a	Subpart MMMM (Surface Coating of Miscellaneous Metal Parts and Products), Subpart PPPP (Surface Coating of Plastic Parts)	Permanent total enclosure and RTO with minimum destruction/removal efficiency of 95	New PTE limitations	Operational limits, permanent total enclosure and RTO with minimum destruction/removal efficiency of 95%	No change

			and Products), and Subpart QQQQ (Wood Building Products Surface Coating)				
14) Meridian Manufacturing Group, Storm Lake, IA	Final	1.23; 1.61	Subpart MMMM (Miscellaneous Metal Parts and Products Surface Coating)	Compliant materials	New PTE limitations	Compliant materials and operational limits for spray booths	No change
15) Novel Iron Works, Greenland, NH	Final	0.12; 0.28	Subpart MMMM (Miscellaneous Metal Parts and Products Surface Coating)	Compliant materials	New PTE limitations	Compliant materials	No change
16) Shelburne Shipyard Incorporated, Shelburne, VT	Final	n/a	Subpart II (Ship Building and ship Repair Surface Coatings)	Compliant materials	New PTE limitations	Compliant materials	No change
17) Talaria Company, LLC, Trenton, ME	Final	4.59; 9.24	Subpart VVVV (Boat Manufacturing)	Compliant materials	New PTE limitations	Compliant materials	No change
18) Tower Industries, Ltd, Massillon, OH	Final	n/a	Subpart WWWW (Reinforced Plastic Composites Production) ⁷	Compliant materials	Existing PTE limitations	Compliant materials	No change
19) TruStile Doors of Iowa, Northwood, IA	Final	0.40; 0.72	Subpart QQQQ (Surface Coating of Wood Building Products)	Compliant materials	New PTE limitations	Compliant materials and operational limits for spray booths	No change
20) Vacuum Orna-Metal, Inc, Romulus, MI	Final	n/a	Subpart PPPP (Surface Coating of Plastic Parts and Products)	Compliant materials	New PTE limitations	Compliant materials and material limits	No change

⁷ As discussed in the MM2A proposal preamble, 40 CFR 63, subpart WWWW (Reinforced Plastic Composite Production) contains a regulatory provision that reflects the 1995 OIAI policy. The EPA is proposing to revise Table 2 of subpart WWWW by removing the date after which a major source cannot become an area source. The existing provision will remain in effect until such time as it is revised or removed by final agency action.

21) Vanguard National Trailer Corporation, Monon, IN	Final	0.30; 0.32	Subpart MMMM (Miscellaneous Metal Parts and Products)	Compliant materials	True area	Permanent operational changes (removal of emission units) and Compliant materials	No change
Oil and Gas							
22) Andeavor Field Services, LLC Ponderosa Compressor Station (Ponderosa), Uintah and Ouray Indian Reservation, UT	Final	9.50; 14.16	Subpart HH (Oil and Natural Gas Production Facilities)	Control technology (flare and enclosed combustion device)	Existing PTE limitations	Control technology (flare and enclosed combustion device)	No change
23) Catamount Energy Partners, LLC - Ignacio Gas Treating Plant, Colorado Southern Ute Indian Reservation	Final	1.52; 2.76	Subpart ZZZZ (RICE)	Replaced uncontrolled engines with new engines designed with control technology (catalytic oxidizer) to reduce formaldehyde by 90%	New PTE limitations	Control technology (engine designed with catalytic oxidizer to reduce formaldehyde by 90%) and operational limitations	No change
24) Crescent Point Energy Corporation Ute Tribal Compressor Station, Duchesne County, Ute Indian Tribe, UT	Draft	n/a	Subpart HH (Oil and Natural Gas Production Facilities)	Control technology (enclosed combustion device)	New PTE limitations	Control technology (enclosed combustion device)	No change

25) Denbury Onshore LLC, Little Creek EOR Facility, Ruth, MS	Final	2.39; 7.02	Subpart HH (Oil and Natural Gas Production Facilities)	Control technology (flare)	New PTE limitations	Control technology (flare) and restriction on amount of low-pressure relief gas vented to atmosphere	Reduction on HAP
26) WGR Operating, LP's Granger Gas Plant, Section 16 (sweet gas processing), Granger, WY	Final	6.02; 20.76	Subpart HH (Oil and Natural Gas Production Facilities)	Control technology (condenser and flare)	Existing PTE limitations	Control technology (engine oxidation catalyst, condenser and flare)	No change
Fuel Combustion/Boilers							
27) City of Columbia - Municipal Power Plant, Columbia, MO	Final	17.06; 20.53	Subpart DDDDD (Boilers), YYYY (Turbines), and ZZZZ (Stationary Reciprocating Internal Combustion Engines [RICE])	Not known	True area	Permanent operational changes (Ceased combustion of coal in boiler #6 and #7)	Reduction in HAP
28) Holland Board of Public Works - James DeYoung Generating Station and Wastewater Treatment Plant, Holland, MI	Final	16.61; 20.69	Subpart ZZZZ (RICE)	Not known	True Area	Permanent operational changes (coal-burning power plant ceased operations in 2016)	Reduction in HAP.
29) MidAmerican Energy Company - Riverside Generating	Final	23.47; 38.36	Subpart DDDDD (Boilers)	Not known	New PTE limitations	Operational restriction (usage of natural gas for Boiler #9)	Reduction in HAP

Station, Bettendorf, IA							
30) UniFirst Corporation, Pontiac, MI	Final	0.20; 0.38	Subpart DDDDD (Boilers)	Not known	Existing PTE limitations	Material limits and operational restriction on usage of natural gas boiler	No change
Chemicals							
31) Citgo Petroleum Corporation, Hillsborough, FL	Final	0.38; 1.50	Subpart R (Gasoline Distribution Facilities)	Control technology (Vapor collection system)	New PTE limitations	Control technology (Vapor collection system)	No change
32) Ross Incineration Services, Grafton, OH	Final	0.40; 1.33	Subpart DD (Off-Site Waste Recovery Operations)	Control technology (thermal oxidizer, fixed roofs with closed vents systems routed to carbon adsorption units)	New PTE limitations	Control technology (thermal oxidizer, fixed roofs with closed vents systems routed to carbon adsorption units)	No change
33) Transmontaigne, Evansville Terminal, Evansville, IN	Final	n/a	Subpart R (Gasoline Distribution Facilities)	Control technology (vapor flare and vapor combustor)	New PTE limitations	Control technology (vapor flare and vapor combustor)	No change
Heavy Industry							
34) Mississippi Lime Company - Verona Plant, Verona, KY	Final	6.19; 6.20	Subpart AAAAA (Lime Manufacturing Plants)	Control (baghouse)	New PTE limitations	Control (baghouse)	No change

II. Illustrative Analysis

In addition to the permit analysis presented above, we also performed an illustrative analysis for six source categories. This illustrative analysis considered two sets of assumptions. The first set of assumptions aligns with the findings of our permit review presented above in which sources continue to use the same compliance strategy before and after reclassification, and add-on controls are not adjusted to decrease control efficiency after the source is reclassified. The second set of assumptions addresses sources that take PTE limits and use adjustable add-on controls, estimating possible emission impacts if these sources were allowed to change the operating parameters of these controls after reclassifying.

A. Methods

1) Selection of Source Categories

To select the source categories for the illustrative analysis, EPA reviewed the results of the MM2A cost savings analysis for the primary scenario, the 75% threshold cost saving analysis. EPA focused on the results of the analysis for those source categories for which we had RTR modeling data. See Appendix 2 of MM2A Cost Analysis memo.⁸ The 75% threshold scenario assumes that sources that could potentially reclassify are those whose actual reported HAP emissions are at or below 75% of the major source thresholds (7.5 tpy for a single HAP and 18.75 tpy for all HAP). Table 3 presents the source categories (for which EPA had RTR data) accounting for 5% or more of the potential reclassifications for the 75% threshold scenario.

Table 3 Top Source Categories by Percent of Potential Reclassifications for the 75% Scenario

Source Category	Type of Category	Percent of Potential Reclassifications for the 75% Scenario
1. Miscellaneous Metal Parts and Products (40 CFR 63 MMMM)	Coatings	17.62%
2. Wood Furniture (40 CFR 63 subpart JJ)	Coatings	15.4%
3. Stationary Combustion Turbines* (40 CFR 63 subpart YYYY)	Fuel Combustion	8.6%
4. Aerospace- private owned and government owned (40 CFR 63 subpart GG)	Coatings	7.0%
5. Printing and Publishing (40 CFR 63 subpart KK)	Coatings	6.2%

⁸ See Cost Analysis Memorandum, Brian Palmer, Eastern Research Group (ERG) to Eric Goehl, Elineth Torres, Brian Shrager, and Larry Sorrels, U.S. EPA. Documentation of the cost savings analysis for the proposed rulemaking “Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act.” May 2019.

6. Organic Liquid Distribution (non-gasoline) (40 CFR 63 subpart EEEE)	Heavy Industry	5.3%
		60.1%

*Stationary combustion turbines (subpart YYYY) accounted for 8.6% of the sources that could reclassify at the 75% threshold scenario (for source categories with RTR data). Subpart YYYY limitations (emission limitations and operational limitations) apply only to new or reconstructed stationary combustion turbines that commenced construction or reconstruction after Jan 14, 2003. Per the review of permits done for the RTR proposal for subpart YYYY, and due to a 2004 stay on some portions of subpart YYYY, we are aware of only one facility that has had to comply with the emission/operational limitations in this subpart. In April 2019 EPA proposed to remove the stay as part of the RTR proposed rulemaking for stationary combustion turbines. At the time of this analysis (April 2019), sources impacted by the stay have their first substantive compliance date in the future and can reclassify absent MM2A. For these reasons explained above, stationary combustion turbines source category was not considered to be part of the illustrative emission analysis.

From the coating source categories identified in Table 3, EPA selected two source categories for the illustrative analysis: wood furniture and miscellaneous metal parts and products. These two coating categories account for 33% of the potential reclassifications for the 75% threshold scenario. The primary compliance method for these two source categories is the use of compliant materials.⁹ EPA also included the metal can source category (40 CFR 63 subpart KKKK) in the illustrative analysis to account for a coating source category for which the compliance method is a combination of low-HAP coatings and potentially adjustable add-on controls (e.g., thermal oxidizers).¹⁰

From the heavy industry source categories, EPA selected the organic liquid distribution (OLD) non-gasoline source category (5.3%) for the illustrative analysis. The primary compliance method for OLD non-gasoline is a combination of controls for storage tanks, transfer racks and equipment leaks. EPA also selected two other source categories: wet-formed fiberglass (40 CFR 63 subpart HHHH) and hydrochloric acid production (HCl) (40 CFR 63 subpart NNNNN). We selected wet-formed fiberglass to account in the analysis for a heavy industry source category for which the compliance method for organic HAP is add-on controls (e.g., thermal oxidizer). We selected HCl production to account for a heavy industry source category that emits mainly acid gases for which the compliance method is add-on controls (e.g. scrubbers).

To summarize, the illustrative analysis described below focuses on these six source categories.

1. Surface Coating of Miscellaneous Metal Parts and Products (40 CFR part 63 subpart MMMM)
2. Wood Furniture Manufacturing (40 CFR part 63 subpart JJ)
3. Surface Coating of Metal Cans (40 CFR part 63 subpart KKKK)
4. Organic Liquids Distribution (Non-Gasoline) (40 CFR part 63 subpart EEEE)
5. Wet-Formed Fiberglass Mat Production (40 CFR part 63 subpart HHHH)
6. Hydrochloric Acid Production (40 CFR part 63 subpart NNNNN)

⁹ The main compliance method for the aerospace source category and printing and publishing source category is also the use of compliant coatings.

¹⁰ Adjustable controls are those for which operating parameters (e.g., combustion temperature) can be potentially adjusted, which could lead to a potential change in the HAP emission control level.

2) Estimating the Number of Facilities That Could Potentially Reclassify to Area Source Status

For each of these six source categories, consistent with the cost analysis for the rulemaking, EPA used the HAP emissions data from the risk and technology review (RTR) modeling file to estimate whether each facility could potentially reclassify to area source status. Based on whole facility emissions estimates for individual HAP or total combined HAP, we determined the facilities with emissions below the following thresholds:

- 75% of the major source thresholds (7.5 tpy of a single HAP or 18.75 tpy of all combined HAP); and
- 125% of the major source thresholds (12.5 tpy of a single HAP or 31.25 tpy of all combined HAP).

Consistent with the cost analysis, we selected the 75% threshold to represent a scenario in which a facility, based on current emissions, chooses to accept enforceable HAP PTE limits and reclassify to area source status. Under this scenario, facilities will maintain a 25% compliance margin.

The other scenario (125%) represents cases in which a facility that is just above the major source thresholds, based on current emissions, chooses to reclassify as an area source. Under this scenario, the facility would accept enforceable HAP PTE limits and further reduce their emissions consistent with the PTE limits in order to achieve area source status and would also maintain a 25% compliance margin.¹¹ To represent this group of facilities, we reviewed the subset of sources with emissions between 75% and 125% of the major source thresholds.

To estimate the number of facilities in each source category subject to a major source NESHAP that fit these two emissions thresholds, EPA used the same methods we used in the cost analysis of this rulemaking to estimate the sources that could potentially reclassify; these methods are documented in detail in a separate EPA memorandum.¹² While different thresholds, either higher or lower, could be evaluated, the EPA selected the 75% threshold as the primary scenario in this analysis considering that facilities strive to maintain a reasonable compliance margin when meeting various types of standards, and while the major source thresholds are not “standards,” the concept is the same.¹³

¹¹ These facilities would have to weigh the costs of reducing emissions against the avoided costs associated with the major source NESHAP requirements when deciding whether to pursue reclassification. We examine this cost consideration in our analysis of the illustrative 125% threshold as applied to several source categories. This analysis can be found in the RIA for the proposal.

¹² See Cost Analysis Memorandum, Brian Palmer, Eastern Research Group (ERG) to Eric Goehl, Elineth Torres, Brian Shrager, and Larry Sorrels, U.S. EPA. Documentation of the cost savings analysis for the proposed rulemaking “Reclassification of Major Sources as Area Sources Under Section 112 of the Clean Air Act.” May 2019.

¹³ As described earlier in this memorandum, EPA reviewed permit actions related to 34 sources that have reclassified to area source status or are in the process of reclassifying as of March 2019. We had emissions data for 25 of the 34 sources. Our evaluation shows that 22 sources had actual emissions below the major source thresholds; 20 of those 22 sources had actual emissions below 75% of the major source thresholds prior to reclassification.

To estimate each facility's annual emissions of individual HAP and total HAP, we used emissions data from the RTR modeling files. The emissions data for the RTR modeling files were collected from the National Emissions Inventory (NEI)¹⁴ or from industry surveys. EPA applied these methods to all source categories for which we had RTR modeling files to determine the number of facilities whose estimated emissions are below the 75% and 125% thresholds, although we ultimately assessed potential emissions impacts for only six of them.

3) Control Technology Evaluation

For each of these six source categories, we considered the control technology basis of the major source NESHAP and the types of controls that are likely to be employed by facilities to comply with the major source NESHAP requirements (compliance strategy). We reviewed each category's proposed and final rule preambles, the technical support documents, and/or the rule itself to determine the technology basis for the emissions limitation for each class of pollutant regulated by the NESHAP. The results of these reviews are in the tab labeled Control Tech Review in the spreadsheet available in the docket.¹⁵ Consistent with EPA's understanding and findings of the review of the reclassification actions presented in Section I of this memo, for the illustrative analysis EPA assumed that sources within the source categories under analysis that could potentially reclassify to area source status would retain and continue to operate the emission controls or continuing to implement the practices (i.e., use of no-HAP or low-HAP compliant coating) they used to comply with major source NESHAP requirements.

4) Assessing Potential Emission Changes

EPA assessed the potential for emissions changes due to reclassification of sources within the six source categories reviewed under this illustrative analysis.

To estimate overall potential emissions changes, we reviewed the main compliance methods/strategies used across these six categories. The main factor determining any potential emissions increases is whether a facility could adjust the types of controls used to comply with the major source NESHAP requirements upon reclassifying.

- **Compliant Materials:** We considered that pollution prevention measures (e.g., process changes or switches to low-HAP surface coatings) as not adjustable. Source categories employing those measures as their compliance strategy for the applicable major source NESHAP could not readily increase or decrease emissions.
- **Add-on Control Equipment**
 - i) **Non-adjustable Controls:** We considered particulate controls for inorganic HAP (e.g., fabric filters, electrostatic precipitators) as not adjustable. Source categories employing those measures as their compliance strategy for the applicable major source NESHAP could not readily increase or decrease emissions.
 - ii) **Adjustable Controls:** For adjustable controls (e.g., caustic scrubbers, RTOs), our analysis considered two different sets of assumptions. The first derives from the findings of our permit review presented above (sources continue to use the same

¹⁴ <https://www.epa.gov/air-emissions-inventories/national-emissions-inventory-nei>

¹⁵ The control technology evaluation was performed for all major source NESHAP source categories, including the six selected for the illustrative emissions analysis. The results of all analyses are included in the spreadsheet titled, *MM2A_Illustrative Emission Analysis Results_May 2019-*.

compliance strategy before and after reclassification, and add-on controls are not adjusted to decrease control efficiency after the source is reclassified). The alternative set of assumptions addresses the potential emissions impact if sources taking PTE limitations were to be allowed to change the operating parameters of adjustable add-on control upon reclassifying.

We made the following assumptions for the illustrative scenario if sources taking PTE limitations were allowed by their permitting authority to change the operating parameters of adjustable add-on control upon reclassifying.

- For a source category employing adjustable controls, emissions could potentially increase for all facilities with actual emissions below the 75% thresholds.
- For sources with only a single HAP reported in the NEI and an adjustable control, a potential increase in emissions was calculated as the difference between 7.5 tpy and the estimate of the single largest HAP. Otherwise, the potential emissions increase was estimated as the larger difference between 18.75 tpy and the estimate of total HAP emissions and between 7.5 tpy and the single HAP emissions.
- For the 125% scenario, we assumed that facilities with emissions below the 75% threshold and an adjustable control could increase emissions to 7.5 tpy of a single HAP or 18.75 tpy of combined HAP.

Finally, to assess the potential for emission reductions, for the illustrative analysis EPA assumed that facilities with emissions between the 75% and 125% thresholds, regardless of the existing control employed for meeting the major source NESHAP standards, would decrease emissions to 7.5 tpy of a single HAP and 18.75 tpy of combined HAP.

5. Detailed Source Category Analyses

For source categories with adjustable controls, we assessed whether other regulatory requirements apply to the facilities that could reclassify and whether these requirements could prevent the facilities from changing the operating parameters of the adjustable controls and prevent any potential HAP emissions increases. EPA focused the review on applicable area source NESHAP requirements, new source performance standards (NSPS), and control techniques guidelines (CTG).

ERG and EPA also analyzed the effect of other state rules (e.g., state rules included in state implementation plans (SIPs) to limit volatile organic compounds [VOC] emissions in ozone nonattainment areas) and whether these rules could prevent facilities from changing the operating parameters of the adjustable controls and prevent any potential HAP emissions increases. This analysis was done by reviewing a cross sample of permits for a range of facilities within the six source categories that could potentially reclassify to area source status at the 75% threshold and where a potential emissions increase could occur if sources were to be allowed to change the operating parameters of adjustable add-on controls when reclassifying.

B. Results of Illustrative Analysis

The results of the detailed source category assessments are presented below, and the results of the permit reviews are provided in Appendix B.

