



**SOCMA Comments on
Chemical Manufacturing Area Sources NPRM**

I. Introduction

The Synthetic Organic Chemical Manufacturers Association (SOCMA) is pleased to offer the following comments concerning the proposed NESHAPS for chemical manufacturing area sources.¹

SOCMA is the leading trade association representing the batch and custom chemical manufacturing industry. SOCMA's nearly 300 member companies make the products and refine the raw materials that make our standard of living possible. From pharmaceuticals to cosmetics, soaps to plastics and all manner of industrial and construction products, SOCMA members make materials that save lives, make our food supply safe and abundant, and enable the manufacture of literally thousands of other products. Over 70% of SOCMA's active members are small businesses.

ChemStewards[®] is SOCMA's flagship environmental, health, safety and security (EHS&S) continuous performance improvement program. It was created to meet the unique needs of the batch, custom, and specialty chemical industry, and reflects the industry's commitment to reducing the environmental footprint left by members' facilities. As a mandatory requirement for SOCMA members engaged in the manufacturing or handling of synthetic organic chemicals, ChemStewards is helping participants reach for superior EHS&S performance.

As noted above, many of SOCMA's members are small businesses, and many of these emit, use, or produce at least one of the targeted 15 urban hazardous air pollutants (HAPs), and thus would be drawn into the proposed rule. As explained at length in the following comments, the proposed rule's costs would be substantial – far more so than EPA estimates – and are particularly worrisome to SOCMA. SOCMA thus has a vital stake in this rulemaking.

Finally, SOCMA appreciates EPA's consideration in granting a 45-day extension of the original comment period. This extension has been indispensable in enabling SOCMA to adequately understand the impacts of the proposed rule.

¹ 72 Fed. Reg. 58352 (October 6, 2008).

II. Executive Summary

SOCMA believes that the proposed rule's costs would be substantial – far more so than EPA estimates – and would have serious adverse economic effects on SOCMA members. The single most beneficial step EPA can take would be to establish a de minimis threshold for applicability of the rule. EPA should also tailor the requirements of the rule in a range of ways that recognize the nature of the batch chemical industry; most significantly, applying the rule only to chemical manufacturing process units that emit urban air toxics. With SOCMA's proposed changes, the rule would still control emissions of significant quantities of urban air toxics and other hazardous air pollutants from chemical manufacturing area sources, but it would do so at reasonable cost.

Underestimated Impacts

Based on an attached report by Dixon Environmental, SOCMA believes that EPA dramatically understates the impact of the proposed rule for several reasons:

- EPA's cost analysis omitted many facilities subject to the proposed rule.
- EPA underestimates uncontrolled emissions from chemical manufacturing area sources.
- The impacts of the proposed requirements will be much greater than EPA estimates. EPA cannot rely on data from continuous processes to estimate costs for batch facilities. Batch plants generally will not be able to use condensers, but will have to use thermal oxidizers with halogen control. SOCMA also documents significant impacts for wastewater systems, management practices, and monitoring and recordkeeping, as well as for facilities that are not regulated.

A De Minimis Threshold and Other Proposed Changes

Given these substantial impacts, SOCMA believes that EPA should establish a two-part de minimis threshold for rule applicability, consisting of (i) 2,000 lbs/year actual (controlled) total UAT emissions facility-wide or (ii) 25,000 lbs/year facility-wide manufacture or process of total UATs. A facility falling below either threshold would be exempt. EPA has the legal authority to establish such a threshold. Because of the variability of their activities, batch facilities need a one-year "look back" period to assess applicability.

In addition to establishing a de minimis threshold, SOCMA believes that EPA could make several other changes to the rule that would both faithfully reflect GACT and significantly reduce the rule's burdens:

- EPA should maintain its decisions to impose GACT (and not MACT) controls, and to not require controls for smaller vents, tanks, and cooling towers;

- EPA should apply the rule's requirements on a chemical manufacturing process unit basis. Only CMPUs that emit urban HAPs should be subject to the rule; requirements would apply to all HAPs of the same type as the UAT(s) emitted by the unit (i.e., organic, metal, or both);
- EPA should set a minimum quantity for "contains organic HAPs;"
- EPA should reexamine its approach to process vent issues, including limiting control requirements for the vents to achieve GACT;
- EPA should also redetermine GACT for wastewater systems because of the unrecognized costs of making wastewater determinations;
- EPA should conform the definition of "storage tank" to the discussion in the preamble and address other compliance options;
- EPA should modify the definition of transfer operations, and clarify loading activities;
- EPA should modify its approach to management practices and monitoring requirements;
- EPA should ensure that facilities only subject to management practices should not have to comply with the SSM requirements; and