Coating Source Categories

1. Surface Coating of Miscellaneous Metal Parts and Products (40 CFR part 63 subpart MMMM)

- Pollutant regulated by the major source NESHAP: organic HAP.
 - HAP that could be emitted from source category: xylenes, toluene, phenol, cresols/cresylic acid, glycol ethers, styrene and ethyl benzene.
- Subpart MMMM was promulgated in 2004 and amended in 2006. EPA is currently working on the RTR with a court-ordered promulgation date of March 2020.
- The technology basis of the major source NESHAP standard is low-HAP coatings for all subcategories (except magnet wire, for which the standard is based on the use of a catalytic oxidizer that is part of the curing oven and is integral to the process).
- These facilities are not subject to an NSPS, but they may be subject to state rules based on 1978 and 2008 CTGs. Facilities that are area sources may be subject to the area source NESHAP standard for paint stripping and miscellaneous surface coating operations (subpart HHHHHH).
- Based on our data, 371 facilities are subject to subpart MMMM. We estimate 285 facilities could obtain area source status at the 75% threshold.
 - EPA has reviewed the permits from 107 major source facilities; approximately 30% of these facilities have add-on controls.
 - If these facilities were to reclassify, the fact that they have either already re-engineered their coatings or use emission controls integral to their curing ovens supports the conclusion they will continue to use low-HAP coatings and controls to comply with any VOC coating limits.
 - Based on this review, we would expect no emissions increases from these facilities if they were to reclassify.
- We estimate 47 additional facilities have emissions between 75% and 125% of the major source thresholds and could potentially reclassify.
 - Based on this review, we would expect some emission decreases (160 tpy for combined HAP) from these facilities if they were to reclassify. However, the reclassification decision is not as clear-cut as it is for facilities that have emissions below 75% of the major source thresholds. Facilities with emissions at major source levels would have to weigh the costs of reducing emissions against the avoided costs associated with the major source NESHAP requirements when deciding whether to pursue reclassification. We examine this cost consideration in our analysis of the illustrative 125% threshold as applied to several source categories. This analysis can be found in the RIA for the proposal.

2. Wood Furniture Manufacturing Operations (40 CFR part 63 subpart JJ)

- Pollutants regulated by the major source NESHAP: volatile organic HAP (VOHAP) and formaldehyde.
 - HAP that could be emitted from source category: toluene, xylene, methanol, methyl isobutyl ketone, glycol ethers and formaldehyde.
- Subpart JJ was promulgated in 1995 and amended in 1998. The RTR was promulgated in 2011.

- The technology basis of the major source NESHAP standard is low-HAP coatings and high-efficiency application methods. The RTR confirmed that most facilities are using low- and no-formaldehyde coatings and contact adhesives and found only one facility using an add-on control.
- These facilities are not subject to an NSPS, but they could be subject to state rules based on a 1996 Control Technology Guidance (CTG) document.¹⁶ The CTG is used in the establishment of reasonably available control technology (RACT) for VOC for ozone nonattainment areas.
 - In the RTR, we estimated that on average, 50% of all VOC is HAP.
- Based on emissions data, 333 facilities are subject to subpart JJ and 250 facilities could potentially reclassify to area source status at the 75% thresholds.
 - If these facilities were to reclassify, we expect they would continue the use of no-HAP/low-HAP coatings and high-efficiency application methods because they have already re-engineered their processes and need to continue using these measures to maintain area source status.
 - Based on this review, we would expect no emissions increases from these facilities if they were to reclassify.
- We estimate an additional 26 facilities have emissions between 75% and 125% of the major source thresholds (above 7.5 but below 12.5 tpy for one HAP and above 18.75 but below 31.25 tpy for combined HAP) and could potentially reclassify.
 - Some of these facilities may already be using low-HAP coatings but have high production volumes. Others may rely on formulations that contain a higher percentage of HAP due to product specifications.
 - Based on this review, we would expect some potential for emission decreases (125 tpy for combined HAP) if these facilities were to reclassify. As noted above, facilities will consider the costs to reduce emissions as part of their decision to reclassify. We examine this in our analysis of the illustrative 125% threshold as applied to several source categories. This analysis can be found in the RIA for the proposal.

3. Surface Coating of Metal Cans (40 CFR part 63 subpart KKKK)

- Pollutant regulated by the major source NESHAP: organic HAP.
 - HAP that could be emitted from source category: xylene, hexane, glycol ethers (other than EGBE), isophorone, ethyl benzene, formaldehyde, naphthalene, cumene and toluene.
- Subpart KKKK was promulgated in 2003 and amended in 2006. EPA is currently working on the RTR with a court-ordered promulgation date of March 13, 2020.
- The technology basis of the major source NESHAP standard is a combination of low-HAP coatings and add-on controls (e.g., thermal oxidizers).
- Some facilities may be subject to NSPS subpart WW (beverage can surface coating) and could be subject to state rules based on CTG.
- Based on our data, five facilities are subject to subpart KKKK, and one could obtain area source status at the 75% threshold.
 - Facility emissions: total HAP from NEI = 7.70 tpy; single HAP = 1.97 tpy.

¹⁶ Control of Volatile Organic Compound Emissions from Wood Furniture Manufacturing Operations. EPA-453/R-96-007. April 1996.

- Based on a permit review, the one facility that could obtain area source status at the 75% threshold uses thermal oxidizers to comply with subpart KKKK and is required to capture and control VOC separate from subpart KKKK requirements.
- If the facility reclassified, the state requirement would necessitate it continue to operate the control technology as it has done in the past.
- Based on this review, we would expect no emissions increases from these facilities if they were to reclassify.
- We estimate two additional facilities have emissions between 75% and 125% of the major source thresholds and could potentially reclassify.
 - Based on this review, we would expect some emission decreases (4 tpy for combined HAP) from these facilities if they were to reclassify. As noted above, facilities will consider the costs to reduce emissions as part of their decision to reclassify. We examine this in our analysis of the illustrative 125% threshold as applied to several source categories. This analysis can be found in the RIA for the proposal.

Heavy Industry Source Categories

4. Wet-Formed Fiberglass Mat Production (40 CFR part 63 subpart HHHH)

- Pollutant regulated by the major source NESHAP: formaldehyde (surrogate for total HAP emissions).
 - HAP that could be emitted from source category: formaldehyde and methanol (present in some resins).
- Subpart HHHH was promulgated in 2002 and EPA promulgated the RTR on February 28, 2019.
- The technology basis of the major source NESHAP standard is the use of thermal oxidizers or similar controls (e.g., RTO, regenerative catalytic oxidizer) and the demonstration of compliance with the percent-reduction requirement (96% destruction efficiency of formaldehyde). Formaldehyde-free resins are used in limited applications.
- There are no individual state rules/NSPS/CTG that limit HAP from these sources, though some may be subject to state VOC limits.
- Based on our data, seven facilities are subject to subpart HHHH, and we estimate five could potentially reclassify to area source status at the 75% threshold.
 - Consistent with the findings of our permit review presented above, under the first set of assumptions for our illustrative analysis, if these sources were to reclassify we could expect them to operate the add-on controls at the same control level as prior to reclassification, resulting in no potential increases in emissions due to the reclassification.
 - Under the second set of assumptions for our illustrative analysis, we reviewed whether these five facilities could potentially be allowed to adjust the operating parameters to achieve less than 96% reduction of formaldehyde.
 - Based on permit reviews, two facilities have permit requirements associated with VOC control. Because formaldehyde is a VOC, we assumed that if these two facilities were to reclassify, the state requirements would prevent any potential for changes to the operating parameters of the add-on controls. Based on this review, we would expect no emissions increases if these two facilities were to reclassify.

- Based on permit reviews, the other three facilities are not subject to other state rules limiting VOC or HAP emissions or that require operation and maintenance of an emission capture and control system. These sources demonstrate compliance with the percent-reduction NESHAP standard, indicating >96% control, and most of that level of control would be needed to maintain area source status.
- If these three facilities were to reclassify and the permit requires control of formaldehyde at a lower percentage reduction (less than 96% control), emissions could potentially increase (6.1 tpy for a single HAP or 32.5 tpy for combined HAP).
- We estimate there are no facilities with emissions between 75% and 125% of the major source thresholds, and we do not estimate any potential emission reductions from this category.

5. Hydrochloric Acid (HCl) Production (40 CFR part 63 subpart NNNNN)

- Pollutants regulated by the major source NESHAP: HCl and chlorine (Cl₂).
- Subpart NNNN was promulgated in 2003 and amended in 2006. EPA proposed the RTR in February 2019 and has a court-ordered promulgation date of March 13, 2020.
- The technology basis of the major source NESHAP standard is the use of caustic acid-gas scrubbers (99% reduction) on process vents, storage tanks, and transfer operations, plus the use of a site-specific leak detection and repair (LDAR) program.
- There are no individual state rules/NSPS that would otherwise limit HAP from these sources.
- Based on our data, 19 facilities are subject to subpart NNNNN. EPA estimates three could potentially reclassify to area source status at the 75% threshold.
 - Consistent with the findings of our permit review presented above, under the first set of assumptions for our illustrative analysis, if these sources were to reclassify we could expect them to operate the scrubbers to control emissions from HCl and Cl₂ at the same control level as prior to reclassification, resulting in no potential increases in emissions due to the reclassification.
 - Under the second set of assumptions for our illustrative analysis, we reviewed whether these five facilities could potentially be allowed to adjust the operating parameters to achieve less than 99% reduction of HCl and Cl₂.
 - One facility has a permit limit on annual HCl emissions that is at least as stringent as the NESHAP, this state requirements would prevent any potential for changes to the operating parameters of the add-on controls. Based on this review, we would expect no emissions increases if this facility were to reclassify.
 - Based on permit reviews, there are no other requirements for two facilities that would limit emissions or that require operation and maintenance of emission capture and control systems that could serve as backstops.
 - If these three facilities were to reclassify and the permit required control of HCl and Cl₂ at a lower percentage reduction (less than 99% control), emissions could potentially increase (11 tpy for a single HAP or 27 tpy for combined HAP).
- We estimate two additional facilities have emissions between 75% and 125% of the major source thresholds.
 - Based on this review, we would expect some emission decreases (4 tpy for combined HAP) from these facilities if they were to reclassify. As noted above, facilities will

consider the costs to reduce emissions as part of their decision to reclassify. We examine this in our analysis of the illustrative 125% threshold as applied to several source categories. This analysis can be found in the RIA for the proposal.

6. Organic Liquids Distribution (OLD Non-Gasoline) (40 CFR part 63 subpart EEEE)

- Pollutant regulated by the major source NESHAP: organic HAP.
 - HAP that could be emitted: benzene, ethylbenzene, toluene, vinyl chloride and xylenes.
- Subpart EEEE was promulgated in 2004 and amended in 2006 and 2008. EPA is currently working on the RTR with a court-ordered promulgation date of March 13, 2020.
- Emission sources controlled by the major source OLD NESHAP are storage tanks, transfer operations, transport vehicles while being loaded, and equipment leak components (valves, pumps, and sampling connections).
- The technology basis of the major source NESHAP standard for storage tanks is a floating roof or closed vent system and control device (combustion, scrubber or adsorber) with a 95% reduction; for transfer racks, it is a closed vent system and control device (combustion) with 98% destruction; for equipment leaks, it is an LDAR work practice; and for transport vehicles, it is a vapor tightness or vapor collection certification work practice.
- Based on our data, we estimate 178 facilities are subject to subpart EEEE.
 - Sixty-two OLD facilities are stand-alone and not co-located with other NESHAP sources. These are typically pipeline or marine terminals.
 - One hundred-sixteen OLD facilities are co-located with other NESHAP sources (e.g., HON, MON, MCM,¹⁷ coating and printing, bulk gasoline distribution).
 - Fifty OLD facilities are also subject to NSPS 40 CFR part 60 subpart Kb (“Standards for Volatile Organic Liquid Storage Vessels, Including Petroleum Liquid Storage Vessels, for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.”) and some could also be subject to state or local VOC standards if located in ozone nonattainment areas.
- We estimate 89 OLD facilities could potentially obtain area source status at the 75% threshold. Of these, 41 are stand-alone OLD facilities and 18 are subject to NSPS subpart Kb.
- Consistent with the findings of our permit review presented above, under the first set of assumptions for our illustrative analysis, if these sources were to reclassify we could expect them to operate the combustion devices to control emissions from organic HAP from tanks and transfer racks at the same level as prior to reclassification, resulting in no potential increases in emissions due to the reclassification.
- Under the second set of assumptions for our illustrative analysis, we reviewed whether these 89 OLD facilities could potentially be allowed to adjust the operating parameters to achieve less than 98% destruction of organic HAP.
 - First, we determined which of these 89 OLD facilities are in ozone nonattainment areas. ERG then reviewed the permits for 15 of those OLD facilities located in ozone nonattainment areas that could reclassify to assess whether there are existing state rules

¹⁷ HON = Hazardous Organic NESHAP (subparts F, G, H, and I), MON = Miscellaneous Organic NESHAP (subpart FFFF), and MCM = Miscellaneous Coatings Manufacturing NESHAP (subpart HHHHH).

or other permit conditions that could prevent the facility from increasing emissions if the facility obtained area source status.

- Based on the permit review, at the 75% threshold seven facilities would not be expected to increase emissions because they are subject to state rules or permit requirements that directly or indirectly affect HAP emissions.
- For the remaining 82 OLD facilities, if these facilities were to reclassify and the permit required organic HAP control at a lower percentage reduction (rather than 95-98% control), there could be a potential emissions increase of 1,140 tpy (for combined HAP).
- If the NSPS Kb acted as a backstop for 22 facilities, the potential for emissions increases would be reduced to 913 tpy (for combined HAP), a difference of 227 tpy of HAP.
- However, 4% of HAP emissions in the NEI come from transfer racks and 17% from equipment leaks (21% combined), and these two sources, as well as wastewater operations, are not regulated by these NSPS. (In the NEI, 44% of emissions could not be assigned to a specific source.) At the 22 facilities subject to NSPS Kb, transfer racks and equipment leaks may represent about 48 tpy of the projected HAP increase, and this increase would not be prevented by subpart Kb.
- Therefore, the potential HAP emissions increase could be slightly higher because there is no NSPS backstop on emissions from transfer racks, equipment leaks, or wastewater operations.
- We estimate 19 facilities have emissions between 75% and 125% of the major source thresholds.
 - Based on this review, we would expect some emission decreases (77 tpy for combined HAP) from these facilities if they were to reclassify. As noted above, facilities will consider the costs to reduce emissions as part of their decision to reclassify. We examine this in our analysis of the illustrative 125% threshold as applied to several source categories. This analysis can be found in the RIA for the proposal.

CONCLUSION

A summary of the findings of our illustrative emission impact assessment for the six source categories analyzed is presented in Table 4.

The results of the illustrative analysis show that:

- For many facilities, the reclassification from major source to area source status is not expected to result in an increase in that source's HAP emissions.
- For many sources, there are backstops in place that would prevent emissions increases (e.g., other non-HAP regulatory requirements that also provide for HAP control).
- For some source categories, no emissions increases, and some emissions decreases, can be anticipated.
- For some facilities, if permitting authorities were to allow for changes in the operating parameters of adjustable add-on control technologies, these changes could potentially result in emissions increases.

Table 4: Results of Potential Emission Impacts for the Illustrative Analysis

Source Category (Number of major sources)	Pollutants and Control Technology Basis	Total HAP Emissions (tpy)	Number (and %) of Facilities Projected to Obtain Area Source Status at 75% cut-off Scenario	Range of Potential HAP Increases (tpy) at 75% cut-off/single HAP	Range of Potential HAP Increases (tpy) at 75% cut-off/ Total HAP	Additional Facilities Projected to Obtain Area Source Status at 125% cut-off scenario (%)	Range of Potential HAP Decreases (tpy) at 125% cut-off
Wood Furniture (333)	Organic HAP; Low HAP/no HAP coatings	5,378	250 (75%)	0	0	26 (8%)	0 to 125
Metal Can (5)	Organic HAP; Low HAP coatings and add-on controls	131	1 (20%)	0	0	2 (40%)	0 to 4
Miscellaneous Metal Parts and Products (371)	Organic HAP; Low HAP coatings and add-on controls	4,895	268 (72%)	0	0	46 (12%)	0 to 160
Wet Formed Fiberglass Mat (7)	Formaldehyde Add-on controls and low HAP materials	111	5 (71%)	0 to 6	0 to 33	0	0
HCl Production (19)	HCl, Cl ₂ ; Add-on controls	1,331	3 (16%)	0 to 11	0 to 27	2 (11%)	0 to 4
Organic Liquid Distribution (non-gasoline) (177)	Organic HAP; Add-on controls	10,341	82 (46%)	0	0 to 1,140	19 (11%)	0 to 77

Appendix A: List of Permit Documents Reviewed and Summary of Reclassification Actions

List of Permit Documents Reviewed¹⁸

Facility Name	Status of Reclassification	Permit Documents Reviewed
Coating Sources		
1) 2700 Real Estate Holdings, Elkhart, IN	Final	2018 Administrative Amendment FESOP No F039-34967-00182
2) Arkwright Advanced Coatings Inc., Coventry, RI	Final	Arkwright-Revocation Letter- TV and Preconstruction
3) Bemis Films, Oshkosh, WI	Final	Analysis and Preliminary Determination to Establish A Plant-Wide Applicability Limit (PAL) for VOCs and Establish the Facility as a Synthetic Minor Source for Federal Hazardous Air Pollutant -06/26/2018 2018 Construction Permit and Operating Permit # 18-JJW-073-R1 Title V Operating Permit 471009990-P32 https://dnr.wi.gov/cias/am/amexternal/AM_Permit_Tracking2.aspx?id=3001751 .
4) Bemis Wisconsin, LLC - New London, WI	Draft	Draft Air Pollution Control Construction Permit Revision and Draft Air Pollution Control Operation Permit Renewal- 02/04/19 Analysis and Preliminary Determination for the Revision of Construction Permits https://dnr.wi.gov/cias/am/amexternal/AM_Permit_Tracking2.aspx?id=3001568
5) Fairhaven Shipyard Companies, Inc., North Shipyard, Fairhaven, MA	Final	Amendment to Air Quality Plan Approval (SE-12-031)-08/17/18 Operating Permit Application Termination - 08/17/18
6) Geiger International, Inc., Atlanta, GA	Final	2018 Air Quality Permit -4/27/18
7) Heritage Home Group, LLC, Hickory, NC	Final	Air Quality Permit No 02779T25 -06/15/18 and Statement of Basis (SOB)
8) Heritage Home Group, LLC Lenoir Plant, Lenoir, NC	Final	Air Quality Permit No. 04172T26- 05/9/18 and SOB

¹⁸These documents can be found in the docket MM2A Docket No. EPA-HQ-OAR-2019-0282.

9) Herman Miller, Inc., Zeeland, MI	Final	2019 Opt-out Permit to Install No. 9-18A- 01/04/19 Voided ROP letter-02/13/19
10) Highland Industries Inc. Cheraw, SC	Final	Title V Minor Modification and SOB -6/4/18 Title V Operating Permit revision No.TV-0660- 0002- 01/16/19
11) IAC Iowa City, LLC, Iowa City, IA	Final	2018 Air Construction Permits-06/05/18
12) Kimball Office Salem Wood Office Furniture, Salem, IN	Final	2018 FESOP No 175-39067-00007 -04/26/18
13) Mapes Panels, LCC, Lincoln, NE	Final	2018 Permit to Construct/Reconstruct/Modify An Air Contaminant Source No 199- 09/01/18
14) Meridian Manufacturing Group, Storm Lake, IA	Final	2018 Air Quality Construction Permit- Project Number 18-181-07/19/18
15) Novel Iron Works, Greenland, NH	Final	Temporary Permit TP-0228 and NHDES Letter- 12/31/18
16) Shelburne Shipyard Incorporated, Shelburne, VT	Final	2018 Air Pollution Control Permit to Construct- AP-15-025- 04/26/18
17) Talaria Company, LLC d/b/a The Hinckley Company, Trenton, ME	Final	Minor Source Air Emission License (A-798-71-C- R/A)-05/4/18
18) Tower Industries, Ltd, Massillon, OH	Final	Permit-to-Install P0123990-05/18/18
19) TruStile Doors of Iowa, Northwood, IA	Final	2018 Air Quality Construction Permit Project No 18-144-05/16/1//
20) Vacuum Orna-Metal, Inc, Romulus, MI	Final	Permit To Install No. 145-16A: 03/23/18 MI DEQ Letter Void Renewable Operating Permit No. MI-ROP-B4550-2017-11/14/18
21) Vanguard National Trailer Corporation, Monon, IN	Final	2018 Title V Operating Permit Renewal No 181- 38409-00043-04/18/18
Oil and Gas		
22) Andeavor Field Services, LLC Ponderosa Compressor Station (Ponderosa) Uintah and Ouray Indian Reservation, UT	Final	U.S. EPA Region 8 Letter Rescinding 40 CFR part 71 Title V -05/18/18 MNSR permit SMNSR-UO-002178- 2017.003- 04/06/17

23) Catamount Energy Partners, LLC - Ignacio Gas Treating Plant, Colorado Southern Ute Indian Reservation	Final	MNSR permit SMNSR-SU-000052-2018.002-03/04/19
24) Crescent Point Energy Corporation - Ute Tribal Compressor Station, Ute Indian Tribe, UT	Draft	MNSR proposed permit SMNSR-UO-008008-2017.001-07/13/18
25) Denbury Onshore LLC, Little Creek EOR Facility, Ruth, MS	Final	Title V Significant Modification Permit No 2280-00038 -08/02/18 and SOB
26) WGR Operating, LP's Granger Gas Plant, Section 16 (sweet gas processing), Granger, WY	Final	Title V Operating Permit Renewal Permit No P0020683 (Legacy No 3-3-032), SOB and RTC-04/24/18 NSR permit MD-1535A-09/5/2007
Fuel Combustion/Boilers		
27) City of Columbia - Municipal Power Plant, Columbia, MO	Final	Title V Permit No OP2018-109-12/10/18
28) Holland Board of Public Works - James DeYoung Generating Station and Wastewater Treatment Plant, Holland, MI	Final	MI DEQ Letter Voiding Renewable Operating Permit MI-ROP-B2357-2014a and Source-wide Permit to Install No MI-PTI-B2357-2014a
29) MidAmerican Energy Company - Riverside Generating Station, Bettendorf, IA	Final	2018 Air Construction Permit Project Number 18-194-07/03/18
30) UniFirst Corporation Pontiac, MI	Final	Permit to Install 166-16B -04/19/18
Chemicals		
31) Citgo Petroleum Corporation, Hillsborough, FL	Final	2018 FESOP Air Permit No. 0570016-019-AF - 11/13/18
32) Ross Incineration Services, Grafton, OH	Final	Permit-to-Install Administrative Modification P0124980-01/3/19 Title V renewal to permit P0108010-2/5/19 RCRA permit OHD 048 415 665- 05/23/14
33) Transmontaigne, Evansville Terminal, Evansville, IN	Final	FESOP Renewal No 163-38296-00063 -04/16/18

Heavy Industry		
34) Mississippi Lime Company - Verona Plant, Verona, KY	Final	Air Quality Permit V-15-027 R1-12/23/18 and SOB

Summary of Reclassification Actions: Permit Review

1) 2700 Real State Holding, Elkhart, IN

a) *Status prior to 2018 MM2A Memo*

- i) The source was originally classified major for HAP. The removal of existing emission units changed the source from a major source to an area source. The facility has been an area source since December 2011.
- ii) Subject to 40 CFR 63 subpart MMMM (Surface Coating for Miscellaneous Parts and Products)- Two RV assembly lines involving coating material applications, using manual flowcoating, wiping and aerosol spray applications. Compliance strategy for NESHAP was the use of compliant coatings (no-HAP/low-HAP).
- iii) Subject to 40 CFR 63 subpart CCCCCC (Gasoline Dispensing Facilities- Area Source)
- iv) Unrestricted PTE
 - Largest single HAP- 1.94 tpy (toluene)
 - Total HAP- 5.63
- v) Source received a Federally Enforceable State Operating Permit (FESOP) Minor Source in 2015 that included facilitywide HAP PTE limitations and NESHAP applicability.
 - The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and the potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- vi) 2014 NEI emission data for facility
 - Largest single HAP: 0.01 tpy
 - Total HAP: 0.01 tpy
- vii) Latest emission data reported to Emissions Inventory System (EIS) Gateway, for 2016:
 - Total HAP: 2.8 tpy

b) *Status post-2018 MM2A Memo*

- i) In March 2018, source submitted application to Indiana Department of Environmental Management (IDEM) to remove the requirements of 40 CFR 63 subpart MMMM from 2015 FESOP.
- ii) IDEM issued an Administrative Amendment to the 2015 FESOP in April 2018.

c) *2015 FESOP/2018 Administrative Amendment*

- i) Removes applicability of subpart MMMM.

- ii) Source still subject to sourcewide HAP limits. RV assembly lines are still subject to VOC content limitations.
- d) *General observations from reclassification*
 - i) Source has been an area source of HAP since 2011.
 - ii) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, the removal of existing emission units, and that the facility is now a true area source, we don't expect emission increases resulting from the reclassification of this source.

2) **Arkwright Advanced Coatings, Fiskeville/Coventry, RI**

- a) *Status prior to 2018 MM2A Memo*
 - i) Facility was subject to Title V Operating Permit.
 - ii) Subject to 40 CFR 63 subpart JJJJ (Paper and other web coating). Compliance strategy for NESHAP was the use of compliant coatings (no-HAP/low-HAP).
 - The permittee shall, on a facilitywide basis limit organic Hazardous Air Pollutant (HAP) emissions, from emission units P001 (when used for production purposes), P003, P007, P005, L001, L003, P006, and P012 to no more than 4% of the mass of coating materials applied for each month. [40 CFR 63.3320(b)(2)]
 - iii) 2014 NEI emission data for facility
 - Largest single HAP: 0.12 tpy
 - Total HAP: 0.15 tpy
- b) *Status post-2018 MM2A Memo*
 - i) Facility implemented process removals, with PTE from remaining sources determined by RI Office of Air Resources to not exceed major source thresholds.
 - ii) Reclassified as true area source 10/12/2018 with no emissions cap required to remain below major source thresholds.
 - iii) RI DEM issued a revocation letter terminating the operating permit effective October 12, 2018.
- c) *PTE Limitations*
 - i) None.
- d) *General observations from reclassification*
 - i) Due to process changes in the facility, the use of compliant coatings, this source is now a true area source. We don't expect emission increases resulting from the reclassification of this source.

3) **Bemis Films, Oshkosh, WI**

- a) *Status prior to 2018 MM2A Memo*
 - i) Subject to 40 CFR 63 subpart KK- Printing and Publishing
 - Compliant materials.
 - Most solvent based flexographic inks contain little or no HAP. Capture and control devices used with solvent based inks are usually designed, permitted and operated for VOC control.

- ii) Subject to 40 CFR 63 subpart DDDDD- Industrial, Commercial, and Institutional Boilers and Process Heaters
 - iii) Subject to 40 CFR 63 subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines- RICE)- for spark ignition RICE emergency generators and compression ignition RICE fire pump, compression ignition RICE emergency generator
 - iv) Facility is in an attainment area for NAAQS.
 - v) No HAP emissions reported in 2014 NEI.
 - vi) VOC emissions from flexographic press are controlled by thermal oxidizers and catalytic oxidizers.
- b) *Status post-2018 MM2A Memo*
- i) July 31, 2018 facility obtains permit that establishes plant applicability limit (PAL) for VOC and federal HAP synthetic minor limitations.
 - ii) In March 2019 facility submitted application to revise the air pollution control construction permit and Title V operating permit to correct PAL compliance demonstration equation.
 - iii) Source is major for CAP and will continue to have Title V Operating Permit 471009990-P32.
 - iv) https://dnr.wi.gov/cias/am/amexternal/AM_PermitTracking2.aspx?id=3001751
- c) *2018 Construction Permit and Operating Permit (18-JJW-073-R1)*
- i) Permit states: General conditions applicable to entire facility: (1)(a) The permittee shall limit the emissions from the facility of each federal HAP to less than 1,500 pounds per month averaged over each 12-consecutive month period; and (b) limit the cumulative emissions of all federal HAPs to less than 4,000 pounds per month averaged over each 12-consecutive month period.
 - ii) Permit provides compliance demonstration calculation.
 - iii) Permit requires recordkeeping of
 - a) A unique name or identification number for each federal HAP-containing material;
 - (b) The total volume or mass of each federal HAP-containing material used for the entire facility for each month, in gallons or pounds;
 - (c) The mass of each individual federal HAP present in each federal HAP-containing material used during each month, in pounds per gallon or percent by weight;
 - (d) The total mass of each individual federal HAP used during each month, in pounds;
 - (e) The total mass of each individual federal HAP emitted, averaged over the previous 12 consecutive months, in pounds;
 - (f) The total mass of all federal HAPs combined emitted, averaged over the previous 12 consecutive months, in pounds;
 - (g) Copies of USEPA test method results, Certified Product Data sheets, Safety Data Sheets, analytical records from suppliers, or other records that list the federal HAP content of each federal HAP-containing material in units necessary to determine compliance; and
 - (h) Copies of all compliance reports documenting the capture and destruction efficiency for each process, as applicable.

- iv) For VOC limitations purposes,
 - When using solvent based inks, process emissions are exhausted to through control devices C03, C04, and/or C05. When using compliant inks, process emissions are exhausted to oxidizer bypass stacks.
 - The permittee shall operate an oxidation system whenever solvent based inks and coatings are used with a minimum destruction efficiency of 95%.
- d) *General observations from reclassification*
 - i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings (no-HAP/low HAP), and the fact that the permit requires the operation of an oxidation system whenever solvent based inks and coatings are used with a minimum destruction efficiency of 95% (same as NESHAP subpart KK), we don't expect emission increases resulting from the reclassification of this source.

4) **Bemis Wisconsin LLC, New London, WI**

- a) *Status prior to 2018 MM2A Memo*
 - i) Subject to 40 CFR 63 subpart KK- Printing and Publishing
 - Compliant materials.
 - Most solvent based flexographic inks contain little or no HAP. Capture and control devices used with solvent based inks are usually designed, permitted and operated for VOC control.
 - ii) Subject to subpart DDDDD- Industrial, Commercial, and Institutional Boilers and Process Heaters
 - iii) Subject to 40 CFR 63 subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines -RICE) for emergency RICE
 - iv) No HAP emissions reported in 2014 NEI.
 - v) Title V Operation Permit 445030850-P22
- b) *Status post-2018 MM2A Memo*
 - i) Facility requested revision of construction permit issued in May 9, 2017 to take HAP limitations to reclassify as area source and remove requirements of subpart KK for the two flexographic presses authorized in the 2017 permit (construction permit 17-JJW-043) and remove requirements of subpart DDDDD.
 - ii) Facility also requested emission limitations for VOC of 39.8 tpy.
 - iii) https://dnr.wi.gov/cias/am/amexternal/AM_PermitTracking2.aspx?id=3001568
- c) *Draft Construction Permit and Title V permit revision (445030850-P30)*
 - i) The renewal of the operation permit (445030850-P21) was processed with the construction permit revisions requested by the facility.
 - ii) Draft construction permit revision/operation permit renewal approved (and submitted for public comment) Feb 2019. Public comment period ended on 3/3/19.
 - iii) PTE- Facilitywide HAP usage per permit analysis
 - N-butanol- 4,800 lb/yr (2.4 tpy)

- Glycol ether- 800 lb/yr (0.4 tpy)
- iv) Facility limited in new permit to <1500 pounds/month for individual HAP, <4000 pounds/month combined HAP, averaged over each 12-consecutive month period.
- v) Limited to 125 pounds/month and 333.3 pounds/month for first 12 months after permit issuance.
- vi) Permit uses monthly recordkeeping of raw material and calculations to demonstrate compliance.
- vii) https://dnr.wi.gov/cias/am/amexternal/AM_PermitTracking2.aspx?id=3001568
- d) *General observations from reclassification*
 - i) Permit analysis document from WI DNR
 - the proposed change does not require a new construction permit under ch. NR 406, Wis. Adm. Code because the change does not result in an increase in emissions, and the change does not trigger a requirement under section 111 or 112 of the Clean Air Act. Thus, the proposed change can be made through a construction permit revision issued under s. NR 406.11, Wis. Adm. Code. Upon issuance of operation permit 445030850-P30, any federal HAP emissions that are also considered state HAP emissions will be subject to regulation under ch. NR 445, Wis. Adm. Code. The removal of the existing major source NESHAPs and the insertion of synthetic minor source conditions will not result in an increase in potential federal HAP emissions.
 - ii) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings (no-HAP/low HAP), we don't expect emission increases resulting from the reclassification of this source.

5) Fairhaven Shipyard Companies Inc, North Shipyard, Fairhaven, MA

- a) *Status prior to 2018 MM2A Memo*
 - i) Subject to 40 CFR 63 subpart II (shipbuilding). Compliance strategy was the use of compliant coatings.
 - ii) 2014 NEI emission data for facility
 - Largest single HAP: 2.05 tpy (xylene)
 - Total HAP: 2.05 tpy
 - iii) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 2.05 tpy
 - iv) Source had taken enforceable PTE limitations in a 2016 Limited Air Quality Operating Permit (SE-12-030).
- b) *Status post-2018 MM2A Memo*
 - i) On July 2018, the source requested the withdrawal/revocation of the Final Air Quality Operating Permit and requested revision to the underlying 2016 Limited Air Quality Operating Permit to remove applicability to subpart II.

- ii) On September 2018, MassDEP issued an administrative amendment and re-issued Limited Air Quality Operating Permit (SE-12-030) removing subpart II and the issued a final air quality operating permit revocation.
- c) 2018 Limited Air Quality Operating Permit Revision (SE-12-031).
 - i) Limit material usage such that HAP (single) emissions do not exceed 9.9 TPY / 3.3 TPM
 - ii) Limit material usage such that HAP (total) emissions do not exceed 9.9 TPY/3.3 TPM
 - iii) Limit material usage such that VOC content and emissions do not exceed 9.9 TPY / 3.3 TPM
 - *Permit includes VOC limits by coating category*
 - iv) Monitor the use of solvents, thinners, and coatings, to include VOC and HAP used and emitted, in order to demonstrate compliance with operational and emission limits.
- d) *General observations from reclassification*
 - i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source in 2016 reflect the use of compliant coatings, we don't expect emission increases resulting from the reclassification of this source.

6) Geiger International, Atlanta, GA

- a) *Status prior to 2018 MM2A Memo*
 - i) Facility located in ozone nonattainment area with a major source threshold of 25 tpy of VOC.
 - ii) In November 2016, source proposed to reduce VOC emissions to 25 tpy and became a synthetic minor NSR source (permit amendment- # 2521-121-0558-V-04-1.)
 - iii) Source was still classified as major for HAP.
 - Subject to 40 CFR 60 Subpart JJ (wood furniture). Spray booths, adhesive operations and staining operations. Compliance strategy was the use of compliant coatings-low solvent coating technology (no-HAP/low HAP); emissions determined by mass balance)
 - (a) Per 2016 Title V permit narrative- "The compliance reports from the facility to the Division indicate that all of the finishing materials used in the past are compliant materials."
 - Subject to 40 CFR 63 subpart ZZZZ (emergency power generation)
 - iv) No HAP emission data for facility available in 2014 NEI.
 - v) Actual emission data per 2018 permit
 - Largest single HAP: 0.4 tpy
 - Total HAP: 0.4 tpy; primarily xylenes and toluene
- b) *Status post-2018 MM2A Memo*
 - i) In February 2018, Geiger International submitted an application to GA Department of Natural Resources (GADNR) requesting a synthetic minor permit with HAP limits to reclassify the source as area source of HAP and remove subpart JJ from permit. The

- facility no longer would be a Title V source, and per GADNR, public advisory was not needed.
- ii) On April 27, 2018, GA DNR issued an air quality permit for the source establishing enforceable emission limitations so that the facility will not be considered a major source of HAP and revoked previously issued air quality permits.
- c) *2018 Air Quality Permit*
- i) Emission limits to establish/reclassify facility as an area source of HAP
 - Individual HAP less than 10 tpy (any 12 consecutive months)
 - Total combined HAP less than 25 tpy (any 12 consecutive months)
 - ii) The Permittee shall maintain monthly usage records of all VOC-containing materials used in the entire facility. These records shall include the total weight of each material used and the VOC content of each material (expressed as a weight percentage).
 - iii) The Permittee shall use the equation provided in permit to calculate HAP emissions.
 - i) Permittee shall notify the Division in writing if, during any calendar month, facilitywide emissions of any individual HAP exceed 0.83 tons or emissions of all listed HAP combined exceed 2.08 tons.
 - i) Provided that total combined HAP emissions from the facility are less than 5 tons per year, the facility may opt to track total HAP only. If total HAP emissions equal or exceed 5 tons during any 12 consecutive months, the Permittee shall, beginning the next calendar month and from that point forward, track individual HAP as well as total HAP.
- d) *General observations from reclassification*
- i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings (no-HAP/low HAP), we don't expect emission increases resulting from the reclassification of this source to area source status.

7) Heritage Home Group LLC, Hickory, NC

- a) *Status prior to 2018 MM2A Memo*
- i) Subject to 40 CFR 63 subpart JJ "Wood Furniture Manufacturing Operations"- for wood furniture and coating operations. Compliance strategy was the use of compliant coatings
 - ii) Subject to 40 CFR 63 Subpart DDDD "Plywood and Composite Wood Products." For glue press.
 - iii) Facility remained subject to these subparts even after the facility accepted an operating limit to be considered an Area Source.
 - iv) In December 2013, Permit T23 added an avoidance condition for HAP-Major Status by obtaining enforceable facilitywide emission limits for HAP.
 - Less than 10 tons per consecutive 12-month period for any single HAP and 25 tons per consecutive 12-month period for all HAP.

- v) 2014 NEI emission data for facility
 - Largest single HAP: 4.18 tpy (toluene)
 - Total HAP: 6.48 tpy
- vi) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 4.77 tpy
- vii) From Permit Application Review -total actual emissions single and total HAP (tpy)
 - 2014 4.18 (single); 6.48 (total)
 - 2015 3.80 (single); 5.74 (total)
 - 2016 3.50 (single); 4.78 (total)
- b) *Status post-2018 MM2A Memo*
 - i) Facility submitted application in February 2018 to remove conditions for subparts JJ and DDDD from the source's operating permit.
- c) *Revision to Title V Permit 02779T25, issued June 15, 2018*
 - i) Removed All specific conditions for Subpart JJ and DDDD.
 - ii) Added a permit condition for Subpart OOOOOO (Flexible Polyurethane Foam Production and Fabrication Area Sources).
 - The Permittee shall not use any adhesive containing methylene chloride in a flexible polyurethane foam fabrication process.
 - The Permittee shall use adhesive usage records, Material Safety Data Sheets, and/or engineering calculations in order to demonstrate compliance.
 - iii) The facility remains subject to and (based on most recent inspection) continues to comply with Subparts ZZZZ (RICE), Subpart JJJJJJ (Industrial, Commercial, and Institutional Boilers Area Sources).
 - iv) Facility continues to be subject to HAP PTE limitations
 - Facilitywide emissions shall be less than 10 tons per consecutive 12-month period for any single HAP and 25 tons per consecutive 12-month period for all HAP.
 - The Permittee shall maintain monthly records of consumption for each fuel type or HAP containing material (e.g., coatings, adhesives, etc.) and/or operating hours for each emission source
 - Compliance demonstration: the facility must calculate HAP emissions from the furniture finishing operations and boilers. The facility must keep records of the rolling 12-month total HAP emissions and report this twice per year.
- d) *General observations from reclassification*
 - i) From Permit Statement of Basis (SOB)- Permit SOB "This permit renewal is not expected to change potential emissions from the facility."
 - ii) The facility's PTE limits were already in effect prior to reclassification and did not change. Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings (no-HAP/low HAP), we don't expect emission increases resulting from the reclassification of this source to area source status.

8) **Heritage Home Group (HHG) LLC, Lenoir, NC**

a) *Status prior to 2018 MM2A Memo*

- i) Facility subject 40 CFR 63 subpart JJ (wood furniture manufacturing) for wood furniture coating operations. Compliance strategy was the use of compliant coatings.
- ii) Subject to 40 CFR 63 subpart DDDD (plywood and composite wood) for wood treatment operation/lumber kiln
- iii) Subject to case by case MACT (boilers and process heaters),
- iv) Facility subject to 40 CFR 63 subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines) for area sources.
- v) 2014 NEI emission data for facility
 - Largest single HAP: 6.74 tpy (toluene)
 - Total HAP: 14.48 tpy
- vi) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 12.35 tpy
- vii) In December 21, 2016, facility submitted application for renewal of Air Permit No 04172T25. And in March 2017, facility submitted application for a significant modification of the existing Title V permit for purposes of the facility being classified as minor for HAP. Facility requested federally enforceable avoidance condition for HAPs
 - From Permit Application Review -total actual emissions single and total HAP (tpy)
 - 2014 6.74 (single); 15.29 (total)
 - 2015 5.11 (single); 11.90 (total)
 - 2016 5.55 (single); 13.30 (total)

b) *Status post-2018 MM2A Memo*

- i) In January 2018, facility submitted a request to remove MACT applicability from permit.
- ii) In May 2018, issued the updated Air Quality Permit No. 04172T26 replacing permit No 04172T25.

c) *Air Quality Permit/Title V modification dated May 9, 2018*

- i) The state determined that facility meets the criterion set forth in the 2018 MM2A memo and will no longer be subject to NESHAP Subparts DDDD (Plywood and Composite Wood Products) and JJ (Wood Furniture Manufacturing Operations) upon the issuance of Air Permit No. 04172T26 with a federally enforceable avoidance condition for HAPs.
- ii) As a minor source of HAPs, facility will be subject to the National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers (40 CFR 63 Subpart JJJJJ).
- iii) The facilitywide emission sources shall discharge into the atmosphere less than 10 tons of any single hazardous air pollutant (HAP) per consecutive 12-month period and less than 25 tons of any combination of HAPs per consecutive 12-month period.
 - The Permittee shall maintain monthly consumption records of each material used containing hazardous air pollutants as follows: i. quantity of individual hazardous

air pollutants in pounds used by the facility each month and for the 12-month period ending on that month, ii. quantity of all hazardous air pollutants in pounds used by the facility each month and for the 12-month period ending on that month.

- The Permittee shall keep a record of the applicability determination on site at the source for a period of five years after the determination, or until the source becomes an affected source. The determination must include the analysis demonstrating why the Permittee believes the source is unaffected pursuant to 40 CFR Part 63.10(b)(3). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .111 t if the records are not maintained.

d) *General observations from reclassification*

- i) From permit SOB “Emissions of N. C. air toxics are not increased, and are not being reviewed, with this permitting action. However, future modifications that result in an increase in N. C. air toxics emissions may trigger a review of previously exempt sources.”
- ii) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings (no-HAP/low HAP), we don’t expect emission increases resulting from the reclassification of this source to area source status.

9) **Herman Miller Inc. Zeeland, MI**

a) *Status prior to 2018 MM2A Memo*

- i) Prior to 2018 MM2A Memo source had Renewable Operating Permit (ROP).
- ii) Facility subject 40 CFR 63 subpart JJ (wood furniture manufacturing) for wood furniture coating operations. Compliance strategy was the use of compliant coatings.
- iii) Subject to 40 CFR 63 subpart JJJJJ (area source boiler MACT), wood fired boiler.
- iv) 2014 NEI emission data for facility
 - Largest single HAP: 0.37 tpy
 - Total HAP: 0.47 tpy
- v) Latest emission data reported to EIS Gateway, for 2016:
- vi) Total HAP: 0.03 tpy

b) *Status post-2018 MM2A Memo*

- i) Facility submitted application for an Opt-out Permit to install on 11/26/18 and requested to void the Renewable Operating Permit (Title V).
- ii) State approved Permit to Install on 01/04/19 and voided ROP on 2/13/19.

c) *2019 Opt-out Permit to Install No. 9-18A*

- i) Sourcewide emissions limit
 - individual HAP less than 9 tpy, 12-month rolling time period determined at the end of each calendar month
 - aggregate HAP less than 22.5 tpy 12-month rolling time period determined at the end of each calendar month

- ii) The permittee shall determine the HAP content of any material as received and as applied, using manufacturer's formulation data.
- iii) The permittee shall keep
 - Records of coating usage and the HAP content of each coating, both on an individual and aggregated HAP basis, based upon a rolling 12-month time period.
 - Records of fuel usage and the individual and aggregated HAPs emitted through the stack or in the fly-ash based on stack test data, sampling data or established emission factors on a rolling 12-month time period.
- iv) Boiler continues to be subject to subpart JJJJJ (HCl limit 0.66 tpy.)
 - Fabric filter, HCl gas sorbent injection system
- d) *General observations from reclassification*
 - i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings (no-HAP/low HAP), we don't expect emission increases resulting from the reclassification of this source to area source status.

10) Highland Industries Inc, Cheraw, SC

- a) *Status prior to 2018 MM2A Memo*
 - i) The facility is a textile manufacturing facility that produces woven and knitted fabric mainly for industrial uses.
 - ii) Originally, Takata Resistant Systems Inc. (TRSI) was collocated with Highland Industries for permitting applicability determinations. TRSI was closed on February 7, 2006.
 - iii) Subject to 40 CFR 63 subpart OOOO (Printing, Coating, and Dyeing of Fabric and Other Textiles)
 - iv) In 2007, a modeling study using emissions from the combined facilities showed total HAP emissions were 447.8 tpy, which would classify this facility as a major source. Highland Industries would also be classified as a major source of HAPs, as total HAP emissions from the facility were 51.087 tpy.
 - v) As a part of the facility's current Title V renewal application, which was received September 29, 2017, the facility updated calculations to include information gathered from a review of all the Safety Data Sheets (SDS) for all the materials used at the facility. The updated facilitywide potential emission calculations showed total uncontrolled HAP emissions of 2.72 tpy.
 - vi) Per SCDHEC's Bureau of Air Quality (BAQ), Highland Industries will no longer be a major source of HAP. As a result, BAQ stated that a State Operating Permit would be issued for the facility upon renewal of the operating permit in 2018.
 - vii) 2014 NEI emission data for facility
 - Largest single HAP: 0.32 tpy
 - Total HAP: 0.80 tpy (RTR modeling file: 33.31 tpy)
 - viii) Latest emission data reported to EIS Gateway, for 2016:

- Total HAP: 0.80 tpy
- b) *Status post-2018 MM2A Memo*
 - i) In March 2018, the facility requested removal of the existing NESHAP requirements for Subpart OOOO (Printing, Coating, and Dyeing of Fabric and Other Textiles) from the current Title V operating permit.
 - ii) Per BAQ, based on information submitted by the facility, along with their operating permit renewal application, the facility is currently operating as a true area source of HAP emissions.
 - iii) Thus, per BAQ, the facility is no longer subject to the NESHAP requirements for a major source of HAP emissions.
 - iv) This was reflected in a Title V permit minor modification dated June 4, 2018, which was to expire June 30, 2018.
 - v) A Title V Operating Permit revision 0660-0002 was issued January 16, 2019, effective April 1, 2019.
- c) *PTE Limitations*
 - i) N/A
- d) *General observations from reclassification*
 - i) The state has classified the source as a true area source with an uncontrolled HAP PTE of 2.72 tpy. We don't expect emission increases resulting from the reclassification of this source to area source status.

11) IAC Iowa City LLC, Iowa City, IA

- a) *Status prior to 2018 MM2A Memo*
 - i) In 2004, source obtained permit establishing plantwide VOC limit.
 - ii) In 2013, source requested to modify plantwide VOC limit and add NESHAP requirements.
 - iii) Source was classified as major for HAP.
 - Subject to 40 CFR 63 subpart PPPP (plastic parts and products) for paint booths. Compliance strategy was the use of compliant coatings (no-HAP/low-HAP).
 - iv) 2014 NEI emission data for facility
 - Largest single HAP: 2.16 tpy
 - Total HAP: 2.60 tpy (RTR modeling file: 4.66 tpy)
 - v) From permit emission calculations – 2017 emissions
 - Largest single HAP: 0.62 tpy (Triethylamine)
 - Total HAP: 0.63 tpy
 - vi) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 1.67 tpy
- b) *Status post-2018 MM2A Memo*
 - i) In June 2018, IA DNR issued an Air Quality Construction Permit for the source. Permit updated VOC and HAP limits:
 - Facilitywide emission limit of 95.0 tpy of VOC per rolling 12-month period to restrict PTE below the major source threshold for purposes of Title V and PSD.

- Facilitywide emissions for HAP to restrict PTE below the major source thresholds for purposes of NESHAP applicability.
 - Previous permits established operating limits and/or restrict paint usage for paint booths.
 - (a) <https://programs.iowadnr.gov/airqualityconstructionpermits/Pages/ConstructionPermit/SearchResult.aspx>
- c) *2018 Air Construction Permit*
- i) Emission limits to establish/reclassify facility as an area source of HAP
 - Individual HAP less than 9 tpy per rolling 12-month period
 - Total combined HAP less than 25 tpy per rolling 12-month period
 - ii) Operating Requirements
 - Daily and monthly records of the identification, the VOC content, the HAP content, and the amount (gallons) of each VOC-containing material and/or HAP-containing material used in the noncombustion sources at this facility.
 - If the rolling 12-month total of any individual HAP emitted from the noncombustion sources at this facility exceeds 6.5 tons per 12-month rolling period, the permittee shall maintain the following daily records: (1) The total emissions of individual HAP (tons) from the noncombustion sources at this facility, and (2) the rolling 365-day total amount of individual HAP emissions from the noncombustion sources at this facility. Daily recordkeeping/calculations for individual HAP emissions shall continue until the rolling 12-month total amount of individual HAP emissions drops below 6.5 tons on the last day of a month. Monthly calculation of individual HAP emissions will then begin in the following month.
 - If the rolling, 12-month total of cumulative HAP emitted from the noncombustion sources at this facility exceeds 18.0 tons per 12-month rolling period, the permittee shall maintain the following daily records: (1) The total emissions of cumulative HAP (tons) from the noncombustion sources at this facility, and (2) the rolling 365-day total amount of cumulative HAP emissions from the noncombustion sources at this facility. Daily recordkeeping/calculations for cumulative HAP emissions shall continue until the rolling 12-month total amount of cumulative HAP emissions drops below 18.0 tons on the last day of a month. Monthly calculation of cumulative HAP emissions will then begin the following month.
 - i) Per permit documentation
 - Since 2012, emissions have been less than 2.64 tpy total HAP.
 - 2017 actual emissions: 0.62 tpy single HAP (triethylamine); 0.63 tpy total HAP.
- d) *General observations from reclassification*
- i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings (no-HAP/low HAP) and that the source also has other permits establishing operating limits and/or restrict paint

usage for paint booths/ovens, we don't expect emission increases resulting from the reclassification of this source to area source status.

12) Kimball Office Salem Wood Office Furniture, Salem, IN

- a) *Status prior to 2018 MM2A Memo*
 - i) Source submitted an application to IDEM in September 2017 to renew its operating permit and transition to a FESOP.
 - Subject to 40 CFR 63 subpart JJ (wood furniture). Compliance strategy was the use of compliant coatings (no-HAP/low-HAP).
 - ii) 2014 NEI emission data for facility
 - Largest single HAP: 0.05 tpy
 - Total HAP: 0.05 tpy
 - iii) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 0.03 tpy
 - iv) Unrestricted PTE
 - Largest single HAP: 105.39 tpy
 - Total HAP: 195.83 tpy
- b) *Status post-2018 MM2A Memo*
 - i) In April 2018, after a 30-day comment period, IDEM issued the final FESOP limiting PTE HAP to below the major source thresholds and reclassifying this source as an area source under section 112 of CAA and removing applicability to 40 CFR 63 subpart JJ.
- c) *2018 FESOP No 175-39067-00007*
 - i) PTE HAP limitations
 - The input of any single HAP to spray booths, identified as SB1 through SB15, UV-1 and UV-2 shall be limited to less than 9.5 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The input of any combination of HAPs to spray booths, identified as SB1 through SB15, UV-1 and UV-2 shall be limited to less than 24.0 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - Compliance with these limits, in conjunction with the potential to emit HAPs from the other emission units at this source, shall limit the sourcewide emissions of HAPs to less than ten (10) tons per year of a single HAP and less than twenty-five (25) tons per year of combined HAPs and will render the requirements of 326 IAC 2-7 (Part 70 Permit Program) not applicable to the source.
 - Compliance with the HAP input usage limitations shall be determined by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" HAP data sheets. IDEM, OAQ, reserves the authority to determine compliance using EPA Method 311 - Analysis of Hazardous Air Pollutant Compounds in Paints and Coatings.
 - ii) PTE after issuance of FESOP
 - Largest single HAP: 9.5 tpy (methanol)
 - Total HAP: 24.42 tpy

- d) *General observations from reclassification*
 - i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings (no-HAP/low HAP), we don't expect emission increases resulting from the reclassification of this source to area source status.

13) Mapes Panels, LLC, Lincoln, NE

- a) *Status prior to 2018 MM2A Memo*
 - i) Facility was classified as a major source of HAP.
 - ii) Subject to 40 CFR 63 subpart MMMM (Surface Coating of Miscellaneous Metal Parts and Products), subpart PPPP (Surface Coating of Plastic Parts and Products), and subpart QQQQ (Wood Building Products Surface Coating)
 - Compliance strategy to meet major source NESHAP requirement was the use of a regenerative thermal oxidizer (RTO).
 - iii) No HAP emission data for facility available in EIS/NEI 2014.
- b) *Status post-2018 MM2A Memo*
 - i) In May 2018, Mapes Panels submitted a minor source construction permit application requesting that the Lincoln-Lancaster County Health Department (LLCHD) withdraw the June 28, 2017, operating permit renewal application concurrent with issuance of a construction permit to establish the facility as an area source of HAP.
 - ii) LLCHD issued a minor NSR permit effective on September 1, 2018. A 30-day period was allowed for public comments.
- c) *2018 Permit to Construct/Reconstruct/Modify An Air Contaminant Source No 199*
 - i) Allows for operation of architectural panel laminating spray line with permanent total enclosure and a thermal oxidizer.
 - ii) Sets emission limits to establish/reclassify facility as an area source of HAP
 - Individual HAP less than 2.5 tpy (any 12 consecutive months)
 - Total combined HAP less than 10.0 tpy (any 12 consecutive months)
 - iii) Operational limits
 - Limit adhesive throughput associated with EU 1-1 (Architectural Panel Laminating – Spray Line) to no more than 64,500 gallons during any consecutive 12-month period.
 - VOC and organic HAP emissions from EU 1-1 (Architectural Panel Laminating – Spray Line) shall be controlled by EU 3-1 (Thermal Oxidizer). EU 3-1 shall be capable of achieving and maintaining, at a minimum, a destruction and removal efficiency (DRE) of 95.0% of emissions of VOCs and organic HAP.
 - (a) Operational parameters for RTO include continuous compliance with temperature requirement.
- d) *General observations from reclassification*
 - i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission

limitations taken by the source to reclassify reflecting the same operational design, control technology and emission destruction efficiency as prior to the reclassification, we don't expect emission increases resulting from the reclassification of this source to area source status.

14) Meridian Manufacturing Group, Storm Lake, IA

- a) *Status prior to 2018 MM2A Memo*
 - i) Source was classified as major for HAP.
 - ii) Subject to 40 CFR 63 subpart M (Miscellaneous Metal parts and Products Surface Coating). Compliance strategy was the use of compliant coatings (no-HAP/low-HAP).
 - iii) 2014 NEI emission data for facility
 - Largest single HAP: 1.23 tpy
 - Total HAP: 1.61 tpy (RTR modeling file: 9.52 tpy)
 - iv) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 3.06 tpy
- b) *Status post-2018 MM2A Memo*
 - i) On May 3, 2018, facility submitted an air construction permit application to IA DNR to establish enforceable limits for VOC and HAP to get out of Title V. IA DNR issue the construction permit on July 19, 2018. Plant Number 11-01-029; Project Number 18-181.
 - ii) This facility is now subject to NESHAP subpart XXXXXX, National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories.
- c) *2018 Air Quality Construction Permit Project Number 18-181*
 - i) All VOC and HAP emissions from this unit are accounted for in the facility's paint booth permits.
 - ii) Limits:
 - Spray booths – limited to 40,000 gallons/yr paint @ 4.52 lb/gal VOC, 0.19 lb/gal SHAP, 0.24 lb/gal THAP. Limited to 700 gal/yr solvent @ 7.5 lb/gal.
 - (a) Maintain the SDS of any paint used at this facility showing the SHAP content.
 - (b) The total HAP (THAP) content of any paint used in this facility shall not exceed 0.24 pounds per gallon. Maintain the SDS of any paint used at this facility showing the THAP content.
 - Welding areas – limited in hours of operation
 - Plasma table – limited in hours of operation
 - iii) This facility is subject to NESHAP subpart XXXXXX, National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Nine Metal Fabrication and Finishing Source Categories.
 - Spray booths – monitoring and work practice requirements
 - Welding areas – monitoring and work practice requirements
 - Plasma table – work practices
 - iv) Potential emissions from engineering analysis:

- Largest single HAP: 4.9 tpy
 - Total HAP: 5.9 tpy
- d) *General observations from reclassification*
- i) Based on IA's engineering analysis for permit, source wants to leave open the option to use paints and metals with the MFHAPs.
 - ii) Previous applicable NESHAP (MMMM)
 - iii) only regulates organic HAP. Source had the flexibility of using paints and metals with MFHAP while a major source. By reclassifying this source is now subject to the metal fabrication and finishing area source NESHAP (40 CFR 63 subpart XXXXXX [6X]), whenever using spray material containing MFHAP as defined in 40 CFR §63.11522. 40 CFR 63 Subpart 6X includes monitoring and work practice requirements for the spray booths, work practice and opacity monitoring requirements for welding areas and work practice requirements for their plasma table. All potential metal HAP emissions are controlled because the equipment standards and management practices requirements of 40 CFR subpart 6X control particulate matter as a surrogate for MFHAP. 40 CFR subpart 6X requires spray booths to be fitted with filter technology demonstrated to achieve at least 98% control efficiency of paint overspray (arrestance). We don't expect emission increases from the reclassification of this source.
 - iv) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings [no-HAP/low HAP] and limits on usage and hours of operation), we don't expect emission increases resulting from the reclassification of this source to area source status.

15) Novel Iron Works Inc., Greenland, NH

- a) *Status prior to 2018 MM2A Memo*
 - i) Novel Iron Works, Inc. (Novel) was issued a Title V Permit (TV-OP-049) on December 10, 2003, for spray painting of structural metal components. Novel was issued another Title V Permit (TV-049) on February 1, 2016.
 - ii) Facility subject to 40 CFR 63 subpart MMMM (Miscellaneous Metal parts and Products Surface Coating). Compliance strategy was the use of compliant coatings (no-HAP/low-HAP).
 - iii) 2014 NEI emission data for facility:
 - Largest single HAP: 0.12 tpy
 - Total HAP: 0.81 tpy
 - iv) Actual uncontrolled emissions for 2017 as reported by facility:
 - Largest single HAP: 0.18 tpy
 - Total HAP: 0.25 tpy.
- b) *Status post-2018 MM2A Memo*

- i) Novel submitted an application on May 25, 2018, requesting enforceable limitations on the potential to emit HAP to below the major source threshold of 10 tpy for any individual HAP and 25 tpy for combined HAP.
- ii) 30-day public comment period 11/20 - 12/21/2018
- iii) Final temporary permit issued 12/31/18.
- c) *Temporary Permit TP-0228*
 - i) Facility removed from Title V requirements by temporary permit.
 - ii) As a compliance strategy, per the temporary permit, the facility must continue to use compliant (low- or no-HAP) coatings in their spray painting process and document via reporting/record-keeping requirements.
 - iii) Per their permit, the facility has the potential to emit HAP above the major source thresholds. PTE limits of HAP to <10/25 tpy added to this permit, establishing the facility as a synthetic area source for HAP.
 - Maintain monthly records of total quantity of coating, thinning and cleaning material containing VOCs, HAPs and/or RTAPs; and SDS or other documentation containing the concentration of total VOCs, each HAP, and each RTAP in each coating, thinning and cleaning material used.
 - Submit an annual emissions report which shall include the following information:
 - a.) Actual calendar year emissions of: 1.) Total VOCs; 2.) Each RTAP and each HAP reported by CAS number;
 - b.) The methods used in calculating such emissions in accordance with Env-A 705.02, *Determination of Actual Emissions for Use in Calculating Emission-Based Fee*;
 - c.) The emission factors and the origin of the emission factors; and
 - d.) total quantity of coating, thinning and cleaning material containing VOCs, HAPs and/or RTAPs compiled on a monthly basis.
 - iv) 40 CFR 63 XXXXXX (Nine metal fabrication and finishing source category for area sources) is applicable to the source. NHDES has not taken delegation of this rule and so no applicable requirements have been placed into the permit.
- d) *General observations from reclassification*
 - i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant no-HAP/low-HAP coatings), we don't expect emission increases resulting from the reclassification of this source to area source status.

16) Shelburne Shipyard Inc, Shelburne, VT

- a) *Status prior to 2018 MM2A Memo*
 - i) Facility was constructed and commenced operations without a Permit to Construct or a Title V Permit to Operate and had uncontrolled HAP PTE above major source thresholds (even though actual emissions were much lower, according to EPA).

- ii) Subject to 40 CFR 63 subpart II (Ship building and ship repair surface coatings). Compliance strategy was the use of compliant coatings.
 - iii) No HAP emission data for facility available in EIS/NEI 2014.
 - iv) In January 2018, facility submitted a Permit to Construct and a Permit to Operate as a Synthetic Minor source that included an allowable emissions limit of less than 10 tons per year of all pollutants combined.
- b) *Status post-2018 MM2A Memo*
- i) On April 26, 2018, VT issued an Air Pollution Control Permit to Construct for the facility with restrictions on PTE below the major source thresholds. The facility will not be subject to Subpart II or Title V.
- c) *2018 Air Pollution Control Permit to Construct- AP-15-025*
- i) HAP PTE Limits – The permit restricts emissions of individual HAP from the facility to less than 8 tpy and emissions of total HAP and VOC combined to less than 8 tpy based upon any rolling 12-month period for combined total emissions of HAP and VOC. Limitation includes all surface coating operations, including coatings and solvents.
 - ii) Compliance strategy – Permit requires the facility to use both compliant materials (low/no HAP coatings) and emission control equipment (filters) as enforceable conditions to achieve compliance.
 - iii) Reporting Requirements
 - At the beginning of each month, the Permittee shall calculate the total quantity of the following emissions from the use of all coatings and solvents combined for the previous month as well as the previous twelve (12) consecutive calendar months, including “low-usage exempt” coatings, expressed in tons of VOC and pounds of HAC and HAP:
 - (a) VOC emissions;
 - (b) Each individual HAC emission; and
 - (c) Each individual HAP emission;
 - (d) The combined VOC and total of HAP emissions. For purposes of this condition, emissions that are considered to be both hazardous air pollutants and volatile organic compounds need not be double counted. (This is for comparison to the VOC, HAP and HAC limits of conditions (10) and (13) of this Permit.)
- d) *General observations from reclassification*
- i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant no-HAP/low-HAP coatings), we don’t expect emission increases resulting from the reclassification of this source to area source status.

17) Talaria Company, LLC, Trenton, ME

- a) *Status prior to 2018 MM2A Memo*

- i) The facility was issued an initial Title V License in 2002.
- ii) Subject to 40 CFR 63 subpart VVVV (boat manufacturing). Compliance strategy was the use of compliant materials.
- iii) Subject to 40 CFR 63 subpart ZZZZ (RICE for area sources).
- iv) Since its initial license, the facility had reduced HAP emissions to below major source thresholds through operational changes.
- v) 2014 NEI emission data for facility
 - Largest single HAP: 4.59 tpy
 - Total HAP: 9.24 tpy
- b) *Status post-2018 MM2A Memo*
 - i) Source submitted a request to license its existing equipment and equipment and processes from another nearby facility being merged with the original facility. They requested HAP PTE limits below major source thresholds and for the agency replace its Title V license with a minor source license.
 - ii) In May 2018, ME DEP issued the Minor Source Air Emission License ([A-798-71-C-R/A](#)).
- c) *Minor Source Air Emission License*
 - i) Establishes HAP PTE limits
 - Largest single HAP: 9.9 tpy
 - Total HAP: 24.9 tpy
 - ii) With the annual VOC and PTE limits associated with the boat building processes (composite fabrication and coating operations) and work practice standards, the facility's emissions are below major thresholds for HAP.
 - Facility processes must adhere to Maine's Best Practical Treatment (BPT), which means the facility uses methods that control or reduce emissions to the lowest possible level considering the existing state of technology, effectiveness of available alternatives, and economic feasibility for the type of establishment involved.
 - Epoxy-based part production and curing processes use low/no HAP materials, and the agency considers this process an insignificant activity.
 - Polyester/vinylester resin operations use higher HAP materials, but the facility uses a closed-molding operation to limit emissions.
 - Work practice standards also include good housekeeping practices such as leak detection and repair, with annual reporting required.
 - The facility shall also continue research and manufacturing test trials of pollution prevention technologies.
 - iii) Compliance demonstration: maintaining records of total HAP and single HAP on a monthly and 12-month rolling total basis using mass-balance calculations.
- d) *General observations from reclassification*
 - i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant no-HAP/low-HAP coatings), the

state's BPT requirements and permit-required work practice standards, we don't expect emission increases resulting from the reclassification of this source to area source status.

18) Tower Industries, Ltd, Massillon, OH

a) *Status prior to 2018 MM2A Memo*

- i) Facility was a major source of HAP beyond its compliance date for the applicable MACT standard, and thus was considered a major source and required to obtain a Title V permit.
 - Draft Title V permit renewal issued 12/22/2017, but no final version was issued prior to reclassification.
- ii) Subject to 40 CFR 63 subpart WWWW (Reinforced Plastic Composites Production). Compliance strategy was the use of compliant materials.
- iii) One emissions unit was subject to the MACT standard, the reinforced plastics composite production unit P002 (solid surface casting line, affected operations are mixing, cleaning of equipment, and HAP containing materials storage).
 - The only HAP is styrene- also a VOC. VOC emissions are equal to HAP/styrene emissions.
 - Best Available Technology, or BAT, standards were required for VOC emissions for this unit. Work practice standards for this unit require no-HAP materials, except in closed systems where HAP were fully controlled. Other work practice standards used included proper storage of HAP-containing materials.
 - Use of only non-VOC clean-up solvent per BAT is more stringent than the limitation in subpart WWWW prohibiting the use of HAP coating solvents.
- iv) No HAP emissions in 2014 NEI or in EIS.

b) *Status post-2018 MM2A Memo*

- i) Prior to final issuance of the Title V permit,
- ii) The facility submitted calculations demonstrating that the facility's current PTE for HAP is less than 10 tpy.

c) *Permit-to-Install P0123990*

- i) PTIO issued May 18, 2018.
 - Permit describes itself as "Renewal PTIO issued to transition this facility from TV major source status to minor source status due to revocation of the US EPA MACT 'once-in-always-in' policy guidance."
- ii) The facility's current potential to emit for VOC is less than 10 tons per year.
- iii) Same BAT and work practice standards limiting HAP emissions outlined in previous draft Title V permit remain in place in PTIO.
 - Operational restriction- The permittee shall use only non-VOC containing clean-up material in this emissions unit
 - Recordkeeping- The permittee shall collect and record the following information on a daily basis for this emissions unit:
 - a. the name and identification number of the resin employed;
 - b. the tons of resin used per day;

- c. the starting monomer (styrene) VOC content of the resin (as employed) in pounds styrene/pound resin;
- d. the number of hours per day the emissions unit was in operation; and
- e. the name, identification number and VOC content of the cleanup/solvent material used.

d) *General observations from reclassification*

- Use of only non-VOC clean-up solvent per BAT is more stringent than the limitation in subpart WWWW.
- Based on the review of the compliance strategy for major source NESHAP and the legally and practicably enforceable emission limitations taken by the source to reclassify, which reflect the same compliance strategy as prior to the reclassification (the use of no-HAP compliant coatings and work practice standards), we don't expect emission increases resulting from the reclassification of this source to area source status.

19) TruStile Doors of Iowa, Northwood, IA

a) *Status prior to 2018 MM2A Memo*

- i) Major source for VOC and HAP.
- ii) Subject to 40 CFR 63 subpart QQQQ (Surface Coating of Wood Building Products). Compliance strategy was the use of compliant coatings (no-HAP/low-HAP).
- iii) 2014 NEI emission data for facility:
 - Largest single HAP: 0.40 tpy
 - Total HAP 0.72 tpy
- iv) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 1.1 tpy

b) *Status post-2018 MM2A Memo*

- i) IA DNR issued the Air Quality Construction Permit in May 2018, updating VOC and HAP limits and NESHAP applicability.

c) *2018 Air Quality Construction Permit*

- i) Establishes emission limits for spray booths, adhesive and putty application
 - The owner or operator shall not emit more than 9.0 tons of single HAP from all noncombustion sources at this facility per rolling 12-month period. The owner or operator shall not emit more than 24.0 tons of total HAP from all noncombustion sources at this facility per rolling 12-month period. These limits were established to limit HAP emissions below the area source HAP limits.
- ii) Establishes operating limits for spray booths
 - Shall not use more than 16,000 gallons of any surface coating materials per rolling 12-month period.
- iii) Compliance demonstration and recordkeeping
 - The facility is required to track actual SHAP and THAP emissions from all noncombustion sources on a rolling 12-month basis. The facility is also required to track VOC material usage from the spray booths and putty application and actual VOC emissions from the adhesive application.

- If the rolling 12-month total amount of single HAP emissions from all noncombustion sources, including the spray booths, adhesive application, and putty application, exceeds 7.2 tons, the owner or operator shall track single HAP emissions on a daily basis. On a daily basis, the owner or operator shall calculate the 365-day total amount of single HAP emissions from these emission units. This calculation must be done each day until the 365-day total amount of single HAP emissions from these emission units are less than 7.2 tons. Calculations may then be performed on a monthly basis as long as the total amount of single HAP emissions is below 7.2 tons.
 - If the rolling 12-month total amount of total HAP emissions from all noncombustion sources, including the spray booths, adhesive application, and putty application, exceeds 19.2 tons, the owner or operator shall track total HAP emissions on a daily basis. On a daily basis, the owner or operator shall calculate the 365-day total amount of total HAP emissions from these emission units. This calculation must be done each day until the 365-day total amount of total HAP emissions from these emission units are less than 19.2 tons. Calculations may then be performed on a monthly basis as long as the total amount of total HAP emissions is below 19.2 tons.
- d) *General observations from reclassification*
- i) IA's engineering evaluation shows that, the actual HAP (and VOC) emissions over the past 15 years have not been close to the major source thresholds.
 - ii) In EPA's 2018 Risk and Technology review rulemaking for this category, EPA stated that EPA's review of the developments in technology for the Surface Coating of Wood Building Products source category did not reveal any changes in practices, processes, and controls. In the original NESHAP, we noted that the most prevalent form of emission control for surface coating of wood building products is the use of low-volatile organic compounds and low-HAP coatings, such as waterborne or ultraviolet (UV)-cured coatings. That continues to be the prevalent compliance approach.
 - iii) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same compliance strategy as prior to the reclassification (the use of compliant coatings (no-HAP/low HAP), and limits on operation, we don't expect emission increases resulting from the reclassification of this source to area source status.

20) Vacuum Orna-Metal, Romulus, MI

- a) *Status prior to 2018 MM2A Memo*
 - i) On November 6, 2017, the issuance data of ROP No. MI-ROP-B4550-2017, Vacuum Orna-Metal (VOM) was required to obtain and operate in compliance with an ROP because the facility's PTE HAP classified VOM as a major source.

- ii) VOM was subject to 40 CFR 63 subpart P (Surface Coating of Plastic Parts and Products). Compliance strategy was the use of compliant coatings (no-HAP/low-HAP).
- iii) Latest emission data reported to EIS Gateway, for 2015:
 - Total HAP: 0.98 tpy
- b) *Status post-2018 MM2A Memo*
 - i) On March 23, 2018, VOM obtained Permit to Install (PTI) No. 145-16A and began operating under legally enforceable permit conditions limiting the PTE to below the major source thresholds.
 - ii) On September 14, 2018, VOM requested reclassification under the MM2A memo as an area source.
 - iii) On November 14, 2018, the state sent a letter agreeing to the reclassification and voided ROP No. MI-ROP-B4550-2017, meaning the source is no longer subject to Title V requirements.
- c) *PTI No. 145-16A*
 - i) Emission limits: less than 8.9 tpy of individual HAP and less than 22.4 tpy of combined HAP, VOC less than 89.9 tpy based on a 12-month rolling period as determined at the end of each calendar month.
 - ii) Material limits: VOC content of coatings as applied (7.5lb/gal minus water), coatings-24,200 gallons/yr based on a 12-month rolling period as determined at the end of each calendar month.
 - iii) Compliance strategy involves using compliant materials (no-HAP/low-HAP coatings).
 - iv) The permittee shall determine the HAP content of any material as applied and as received, using manufacturer's formulation data. Upon request of the AQD District Supervisor, the permittee shall verify the manufacturer's HAP formulation data using EPA Test Method 311.
 - v) The permittee shall keep the following information on a monthly basis for FGFACILITY:
 - a) Gallons or pounds of each HAP containing material used.
 - b) Where applicable, gallons or pounds of each HAP containing material reclaimed.
 - c) HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
 - d) Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
 - e) Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records using mass balance, or an alternative format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.
- d) *General observations from reclassification*

- i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source prior to reclassification (the use of compliant no-HAP/low HAP coatings), we don't expect emission increases resulting from the reclassification of this source.

21) Vanguard National Trailer Corporation, Monon, IN

a) *Status prior to 2018 MM2A Memo*

- i) Stationary truck trailer manufacturing
- ii) Subject to 40 CFR part 63, subpart MMMM (Miscellaneous Metal Parts and Products) for paint booths. Compliance strategy was the use of compliant coatings (no-HAP/low-HAP).
- iii) Subject to 40 CFR part 63, subpart ZZZZ, for the standby spark ignition emergency generator (area sources)
- iv) Subject to 40 CFR part 63, subpart CCCCCC (Gasoline Dispensing Facilities for area sources), for the fueling operations
- v) Source removed emission units: primer booth, finish paint booth, dutch oven boiler.
- vi) 2014 NEI emission data for facility:
 - Largest single HAP: 0.30 tpy
 - Total HAP: 0.32 tpy; RTR modeling file 1.49 tpy
- vii) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 0.32 tpy
- viii) Unrestricted potential emissions for HAP
 - Largest single HAP- 2.95 tpy (manganese, from welding)
 - Total HAP- 3.55 tpy

b) *Status post-2018 MM2A Memo*

- i) As a result of the MM2A memo, IDEM, OAQ reviewed the applicability of the major source NESHAP standards and determined that because this facility is an area source the paint booths will no longer be subject to subpart MMMM.

c) *2018 Title V Operating Permit Renewal No 181-38409-00043*

- i) On April 18, 2018 IDEM issued the renewed Title V permit (the source continues to be a major source for non-HAP).
 - Removed applicability/requirements to subpart MMMM.
 - As area source, the source continues to be subject to subpart ZZZZ and subpart CCCCCC.

d) *General observations from reclassification*

- i) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the classification of the source as a true area with an unrestricted PTE of 3.55 tpy total HAP, we don't expect emission increases resulting from the reclassification of this source to area source status.

22) Andeavor Field Services, LLC Ponderosa Compressor Station, Uintah and Ouray Indian Reservation, UT

- a) *Status prior to 2018 MM2A Memo*
 - i) Title V operating permit required compliance with 40 CFR 63 subpart HH (Oil and Natural Gas Production facilities).
 - Facility runs a NG compressor station that includes a triethylene glycol (TEG) dehydration system using open flame flare for VOC, and releases HAP from two condensate tanks and one water storage tank using an enclosed vapor combustion device.
 - ii) In 2016, facility requested legally and practically enforceable emissions and operational limitations that recognize emissions control equipment installed and operating on existing emissions units.
 - iii) EPA issued a tribal synthetic minor new source review (Tribal MNSR) permit in April 2017 that includes enforceable controls of VOC and HAP that result in emissions below the HAP major source thresholds.
 - iv) 2014 NEI emission data for facility:
 - Largest single HAP: 9.50 tpy
 - Total HAP: 14.16 tpy;
 - v) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 11.19 tpy
- b) *Status post-2018 MM2A Memo*
 - i) On April 9, 2018, facility requested EPA Region 8 to rescind their Title V permit application under MM2A guidance.
 - ii) In a letter dated May 18, 2018, EPA Region 8 agreed to rescind the Title V application.
 - Per Region 8 letter, Andeavor no longer must meet requirements of Title V operating permit but must adhere to the current enforceable limits and controls in the MNSR permit in order to remain an area source of HAP and exempt from the Title V program.
- c) *MNSR permit SMNSR-UO-002178- 2017.003*
 - i) TEG units
 - Permit includes operational limits, emission limits and control and operational limits requiring all emissions from the TEG dehydration system still vent through a close-vent system to an open flame vapor combustion device (flare) designed, operated and monitored as specified in permit.
 - ii) Natural Gas Condensate and Produced Water Storage Tanks
 - Permit includes operational limits, emission limits and control and operational limits requiring all emissions from the natural gas condensated and produced water storage tanks through a closed-vent system to an enclosed combustion device, both designed, operated, tested and monitored as specified in permit.
 - (a) Aggregate emissions from the two 400 bbl natural gas condensate storage tanks and one produced water tank shall not exceed 0.02 tons total HAP in any consecutive 12-month period.
 - iii) Flare and enclosed combustion device

- Permit requires the flare and enclosed combustion device to continuously operate so that uncontrolled VOC emissions and total HAP emissions are reduced by at least 95.0% by weight.
- Flare shall be designed and operated in accordance with the requirements of 40 CFR 63.11(b).

d) *General observations from reclassification*

- i) Based on the review of the permit, the legally and practicably enforceable emission limitations (operational limits, emission limits and control and operational limits) the source had prior to the reclassification we don't expect emission increases resulting from the reclassification of this source.

23) Catamount Energy Partners, LLC- Ignacio Treating Plant in La Plata County, Colorado Southern Ute Indian Reservation

a) *Status prior to 2018 MM2A Memo*

- ii) In 2017, facility obtained a synthetic minor NSR (SMNSR) permit with PTE limitations for two triethylene glycol (TEG) dehydration units as a result of a 2016 settlement agreement.
- iii) Facility has been an area source for purposes of 40 CFR 63 subpart HH (Oil and Natural Gas Production facilities).
- iv) Facility is under a 2012 Consent Decree (CD) requiring the source to be classified as major for 40 CFR 63 subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines) and to obtain a Title V permit. Per CD, facility replaced uncontrolled engines with new engines designed with oxidation catalysts to reduce formaldehyde by 90% and meet RICE requirements for new major sources.
- v) 2014 NEI emission data for facility
 - Largest single HAP: 1.52 tpy
 - Total HAP: 2.76 tpy
- ii) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 2.99 tpy

b) *Status post-2018 MM2A Memo*

- i) On February 8, 2018, the facility submitted a SMNSR application requesting a permit with legally and practicably enforceable limitations to be used when determining the applicability of NESHAP as well as other CAA requirements such as Title V once the CD is terminated.
- ii) EPA proposed a permit to replace the 2017 SMNSR permit in November 2018. After a 60- day public comment period (during which no comments regarding reclassification were received), on March 3, 2019, the EPA issued a final permit. Final permit took effect on April 3, 2019 (2019 SMNSR permit).

c) *2019 SMNSR permit SMNSR-SU-000052-2018.002*

- i) Established legally and practicably enforceable limitations for two TEG units and eight existing compressor engines. Emissions limits, control efficiency, and operational requirements will result in facilitywide allowable emissions of 15.84 tpy for total HAP and 7.43 tpy for formaldehyde.

- ii) Two TEG units will continue to be subject to operational limitations and benzene PTE limitations (facilitywide benzene limit of 1.65 tpy) and subject to 40 CFR 63 subpart HH for area sources (Oil and Natural Gas Production facilities).
- iii) Eight engines will be subject to PTE limitations for carbon monoxide (CO), nitrogen oxide (NO_x), volatile organic compound (VOC) and formaldehyde emissions. These engine requirements become effective when the CD is terminated.
 - For this analysis, these engines are considered to be MM2A-affected units.
- iv) Engines are subject to design and operational limitations unaffected by reclassification:
 - Engines catalytic oxidizer design and engine operation remains the same as prior reclassification (catalytic oxidizer designed to reduce carbon monoxide [CO] by 93%, volatile organic compounds (VOC) by 60% and formaldehyde by 90%.)
 - Engines are limited to a maximum horsepower/nameplate rating.
 - Engines are limited to burn natural gas.
 - Engines are subject to routine inspection and maintenance to ensure optimum performance of each engine and respective catalytic control system to ensure compliance with the required emission limits and control efficiencies.
 - Engines are subject to an initial performance test and semiannual performance test requirements to demonstrate compliance.
- v) Engines are subject to emission limitations for formaldehyde.
 - As major sources, the engines are subject to reduce CO emissions by 93% or more **or** limit the concentration of formaldehyde in the engine exhaust to 14 ppmvd or less at 15% O₂ (major source requirements 40 CFR 63 Subpart ZZZZ).
 - As area sources, the engines will be subject to legally and practicably enforceable PTE limits: not to exceed limits for CO and formaldehyde (in lb/hr and tpy). These limits reflect a reduction of CO by at least 93% by weight and formaldehyde by at least 90% by weight. Emissions from formaldehyde for all engines are limited to 7.43 tpy. Engines will also be subject to area source requirements 40 CFR 63 Subpart ZZZZ.
- d) General observations from reclassification
 - i) Based on the review of the permit, the review of the compliance strategy for major source NESHAP, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same operational design, control technology, and emission destruction efficiency as prior to the reclassification, we don't expect emission increases resulting from the reclassification of this source to area source status.

24) Crescent Point Energy Corp, Duchesne County, Ute Indian Tribe, UT

- a) *Status prior to 2018 MM2A Memo*
 - i) Facility is a natural gas compressor station with a triethylene glycol (TEG) dehydrator located on tribal lands in a NAAQS nonattainment area for ozone.
 - ii) Subject to 40 CFR 63 subpart HH (Oil and Natural Gas Production facilities) for area sources.

- iii) In October 2017, facility applied for tribal MNSR permit to construct to
 - Requested acknowledge control equipment that was already voluntarily installed (enclosed combustion unit) and continuously operating as enforceable requirements to control emissions from a TEG dehydrator still vent.
- b) *Status post-2018 MM2A Memo*
 - i) EPA proposed a MNSR permit in July 2018.
- c) *Proposed MNSR permit*
 - i) Establishes legally and practically enforceable emission restrictions for the control of VOC and HAP from the TEG dehydrator
 - Proposed permit includes operational limits, emission limits and control and operational limits.
 - Requires all produced natural gas emissions from the TEG dehydrator to vent through a closed-vent system to an enclosed combustor designed and continuously operated to meet the manufacturer guaranteed 95% VOC and HAP destruction efficiency.
- d) *General observations from reclassification*
 - i) Based on the review of the compliance strategy prior to the reclassification and the proposed legally and practicably enforceable emission limitations, we don't expect emission increases resulting from the reclassification of this source.

25) Denbury Onshore LLC, Little Creek OER Facility, Ruth, MS

- a) *Status prior to 2018 MM2A Memo*
 - i) Denbury Onshore LLC (Denbury) operates an enhanced oil recovery (EOR) operation in Ruth, Mississippi referred to as the Little Creek EOR Facility. Denbury uses a tertiary recovery process known as enhanced oil recovery to extract additional oil from depleted fields.
 - ii) Most of the pollutants emitted by the facility are volatile organic compounds (VOC), with the majority coming from the tanks and low pressure (LP) vent stream. A flare was installed to control emissions of VOC from many of the tanks, and a vapor recovery unit (VRU) was installed to recover VOCs from the LP vent stream.
 - iii) Facility subject to 40 CFR 63 subpart HH – the NESHAP for Oil and Natural Gas Production Facilities.
 - iv) Title V Operating Permit reissued December 8, 2017
 - ii) 2014 NEI emission data for facility
 - Largest single HAP: 2.39 tpy
 - Total HAP: 7.02 tpy
 - iii) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 7.02 tpy
- b) *Status post-2018 MM2A Memo*
 - i) Proposed modification to shut down the low-pressure. As a result, the low-pressure gas will be vented directly to the atmosphere instead of being recovered, and the Vapor Recovery Unit (VRU) will no longer be used. At a maximum estimated low-pressure gas flow rate of 420 Mscf per day, emissions of VOC will increase by

- approximately 140.35 tons per year (tpy) and emissions of total hazardous air pollutants (HAP) will increase by 17.99 tpy.
- ii) This change is considered a significant modification for the Title V Operating Permit.
 - iii) Source requested also to remove the applicability of 40 CFR 63 subpart HH.
 - For the evaluation for major source applicability for subpart HH, oil and gas production wells and associated equipment and emissions from any pipeline compressor or pump station shall not be aggregated, even if in a contiguous area and under common control. Therefore, the HAP emissions from the oil recovery are evaluated separately for HAP emissions associated with the gas compressors
 - iv) Denbury proposed enforceable restrictions on the amount of low pressure relief gas vented to atmosphere to ensure emissions of the individual HAP 2,2,4-trimethylpentane (largest individual HAP for the gas compression/venting operation) are below 10 tpy and, thereby, become an area source of HAP no longer subject to MACT Subpart HH. This federally enforceable restriction on gas flow and removal of the MACT Subpart HH requirements also requires a significant modification to the Title V Operating Permit.
- c) *Title V Modification*
- i) MS Environmental Quality Permit Board issued Title V permit modification in August 2018.
 - Enforceable restrictions for emission points AA-006 (5,000-barrel vertical, fixed roof wet oil tank) and AA-007 (5,000-barrel vertical, fixed roof dry oil tank)
 - (a) storage vessels must be covered and routed through a closed vent system to a flare (emission point- 020)
 - (b) Flare shall be operated with a flame present at all times and with no visible emissions, except for a period of 5 minutes during any 2 consecutive hours.
 - (c) flare shall be designed and operated in accordance with 40 CFR 63.11(b).
 - Enforceable restriction for low pressure (LP) relief gas vented to the atmosphere (emission point AA-01)
 - (a) the permittee shall not vent more than 147,825 Mscf/yr of low pressure relief gas to the atmosphere, as determined for each consecutive 12-month rolling period.
 - Monitoring and recordkeeping requirements
 - (a) For Emission Point AA-020, the permittee shall record the following:
 - (i) (a) Flare design (i.e., steam-assisted, air-assisted, or non-assisted); and
 - (ii) (b) All visible emission readings, heat content determinations, flowrate measurements, and exit velocity determinations made during the initial compliance demonstration.
 - (b) For Emission Point AA-001, the permittee shall record the amount of any off-gases vented to the atmosphere from the LP relief system.
 - ii) Although the requirements of 40 CFR 63, Subpart HH were removed, the permit still contains some monitoring, recordkeeping, and reporting related to control of the tank emissions and operation of the flare to ensure proper operation needed to achieve the control efficiency indicated in the permit application.

- For the facility, the permittee must keep a record of the applicability determination related to 40 CFR Part 63, Subpart HH readily available for review by MSDEQ for a period of 5 years after the determination, or until the facility changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the permittee believes the source is unaffected (e.g., because the source is an area source).
- d) *General observations from reclassification*
 - i) Without the enforceable limitations in the amount of low-pressure relief gas vented to the atmosphere, emissions from the gas compression/venting would have increased (uncontrolled PTE) to 10.3 tpy for largest individual HAP. The PTE limitations ensure emissions of the individual HAP 2,2,4-trimethylpentane are below 10 tpy and, thereby, become an area source of HAP no longer subject to MACT Subpart HH.

26) WGR Operating, LP's Granger Gas Plant, Granger, WY

- a) *Status prior to 2018 MM2A Memo*
 - i) Facility is a sweet gas processing plant operating 10 engines with oxidation catalysts or NSCR controls, glycol dehydrators, condensers, refrigerants, and a plant flare. Formaldehyde is the only significant HAP emitted by engines.
 - ii) Facility took limits in 2007 due to the installation of engine oxidation catalysts.
 - Formaldehyde limits were issued in a 2007 NSR permit for the following engines: White Superior 8GTLB 0.51 tpy and White Superior 16GTB 1.28 tpy.
 - iii) Subject to 40 CFR 63 subpart HH (Oil and Natural Gas Production facilities)
 - DHY 001 (TEG Dehy) subject to major source requirements) – controlled by plant flare.
 - DHY 003 (V-130 WilRan) subject to area source requirements) – controlled by condenser and plant flare.
 - iv) Subject to 40 CFR 63 subpart ZZZZ (Stationary Reciprocating Internal Combustion Engines)- area sources
 - v) Subject to several NSPS
 - vi) 2014 NEI emission data for facility:
 - Largest single HAP: 6.02 tpy
 - Total HAP: 20.76 tpy
 - vii) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 9.51 tpy
 - viii) January 18, 2018, WGR states in their Title V permit renewal comments to WY that the facility continues to operate as an area source of HAP and is requesting a revision to the 40 CFR 63 subpart HH requirement.
- b) *Status post-2018 MM2A Memo*
 - i) WY issued Title V Permit renewal on April 18, 2018
 - Statement of Basis indicate the removal of the major source requirements from the Title V Operating Permit for DHY001 emission unit

- c) *Title V Operating Permit Renewal Permit No P0020683*
- i) Total facility estimated HAP emission = 9.5 tpy
 - ii) Subject to 40 CFR 63 subpart HH for Oil and Natural Gas Production Facilities- Area source- affected sources include DHY001 and DHY003
 - iii) Subject to 40 CFR 63 subpart ZZZZ (RICE) – area source- Affected sources at this facility include ENG001-ENG010 (K-300, K-301, K-350, K- 351, K-352, K-353, C-101, C-102, A-101 and D-1).
 - iv) Subject to 40 CFR 60 Subpart KKK for Flare
 - v) Requirements
 - Engine configuration requirements
 - (a) Two White Superior 8GTLB engines, ENG001 and ENG002 (K-300 and K-301), each equipped with an oxidation catalyst.
 - (b) (ii) Three White Superior 16SGTLB engines, ENG003, ENG004 and ENG005 (K-350, K-351 and K-352), each equipped with an oxidation catalyst.
 - (c) (iii) One Waukesha 7042GSI engine, ENG006 (K-353), equipped with a NSCR catalyst.
 - (d) (iv) Two Ajax DPC-600 engines, ENG007 and ENG008 (C-101 and C-102).
 - (e) (v) One Ford LSG-875i-6006ER engine, ENG009 (A-101), equipped with a NSCR catalyst.
 - (f) (vi) One Allis Chalmers diesel fired emergency generator, ENG010 (D-1).
 - Engine emission limitations- formaldehyde
 - (a) K-300 and K-301 – 0.12 lb/hr; 0.51 tpy
 - (b) K-350, K-351 and K3-52- 0.29 lb/hr; 1.28 tpy
 - Engine and catalyst monitoring
 - (a) The permittee shall follow the monitoring and maintenance requirements as follows for the White Superior engines, ENG001-ENG005 (K-300, K-301, K-350, K351 and K-352), equipped with an oxidation catalyst:
 - (b) (i) Operate and maintain a thermocouple to measure the temperature at the inlet of the catalyst. The inlet temperature shall be monitored and recorded at least monthly. If the temperature is outside the range of 450°F to 1350°F corrective action shall be taken.
 - (c) (ii) Operate and maintain a device to measure the pressure drop across the catalyst. The pressure drop across the catalyst shall be monitored and recorded at least monthly. If the pressure changes by more than two inches of water from the reference pressure drop, corrective action shall be taken.
 - (d) (A) The reference pressure drop for each engine shall be established during the initial performance test.
 - (e) (B) When a catalyst is replaced, the reference pressure drop shall be re-established for that catalyst during the first engine testing which occurs after the catalyst replacement.

- (f) (C) A valid reference pressure drop shall be established only during testing conducted in accordance with condition F9 of this permit and demonstrating compliance with condition F3.
 - (g) (b) The permittee shall monitor the operating hours of the Allis Chalmers diesel fired emergency generator, ENG010 (D-1), by utilizing the hour meter required by condition F3(c).
- vi) Ethylene glycol dehydrator system
- (a) VOC and HAP emissions associated with the 300 MMSCFD ethylene glycol dehydration system still vent, DHY002 (EG3), shall be controlled with a condenser with the non-condensables routed to the plant flare, FLR001/FLA002.
 - (b) (b) VOC and HAP emissions associated with the 15 MMSCFD triethylene glycol dehydration system still vent, DHY001 (TEG Dehy), shall be controlled with the plant flare, FLR001/FLA002.
 - (c) (c) VOC and HAP emissions associated with the 12 MMSCFD triethylene glycol dehydration system still vent, DHY003 (V-130 WilRan), shall be controlled with a condenser with the non-condensables routed to the plant flare, FLR001/FLA002. Condensed still vent liquids shall be collected and routed to the gasoline system, with produced water being routed to an evaporation pond. Flash tank vapors shall be routed to the plant flare, FLR001/FLA002.
 - (d) (d) The permittee shall maintain and operate the plant flare, FLR001/FLA002, during all periods of active operation of the dehydration units such that it remains effective as a viable emissions control device.
 - (e) (e) VOC and HAP emissions associated with the amine unit flash tank, AMN002 (AFT), shall be routed to the fuel gas system.
- Flare Monitoring
- (a) The presence of the pilot flame for the plant flare, FLR001, shall be monitored using a thermocouple, continuous recording device, or any other equivalent device approved by the Division to detect and record the presence of the flame.
 - (b) (b) The permittee shall monitor for the dates and duration of time when the 15 MMSCFD triethylene glycol dehydration system still vent, DHY0001 (TEG Dehy); the 300 MMSCFD ethylene glycol dehydration system still vent, DHY002 (EG3); or the 12 MMSCFD triethylene glycol dehydration system still vent, DHY003 (V-130 WilRan), are in active operation and the pilot flame is not present.
- d) *General observations from reclassification*
- i) Based on the permit review, the facility continues to be subject to the same emission and operational limitations for the engines and TEG units as prior to the reclassification, we don't expect emission increases resulting from the reclassification of this source.

27) Columbia Municipal Power Plant, Columbia, MO

- a) *Status prior to 2018 MM2A Memo*
 - i) Columbia Municipal Power Plant operates a biomass and natural gas-fired power plant and several emergency backup diesel generators.
 - ii) Construction Permit 122015-003A, issued June 22, 2017, implemented a modification to cease combustion of coal in Boiler Units #6 and #7 (EP0 1 & EP02) and to convert to 100% woody biomass combustion.
 - iii) Subject to 40 CFR subpart DDDDD (Boilers), YYYY (Turbines), and ZZZZ (RICE)
 - iv) 2014 NEI emissions:
 - 17.06 tpy single HAP
 - 20.53 tpy total HAP
- b) *Status post-2018 MM2A Memo*
 - i) MO DNR issued a Title V operating permit in December 2018. Permit removes applicability to 40 CFR subpart DDDDD (Boilers), YYYY (Turbines).
 - ii) Source continues to be subject to requirements under 40 CFR Part 63, Subparts ZZZZ(RICE) and is now subject to 40 CFR 63 subpart JJJJJ (Boilers).
- c) *Title V, Part 70 Permit (12/10/18)*
 - i) Reflects the modification of boilers #6 and #7 and operational limitations of Construction Permit 122015-003 and 122015-003A.
 - *Construction Permit 122015-003, Issued December 8, 2015*
 - *Construction Permit 122015-003A, Issued June 22, 2017*
 - *Application of authority to cease combusting coal in Boiler Units #6 and #7 (EP01 & EP02) and to convert to 100% woody biomass combustion. After the conversion, the installation became a HAP area source, and the boilers became subject to 40 CFR Part 63, Subpart JJJJJ.*
 - *The original construction permit was amended to allow the installation of a supplemental 40 MMBtu.hr natural gas burner on Boiler Unit #7 (EP02) to trim carbon monoxide emissions. The natural gas burner does not increase the boiler's MHDR and results in a lower emission rate than biomass for all criteria pollutants.*
 - ii) PTE HAP 12.31 tpy total; benzene 3 tpy
 - iii) Reported facilitywide HAP emissions in permit statement of basis (tons):
 - 2013: 21.81
 - 2014: 19.15
 - 2015: 10.39
 - 2016 and 2017: 0.00 (after the coal combustion ceased)
- d) *General observations from reclassification*
 - i) The facility became a true area source for HAP after conversion from coal to woody biomass in its boilers, we don't expect emission increases resulting from the reclassification of this source.

28) Holland Board of Public Works- James DeYoung Generating Station and Wastewater Treatment Plant, Holland, MI

- a) *Status prior to 2018 MM2A Memo*
 - i) Facility is a decommissioned municipal power plant with ongoing wastewater treatment activities.
 - ii) Facility was subject to 40 CFR 63 subpart ZZZZ (RICE) as a former coal-burning power plant. Source ceased operations in 2016, and per media reports, the site is expected to be completely repurposed (possibly as a real estate development).
 - iii) 2014 NEI emission data for facility:
 - Largest single HAP: 16.61 tpy
 - Total HAP: 20.69 tpy
 - iv) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 2.51 tpy
- b) *Status post-2018 MM2A Memo*
 - i) In 2018, source requested to void their renewable operating permit (ROP) No. MI-ROP-B2357-2014a and their permit to install (PTI) No. MI-PTI-B2357-2014a in response to MM2A memo. Per agency letter of acceptance of withdrawal (10/24/18), all permitted equipment on site had been decommissioned except for the equipment at the wastewater treatment plant, which is a true area source and exempt from NSR permitting. Michigan AQD reviewed the request and agreed to void the two permits based on the MM2A memo.
- c) *PTE Limitations*
 - i) As noted above, the operating permits have been voided, so there are no PTE limits. However, because the site equipment has been decommissioned, there are no emissions from the former generating station; the wastewater treatment facility is a true area source, with no changes to its operation.
- d) *General observations from reclassification*
 - i) Based on the review of the permit, the source was no longer in existence and the site is to be repurposed. No emissions increases are possible. Source made the request to void the ROP.

29) MidAmerican Energy Company-Riverside Generating Station, Bettendorf, IA

- a) *Status prior to 2018 MM2A Memo*
 - i) Facility was classified as a major source with regard to the Title V Operating Permit program and major stationary source for PSD purposes (PTE for several criteria pollutants are greater than 100 tpy).
 - ii) Subject to 40 CFR 63 subpart DDDDD (boilers).
 - iii) Vaporizers and auxiliary boilers are subject to NSPS subparts A and Dc.
 - iv) Boiler burns natural gas and is not an affected source of 40 CFR 63 subpart UUUUU.
 - v) 2014 NEI emission data for facility
 - Largest single HAP: 23.47 tpy (hexane)
 - Total HAP: 38.36 tpy
 - vi) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 0.28 tpy
- b) *Status post-2018 MM2A Memo*

- i) In May and June 2018, source submitted an air construction permit application to IA DNR for the purpose of restricting HAP emissions below NESHAP major source thresholds and address PM for NAAQS issues. The permit was issued in July 2018.
- c) *2018 Air Construction Permit Project Number 18-194-07/03/18*
 - i) Restricts usage of natural gas for Boiler # 9 so that the facility can be classified as an area source for NESHAP purposes.
 - Operator is required to keep track of the amount of natural gas burned on a monthly basis and on a 12-month rolling basis.
 - Annual Potential Emissions
 - (a) Hexane = 9.33 tpy
 - (b) Total HAP = 9.75 tpy
 - ii) Removes reference to 40 CFR 63 subpart DDDDD for the permits issued to the vaporizers and auxiliary boilers.
- d) *General observations from reclassification*
 - i) This reclassification restricts the usage of natural gas. Based on 2014 NEI data and data from permit on annual potential emissions, emissions dropped 14.14 tpy hexane and 28.61 tpy total HAP. We don't expect emission increases resulting from the reclassification of this source.

30) UniFirst Corporation, Pontiac, MI

- a) *Status prior to 2018 MM2A Memo*
 - i) UniFirst is a leading supplier of uniforms, workwear and related products to businesses. At the Pontiac plant, UniFirst uses conventional water-based industrial laundry equipment and methods, e.g., washing machines and natural gas fired dryers, to launder various apparel, mats, mops, and shop towels that it rents to customers. The plant's activities are covered under SIC 7218 - Industrial Launderers.
 - ii) Facility sent a letter to the EPA in July 2017, requesting non-applicability determination for 40 CFR 63 subpart DDDDD (Industrial, Commercial, and Institutional Boilers and Process Heaters).
 - Affected unit: A natural gas-fired boiler with a maximum heat input of 10.5 MMBtu/hr
 - iii) 2014 NEI emission data for facility
 - Largest single HAP: 0.20 tpy
 - Total HAP: 0.38 tpy
 - iv) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 0.38 tpy
- b) *Status post-2018 MM2A Memo*
 - i) Permit to Install 166-16B issued April 19, 2018. The state voided their ROP on 3/5/2018.
- c) *PTI 166-16B limits*
 - i) Facilitywide HAP limits:
 - Emission limits: emission limits

- (a) individual HAP 8.9 tpy based on 12-month rolling period as determined at the end of each calendar month.
- (b) aggregate HAP 22.4 tpy based on 12-month rolling period as determined at the end of each calendar month.
- Material limits
 - (a) The permittee shall process no more than 2,300,000 pounds of soiled shop towels in FGLAUNDRY per year, based on a 12-month rolling time period as determined at the end of each calendar month.
- i) EUBOILER 01 limitations
 - The permittee shall burn only sweet natural gas in EUBOILER01.
 - The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc for Small Industrial-Commercial-Institutional Steam Generating Units as they apply to EUBOILER01. (40 CFR Part 60 Subparts A & Dc)
 - The permittee shall record the following for each calendar month:
 - a. The amount of natural gas delivered to the facility during the month
 - b. Based on the ratio of the heat input rating of EUBOILER01 to the heat input rating of all natural gas-burning equipment at the facility, the amount of natural gas combusted attributable to EUBOILER01.
- i) The permittee shall record the amount of soiled shop towels processed through FGFACILITY in pounds per calendar month and in pounds per 12-month rolling time period as determined at the end of each calendar month.
- ii) The permittee shall keep monthly records for FGFACILITY of individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month and in tons per 12-month rolling time period as determined at the end of each calendar month. For shop towel laundering, HAP emission factors in Appendix A may be used, or an alternate emission factor approved by the AQD District Supervisor.
- d) *General observations from reclassification*
 - i) Based on the review of the permit, the material limits and the operational restrictions on the boiler we don't expect emission increases resulting from the reclassification of this source.

31) Citgo Petroleum Corporation, Hillsborough, FL

- a) *Status prior to 2018 MM2A Memo*
 - i) Major source for VOC
 - ii) Subject to 40 CFR 63 Subpart R (major source NESHAP for gasoline distribution facilities).
 - Standards for
 - (a) loading cargo tanks: loading rack emissions at both new and existing facilities to be collected and processed to limit emissions to no more than 10 milligrams total organic compound per liter (mg TOC/liter) of gasoline loaded

- (b) gasoline storage tanks: new and existing facilities requires floating-roof gasoline storage tanks to be equipped with specified types of primary and secondary rim seals. In addition, fixed-roof storage tanks must be equipped with internal floating roofs with specified types of primary seals. Installation of gaskets on floating roof fittings are required on all new tanks and when installing the specified rim seals on existing internal floating roof tanks.
- (c) leaks from equipment as pumps, valves, and connectors: must be controlled by adopting a monthly visual equipment leak detection and repair program.
- iii) Subject to 40 CFR 63 Subpart ZZZZ.
 - Standards for diesel fuel-fired emergency engine.
- iv) Subject to 40 CFR 60 Subparts Kb and XX.
- v) 2014 NEI emission data for facility
 - Largest single HAP: 0.38 tpy
 - Total HAP: 1.50 tpy
- vi) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 1.47 tpy
- b) *Status post-2018 MM2A Memo*
 - i) In July 2018, facility submitted application for a minor source air pollution Federally Enforceable State Operating Permit (FESOP). Permit application requested limits on the facility throughput and corresponding VOC emissions and to classify the source as an area source under CAA section 112.
 - ii) The Environmental Protection Commission of Hillsborough County distributed a second draft of the minor FESOP package in October 2018, and the applicant published a public notice. No comments on the Second Revised Draft Permit were received from the public or the applicant.
 - iii) Final FESOP was issued in November 2018.
- c) *2018 FESOP Air Permit No. 0570016-019-AF -11/13/18*
 - i) Establishes throughput limitations and facilitywide VOC PTE limit of 96.1 tpy.
 - Loading racks
 - (a) Throughput limitations in gallons and max vapor pressure of liquid for gasoline, denatured ethanol and diesel.
 - (b) Testing requirements and operational requirements for vapor collection system (vapor combustion unit-VCU)
 - (c) Emission standards: Emissions to the atmosphere from the vapor collection system due to the loading of liquid product into gasoline cargo tanks shall not exceed 10 milligrams of total organic compounds per liter of gasoline loaded. The maximum combined potential VOC emissions from the two loading racks shall not exceed 47.1 tons for any consecutive 12-month period, which includes fugitive emissions from equipment leaks.
 - Tanks
 - (a) Throughput limitations in gallons and max vapor pressure
 - (b) Tanks design requirements: roof type, seals, controls
 - (c) Tanks inspection requirements

- ii) Establishes facilitywide HAP PTE limits and reclassifies source as an area source of air pollutants.
 - The facilitywide HAP emissions, as defined in Rule 62-210.200, F.A.C., shall be less than 4.4 tons in any consecutive 12-month period for any combination of HAP.
 - Because the facility no longer has the potential to emit more than 10 tons per year of hazardous air pollutants (HAP) or 25 tons per year of any combination of HAP, this permit reclassifies the facility as an area source of HAP as requested by the permittee.
- i) Facility continues to be subject to 40 CFR 63 Subpart ZZZZ (diesel fuel-fired emergency engine) and to 40 CFR 60 Subparts Kb and XX.
- iii) Facility is now subject to 40 CFR 63 Subpart BBBB (area source NESHAP: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities)
- iv) Since the facility is no longer subject to 40 CFR 63 Subpart R, the VCU is no longer subject to the continuous monitoring requirements specified under 40 CFR 63.425 and 40 CFR 63.427. Therefore, this permit removes the requirement to obtain approval prior to changing the minimum operating temperature of the VCU. The specific conditions of the permit require the facility to maintain a device to monitor the presence of the VCU pilot flame and to automatically prevent truck loading operations at any time that the pilot flame is absent. Specific permit requirements include:
 - The presence of the thermal oxidation system (VCU) pilot flame shall be monitored using a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, installed in proximity of the pilot light to indicate the presence of a flame. The heat-sensing device shall send a positive parameter value to indicate that the pilot flame is on or a negative parameter value to indicate that the pilot flame is off.
 - The VCU shall be equipped to automatically prevent gasoline loading operations from beginning at any time that the pilot flame is absent.
 - The permittee shall verify, during each day of operation of the loading rack, the proper operation of the assist-air blower and the vapor line valve. Verification shall be through visual observation, or through an automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start and end of a shutdown event may be used. The VCU shall be operated at all times when emissions are vented to it.
 - Permit include a requirement for annual periodic testing in addition to the monitoring of the presence of the pilot flame to ensure that the enclosed combustor is operational when loading operations occur.

d) General observations from reclassification

- i) The permit includes requirement for annual periodic testing in addition to the monitoring of the presence of the pilot flame to ensure that the enclosed combustor is operational when loading operations occur. The annual performance test in conjunction with the monitoring of the presence of the flame act together to ensure operation and

performance.

- ii) Based on the review of the compliance strategy for major source NESHAP, emissions prior to reclassification, and the legally and practicably enforceable emission limitations taken by the source to reclassify reflecting the same operational design, control technology and practices to reduce emissions as prior to the reclassification, we don't expect emission increases resulting from the reclassification of this source to area source status.

32) **Ross Incineration Services, Grafton, OH**

a) *Status prior to 2018 MM2A Memo*

- i) Facility operates a commercial hazardous waste incinerator.
- ii) Facility was (and remains) subject to Title V permit P0108010 as of 11/16/2018.
- iii) Subject to NESHAP 40 CFR 63 subpart EEE (Hazardous Waste Combustor) and 40 CFR 63 subpart DD (Off-Site Waste Recovery Operations)
- iv) Subject to Resource Conservation and Recovery Act (RCRA) regulations and permit requirements.
- v) 2014 NEI emission data for facility
 - Largest single HAP: 0.40 tpy
 - Total HAP: 1.33 tpy
- vi) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 1.07 tpy

b) *Status post-2018 MM2A Memo*

- i) Administrative permit modification to decrease allowable HCl emissions below the major source threshold of 10 tons per year because the facility is not major for HAPs
 - Permit to Install No. P0124980 1/3/2019.
 - Their potential to emit was already less than the 10/25 tons per year thresholds but the facility voluntarily took PTE limits below 10/25 for HCl to ensure that they stay below the 10 tons per year threshold.
 - (a) Source would no longer be subject to 40 CFR 63, subpart DD applicable requirements for tanks.
- c) Facility was issued a Title V renewal to permit P0108010, effective 2/26/2019, which includes the HAP PTE limits (these limits were not explicitly listed in their previous Title V permit renewal issued in 2017).
 - i) Per Title V permit renewal tanks are insignificant emission units. Title V renewal removed requirements previously applicable to the tanks and including subpart DD.
- d) Tanks and equipment leaks continue to be subject to RCRA requirements as specified in RCRA permit (OHD 048 415 665, April 2014).
 - i) Source must fully comply with all applicable Clean Air Act (CAA) and RCRA permit limits. Where two or more operating limitations apply, the most stringent operating limitations take precedence.
 - ii) You shall control the air emissions from each of the tanks in Tank Farms 1, II, III, and Process Dock in accordance with Tank Level2 control requirements at 40 C.F.R. § 264.1 084(d), by venting the tanks through closed vent systems to carbon

adsorption units designed and operated to recover the organic vapors vented to them with an efficiency of 95% or greater by weight. The tanks shall be covered by a fixed roof and vented directly through the closed vent system to a control device in accordance with the following requirements specified in 40 C.F.R. §§ 264.1084(g), G), (k), and (1).

e) *Permit-to-Install P0124980*

- i) Emission Unit- rotary kiln for hazardous waste incinerator (N001) subject to subpart EEE is controlled by a thermal oxidizer. Subpart E emission requirements nor operation of the control technology is not affected by the reclassification of this source.
- ii) Potential HCl emissions are related to the total chlorine and chloride feed rate to the incinerator. The permittee has opted to limit incineration of wastes containing chlorine and chloride and use the voluntary restriction under OAC rule 3745-31-05(F) to ensure HCl emissions do not exceed 10 tons per year.
- iii) Emission limitation: Hydrochloric acid and chlorine gas emissions, expressed as hydrochloric acid equivalents, shall not exceed 10 tons per year.
 - Compliance shall be demonstrated using the following equation and summing the monthly hydrochloric acid equivalents on an annual basis:
 - (a) Tons HCl equivalents per month = tons chlorine/chloride fed per month x CPT emission factor
 - (b) Where: Tons chlorine/chloride fed per month = monthly total chlorine/chloride feed rate in d)(24); and CPT emission factor = emission factor established during the last Comprehensive Performance Test (CPT) that demonstrated compliance in units of mass HCl equivalents per mass chlorine/chloride feed.
- iv) The permittee's potential to emit (PTE) HAPs is less than 10/25 as stated in the permittee's Notification of Compliance required pursuant to 40 CFR 63, subpart EEE.

f) *General observations from reclassification*

- i) Source continues to be subject to NESHAP subpart EEE (requirements are the same for both major and area sources). Source continues to be subject to RCRA regulation/permit requirements, including requirements for tanks and equipment leaks. Therefore, we don't expect emissions increases due to reclassification of this source.

33) Transmontaigne Evansville Terminal, Evansville, IN

a) *Status prior to 2018 MM2A Memo*

- i) The Permittee owns and operates a stationary bulk petroleum storage and transfer terminal.
- ii) 2014 NEI emission data for facility
 - Not available. Facility is operating but not reporting.
- iii) Subject to 40 CFR 63 Subpart R (major source NESHAP for gasoline distribution facilities).
 - Standards for

- (a) loading cargo tanks: loading rack emissions at both new and existing facilities to be collected and processed to limit emissions to no more than 10 milligrams total organic compound per liter (mg TOC/liter) of gasoline loaded
 - (b) gasoline storage tanks: new and existing facilities requires floating-roof gasoline storage tanks to be equipped with specified types of primary and secondary rim seals. In addition, fixed-roof storage tanks must be equipped with internal floating roofs with specified types of primary seals. Installation of gaskets on floating roof fittings are required on all new tanks and when installing the specified rim seals on existing internal floating roof tanks.
 - (c) leaks from equipment as pumps, valves, and connectors: must be controlled by adopting a monthly visual equipment leak detection and repair program.
- iv) Subject to 40 CFR 60 subpart Kb (tanks), and subpart XX (loading racks vapor flare and vapor combustor).
- b) *Status post-2018 MM2A Memo*
- i) On March 2017 source submitted application to IDEM to renew its operating permit.
 - ii) Final Federally Enforceable State Operating Permit (FESOP) permit was issued on April 6, 2018
 - Compliance with these limits, combined with the potential to emit VOC and HAPs from all other emissions units at the source, shall limit the sourcewide total potential to emit VOC to less than 100 tons per twelve (12) consecutive month period, the sourcewide total potential to emit each single HAP and total HAP emissions to less than 10 and 25 tons per twelve (12) consecutive month period, respectively, and render the requirements of 326 IAC 2-7 (Part 70 Operating Permit) not applicable, and this source is an area source of HAP emissions under Section 112 of the Clean Air Act (CAA).
- c) *FESOP Renewal No 163-38296-00063 -04/16/18*
- i) FESOP renewal includes limits to make the source an area source of HAP.
 - The requirements of the requirements of the National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), 40 CFR 63, Subpart R, which is incorporated by reference as 326 IAC 20-10, are not included in the permit for the north tank truck loading rack (L-25) and south tank truck loading rack (L-26) because the source is not a major source of HAP emissions.
 - This source is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities, 40 CFR 63, Subpart BBBB. The source is an area source gasoline distribution terminal that is not subject to the control requirements of 40 CFR part 63, subpart R. The emission sources to which this subpart applies are gasoline storage tanks, gasoline loading racks, vapor collection-equipped gasoline cargo tanks, and equipment components in vapor or liquid gasoline service that meet the criteria specified in Tables 1 through 3 to this subpart.
 - Permit emission analysis:

- (a) Unrestricted worst case PTE total HAP 86.76 tpy and n-hexane 27.06.
 - (i) Main emission point is truck loading racks (L-25 and L-26)- 84.77 tpy total HAP (26.08 tpy n-hexane)
- (b) After issuance of FESOP renewal total PTE of entire source 24 tpy total HAP and 9.5 for largest single HAP (n-Hexane).
 - (i) truck loading racks emissions after limits in permit 22.01 tpy total HAP
- ii) Overall Source HAP Limits
 - The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period;
 - The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
 - To render the source an area source for HAPs, the Permittee shall comply with the following:
 - (a) The total benzene emissions from the vapor combustion systems C-1 and C-2 shall not exceed 9.27 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (b) The total n-hexane emissions from the vapor combustion systems C-1 and C-2 shall not exceed 8.52 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (c) The total toluene emissions from the vapor combustion systems C-1 and C-2 shall not exceed 9.15 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (d) The total 2,2,4-trimethylpentane (iso-octane) emissions from the vapor combustion systems C-1 and C-2 shall not exceed 9.29 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
 - (e) The total combined HAP emissions from loading racks L-25 and L-26 shall not exceed 22.01 tons per twelve (12) consecutive month period, with compliance determined at the end of each month,
- iii) Permittee shall comply with the following
 - The vapor flare (C-1) controlling VOC emissions from the north tank truck loading rack, identified as L-25, shall be in operation at all times when loading rack L-25 is loading gasoline into transports.
 - (b) The vapor combustor (C-2) controlling VOC emissions from the south tank truck loading rack, identified as L-26, shall be in operation at all times when loading rack L-26 is loading gasoline into transports.
- iv) Compliance formula (calculation) provided in permit - based on monthly gasoline throughput and HAP emission factors in permit or values determined in the latest compliant stack text.
 - Permit requires testing for specific HAPs associated with the vapor combustor.

- v) Monitoring for vapor flare system and vapor combustor, include monitoring of pilot flame using a thermocouple or equivalent device when loading rack is in operation.
- vi) Subject to 40 CFR 63 subpart BBBBBB – Area Source Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline facilities. Applicable when tanks store gasoline and for fugitive emissions from roof landings and maintenance.
- d) *General observations from reclassification*
 - i) Tanks and transfer racks are now subject to subpart BBBBBB (regulates emissions from tanks, transfer racks, roof landings and maintenance). Main HAP emission points (transfer racks) continue to be controlled (transfer racks L-25 by a vapor flare and L-26 by a vapor combustor). Source continues to be subject to 40 CFR 60 subparts Kb and XX. The flare operating, and monitoring requirements required by 40 CFR 60 subpart XX are identical to those from subpart R. Therefore, we don't expect emissions increases due to reclassification of this source.

34) Mississippi Lime Company, Verona, KY

- a) *Status prior to 2018 MM2A Memo*
 - i) Mississippi Lime Company (MS Lime) was initially authorized to construct two kilns. Potential emissions of hydrochloric acid (HCl) were calculated to exceed 10 tpy, making the facility a major source of HAPs.
 - ii) Subject to 40 CFR 63 subpart AAAAA (Lime Manufacturing Plants).
 - Regulates PM as a surrogate for non-volatile and semi volatile metal HAP.
 - Compliance strategy use of a baghouse, opacity and use of COMs
 - iii) Subject to area source Subpart ZZZZ (RICE) for diesel fired emergency generator
 - iv) 2014 NEI emission data for facility:
 - Largest single HAP: 6.19 tpy
 - Total HAP 6.20 tpy
 - v) Latest emission data reported to EIS Gateway, for 2016:
 - Total HAP: 6.20 tpy
- b) *Status post-2018 MM2A Memo*
 - i) On February 23, 2018, MS Lime submitted an application to revise their current Title V operating permit. MS Lime now only has one kiln and does not have the authority to construct another kiln in the permit. Stack test for HCl submitted established the potential emissions are below 10 tpy. Therefore, the Kentucky Division of Air Quality concluded that the facility should be designated an area source of HAPs and 40 CFR 63, Subpart AAAAA should be removed from the permit.
- c) *Air Quality Permit V-15-027 R1*
 - i) Draft revision dated 4/11/2018; Final permit issued on 12/27/2018.
 - ii) To preclude applicability requirements of 40 CFR 63, Subpart AAAAA, MS Lime took PTE limits not to exceed the following for any consecutive 12-month period:
 - Any single HAP emissions shall not exceed 9 tpy;
 - Combined HAP emissions shall not exceed 22.5 tpy.

- Compliance shall be determined by calculating and recording monthly emission rates and rolling 12-month total emissions of each individual HAP and total HAPs.
 - Actual emission rate for HCl is calculated using the following equation:
 - Monthly Emission Rate = [Monthly Processing Rate x HCl Emission Factor]
 - A report of the consecutive 12-month totals of HAP emissions for each HAP and combined HAPs from all emission points in Section B and C of the permit shall be maintained onsite.
- iii) Source still subject to other regulatory requirements including PM emission limitations, use of baghouse, monitor opacity as an operating limit with operation of continuous opacity monitoring system (COMS).
- iv) Source is also subject to 401 KAR 63:020, Potentially hazardous matter or toxic substances
- This regulation is applicable to each affected facility which emits or may emit potentially hazardous matter or toxic substances, provided such emissions are not elsewhere subject to provisions of an administrative regulation of the Division for Air Quality. [State-Origin Requirement] Emission units subject to this regulation shall not emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.
 - This regulation applies to Process 06 – Lime Kiln
- b) *General observations from reclassification*
- i) Facility was already only operating one kiln without operating limits and cannot operate a second kiln without re-permitting and without exceeding their new PTE limits. Source still subject to other regulatory requirements including PM emission limitations, use of baghouse, monitor opacity as an operating limit with operation of continuous opacity monitoring system (COMS). We don't expect emission increases resulting from the reclassification of this facility.

Appendix B: Illustrative Analysis: Permit Review

1. Miscellaneous Metal Parts and Products (subpart M MMMM)

- Assumed no emissions increases because the technology basis of the standard is low-HAP coatings for all subcategories (except magnet wire, for which the standard is based on the use of a catalytic oxidizer that is part of the curing oven integral to the process).
- The EPA estimates that 371 facilities are subject to subpart M MMMM and 285 could potentially obtain area source status at the 75% threshold.
- The EPA has collected and reviewed permits from 107 major source facilities.
 - Based on permit reviews, about 30% of facilities have add-on controls. Facilities subject to the general use emission limit are less likely to have add-on controls than those subject to the other subcategory emission limits.
- Miscellaneous metal parts surface coating facilities are not subject to an NSPS, but they are subject to state rules based on 1978 and 2008 CTGs.

Example facility: Industrial Container Services, Gahanna, Franklin County, OH, which reconditions large (e.g., 55-gallon) drums.

- Subject to the general use coating subcategory limit in subpart M MMMM.
- Total HAP from NEI = 2.97 tpy.
- Uses an RTO to comply with subpart M MMMM.
- Subject to VOC limits in the permit determined to be BAT; these limits include a requirement to use a permanent total enclosure (PTE) and RTO (98%) and meet VOC content limits equal to those in the 2008 CTG for interior and exterior drum coatings.
- Even if the facility was no longer subject to subpart M MMMM, it would still be subject to the permit requirements based on BAT to use the RTO and meet the VOC coating limits.

2. Wood Furniture Manufacturing (40 CFR part 63, subpart JJ)

- Based on emissions data, 333 facilities are subject to subpart JJ, and 250 facilities could potentially obtain area source status at the 75% threshold.
 - If these facilities were to reclassify, we expect they would continue the use of no-HAP/low-HAP coatings and high-efficiency application methods because they have already re-engineered their processes and need to continue using these measures to maintain area source status.
 - We project no potential emissions increases from these sources due to reclassification.
- We estimate an additional 26 facilities have emissions at the 125% cutoff (above 7.5 but below 12.5 tpy for one HAP, and above 18.75 but below 31.25 tpy for combined HAP) and could potentially reclassify.
 - Some of these facilities may already be using low-HAP coatings but have high production volumes. Others might rely on formulations that contain a higher percentage of HAP due to product specifications.
 - If these facilities were able to reclassify, emissions could potentially decrease by 125 tpy for combined HAP.

Example facility: Woodcrest Manufacturing, Peru, Miami County, IN, which builds and coats wood furniture using dip coating, flow coating, and spray coating.

- Subject to subpart JJ as an existing source.
- Total HAP from NEI = 10.1 tpy (we do not have an estimate for largest individual HAP).
- Uses low-HAP materials and high-efficiency application methods to comply with subpart JJ.
- Subject to a PSD minor VOC limit of no more than 249 tons VOC per rolling 12-month period.
- Subject to Indiana state rule 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating) that requires the use of high-efficiency coating application methods. The state rule and permit do not include any limits on the VOC content of wood furniture coatings.
- Not subject to any Indiana state rules limiting VOC or HAP content of wood furniture manufacturing coatings. [Indiana state rule 326 IAC 8-11 (Wood Furniture Coatings) applies to facilities located in Lake, Porter, Clark, or Floyd County, but no Indiana wood furniture facilities in the RTR modeling file were in these counties. Rule 326 IAC 8-11 has VOC content limits based on the 1996 CTG.]

3. Metal Can Manufacturing (subpart KKKK)

- The EPA has identified five facilities subject to subpart KKKK and projects that one could potentially obtain area source status at the 75% threshold.

Facility: Ball Metal Food Container Corporation (now operating as Maple Manufacturing), Weirton, WV/ FRSID 110000344663

- Total HAP from NEI = 7.70 tpy; single HAP = 1.97 tpy; can meet the 75% threshold.
- Uses five thermal oxidizers to comply with subpart KKKK.
- No state VOC rule is referenced in permit, but WV CSR 45-21-11 regulates can coating with limits equal to the CTG (see p. 30 of 278 in WV CSR 45-21-11).
- Permit requires capture and control of VOC separate from subpart KKKK requirements. Assumed this requirement as backstop and updated analysis to reflect no emissions increases.

4. Wet-Formed Fiberglass Mat (subpart HHHH)

- The technology basis for the rule is a thermal oxidizer, and all sources use some form of oxidizer.
- The EPA has identified seven facilities subject to subpart HHHH and projects that five could potentially obtain area source status at the 75% threshold.
- There are no individual state rules/NSPS/CTG that would otherwise limit HAP from these sources, though some may be subject to state VOC limits.

Johns Manville, Plant #01 Waterville, OH/ FRSID 110000383870,

- Facility which produces both glass fibers and wet formed fiberglass mat.
- Subject to NESHAP subparts HHHH and DDDDD (ICI Boilers).
- Total HAP from NEI = 2.48 tpy; single HAP = 1.29 tpy.

- Subject to NSPS subpart CC for glass manufacturing plants.
- Wet process fiberglass mat line controlled by a regenerative thermal oxidizer
- Mat machine oven with catalytic incinerator
- Subject to PTI of 3.3 lb of formaldehyde per hour/14.5 tons of formaldehyde per year
- Subject to a state rule requirement requiring organic carbon destruction efficiency of the RTO such that 90% or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide. [OAC 3745-21-07(M)(2)] Assumed this requirement as backstop and updated illustrative analysis to reflect no potential for emissions increases.

Building Materials Manufacturing Corp, Chester, SC/ FRSID 110002233164

- Subject to NESHAP subpart HHHH.
- Total HAP from NEI = 5.21 tpy; single HAP = 4.92 tpy.
- Subject to NSPS subpart CC for glass manufacturing plants.
- Not subject to any state rules limiting VOC or HAP emissions from WFFM manufacturing or otherwise requiring the operation and maintenance of the emission capture and control system.

CertainTeed, North Charleston, SC/ FRSID 110017203523

- Subject to NESHAP subpart HHHH.
- Total HAP from NEI = 11.15 tpy; single HAP = 6.14 tpy.
- Not subject to any state rules limiting VOC or HAP emissions from WFFM manufacturing or otherwise requiring the operation and maintenance of the emission capture and control system.

Johns-Manville Inc.-Waterville 07 Waterville OH/ FRSID 110009650911

- Subject to NESHAP subpart HHHH.
- Total HAP from NEI = 2.48 tpy; single HAP = 0.82 tpy.
- Mat machine oven with catalytic incinerator
- Subject to separate permit requirements to limit VOC emissions (5.3 pounds of VOC per hour and 90% destruction efficiency of VOC emissions by catalytic incineration, or maximum uncontrolled VOC emissions of 3 pounds per hour and 15 pounds per day; 23 tons of VOC emissions per year). Assumed this requirement as backstop and updated illustrative analysis to reflect no potential for emissions increases.
- Subject to separate permit requirements to limit formaldehyde emissions (3.3 pounds of formaldehyde per hour and 14.5 tons of formaldehyde per year).

Owens Corning Non-Woven Technology LLC, Aiken, SC/ FRSID 110022334375

- Subject to NESHAP subparts HHHH and JJJJ.
- Total HAP from NEI = 7.37 tpy; single HAP = 3.93 tpy.

- Not subject to any state rules limiting VOC or HAP emissions from WFFM manufacturing or otherwise requiring the operation and maintenance of the emission capture and control system.

5. Hydrochloric Acid (HCl) Production (subpart NNNNN)

- The technology basis of the standard is the use of scrubbers on process vents, storage tanks, and transfer operations, plus the use of an LDAR program.
- The EPA estimates that 19 facilities are subject to subpart NNNNN and projects that three could obtain area source status at the 75% threshold.
- Hydrochloric acid production facilities are subject to only subpart NNNNN for emissions of HCl and chlorine (Cl₂) and are not subject to any NSPS.

The Dow Chemical Company, Pittsburg, CA/ FRSID 110000602544

- Total HAP from NEI = 6.41 tpy; single HAP = 2.19 tpy
- Not subject to any BAAQMD rules specific to emissions of HCl or Cl₂; subject to BAAQMD rules for visible emissions (VE) and PM, organic compounds, and odorous substances.

E. I. DuPont de Nemours & Co., Inc., Louisville, KY/ HCl RTR modeling file ID 110040920242/ FRSID 110000378494

- Total HAP from NEI = 4.44 tpy; single HAP = 2.07 tpy
- Toxic air contaminants (TAC), including HCl and Cl₂, are regulated for the Louisville Metro APCD under the Strategic Toxic Air Reduction (STAR) Program, which requires companies that emit the largest amounts of chemicals to determine through modeling whether they are exceeding the health risk goal for each of the targeted chemicals. It requires companies that exceed the goal to present a plan to reduce emissions and reach the goal over the next six years.

BASF Kankakee, Kankakee, IL/ FRSID 110043972207

- Total HAP from NEI = 6.18 tpy; single HAP = 3.82 tpy
- Area 90 – CSA Process - High molecular weight compounds result in negligible volatile organic matter (VOM) emissions, but hydrochloric acid is a co-product of the process resulting in HCl emissions, which are subject to subpart NNNNN and controlled by a scrubber.
- For subpart NNNN the facility complies with the outlet concentration limit of 20 ppm. Subpart NNNN outlet concentration limit for HCl tanks and transfer operations is less stringent (120 ppm) but since the units are vented to process vent with the more stringent standard of 20 ppm must be met.
- The permit also limits total HCl emissions to 0.29 tpy, which is described as more stringent than the NESHAP.
- Vents from any process vessel, HCl storage tanks, or HCl transfer operation vent to either two absorbers then to control device (scrubber/mist eliminator).

- Assumed these permit requirements as backstop and updated illustrative analysis to reflect no potential for emissions increases.

6. Organic Liquids Distribution (OLD) (subpart EEEEE)

- **ONE** of the 15 facilities does not have an air permit publicly available online. We only have a technical review document for *Montgomery Chem Ltd (Conshohocken, PA)*, but it does not contain enough information to conduct this analysis.
- **SIX** of the 15 facilities are not subject to the control requirements of the OLD NESHAP.
 - *Marathon Petroleum - Neal Propane Cavern (Kenova, WV)* is a propane storage cavern that is not subject to any NESHAP.
 - *Kinder Morgan Liquid Terminals LP (Argo, IL)* is not subject to the OLD NESHAP because the facility has a synthetic minor limit for HAP emissions in their permit explicitly excluding it from the NESHAP. Section 3.7.a.i.A of the permit limits the facility to less than 8 tpy of individual HAP and 20 tpy of combined HAP.
 - *Wolf Lake Terminals, Inc. (Hammond, IN) and Crane Composites, Inc. (Channahon, IL)* are subject to the OLD NESHAP but no control is required because the vapor pressure of the liquids used at these facilities are below the OLD NESHAP thresholds requiring control.
 - *Proctor & Gamble (Sacramento, CA) and Allnex USA, Inc. (Wallingford, CT)* are not subject to the OLD NESHAP, but rather the MON NESHAP. Both facilities do have state rules that regulate tanks and loading operations.
 - Applicable CA rules do *not* appear to be as stringent as the level required in the MON NESHAP:
 - **CA rule SMAQMD Rule 447** limits emissions from the loading of organic liquids.
 - **CA rule SMAQMD Rule 464, Sections 306 & 307** require liquid transfers utilizing vapor balance, VOC capture and control, or internal floating roof.
 - Applicable CT rule may be as stringent as the level required in the MON NESHAP:
 - **CT rule RCSA §22a-174-20(a)** requires a floating roof or a vapor recovery and control system with 95% control efficiency.
- **EIGHT** of the 15 facilities are subject to the control requirements of the OLD NESHAP.
 - *Kinder Morgan Liquids Terminals, LLC* has applicable state rules that regulate transfer, tank, and other related operations and these rules may be as stringent as the level required in the OLD NESHAP:
 - **CA rule SCAQMD Rule 462** requires this facility to reduce VOC emissions from transfer operations to 0.08 pound or less per thousand gallons of organic liquid transferred (a production-based standard) or comply with a performance-based standard (recover at least 90% of the displaced vapors which is NOT as stringent as the OLD NESHAP 98% control requirement).

- **CA rule SCAQMD Rule 463** requires all openings and fittings of certain IFR at this facility to be fully gasketed or controlled in a manner specified by the Executive Officer (generally speaking, both this rule and the OLD NESHAP require at least IFR with proper seals).
 - **CA rule SCAQMD Rule 1149** regulates emissions from certain tank related activities at this facility, including roof landings, cleaning, maintenance, testing, repair and removal of storage tanks and pipelines (these requirements are more stringent than the OLD NESHAP requires).
 - **CA rule SCAQMD Rule 1178** includes additional requirements for IFR, EFR, DEFR, and fixed roofs at this facility.
- *Cargill, Inc (Hammond, IN)* does *not* have any applicable state rules that regulate affected sources of the OLD NESHAP. However, the facility is subject to a Consent Decree that may be as stringent as the level required in the OLD NESHAP:
 - The propylene oxide tanks (subject to the OLD NESHAP) at this facility are required to be controlled by a thermal oxidizer or with a 98% efficient condenser, and all transfers from these tanks are required to be controlled.
- *AMES Advanced Materials Corp (South Plainfield, NJ)* does not have any applicable state rules that regulate affected sources of the OLD NESHAP. However, the facility is subject to an operating permit condition under **NJ rule N.J.A.C. 7:27-22.16(a)** limiting HAP emissions from formaldehyde storage to less than 0.6 tpy requiring use of a scrubber, and also limits methanol emissions from methanol storage to less than 1.5 tpy requiring use of a conservation vent. The required scrubber control efficiency is not specified, but allowable HAP emissions are less than 5% of potential HAP emissions; therefore, the permit requirements exceed the OLD NESHAP requirement of 95% control.
- *Air Products Baytown Plant (Houston, TX)* has an applicable state rule that regulates affected loading and unloading operations, but the rule does *not* appear to be as stringent as the level required in the OLD NESHAP:
 - **TX rule 30 TAC Chapter 115.212(a)(2) and (3)** require this facility to keep transport vessels vapor-tight, and all liquid and vapor lines of the land-based VOC transfer leak-free.
- *Morgans Point Complex (La Porte TX)* has applicable state rules that regulate affected loading and unloading operations and tanks, but the rules do *not* appear to be as stringent as the level required in the OLD NESHAP:
 - **TX rule 30 TAC Chapter 115.212(a)(2) and (3)** require this facility to keep transport vessels vapor-tight, and all liquid and vapor lines of the land-based VOC transfer leak-free.
 - **TX rule 30 TAC Chapter 115.212(a)(6)** limits this facility to 0.09lb VOC emissions per 1,000 gal loaded from the loading and unloading operations; or the facility must use a vapor control system that achieves a minimum control efficiency of 90%, a vapor balance system, or pressurized loading.
 - **TX rule 30 TAC Chapter 115.112(e)** requires certain storage tanks containing VOC at this facility to maintain working pressure sufficient at all

times to prevent any vapor or gas loss to the atmosphere or use a submerged fill pipe, IFR, EFR, or vapor control system.

- *Beaumont Terminal (Beaumont, TX), East Houston Tank Farm (Houston, TX), and Nederland Marine Terminal (Nederland, TX)* have an applicable state rule that regulates tanks, but these rules do not appear to be as stringent as the level required in the OLD NESHAP:
 - **TX rule 30 TAC Chapter 115.112(e)** requires certain storage tanks containing VOC at these facilities to maintain working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or use a submerged fill pipe, IFR, EFR, or vapor control system.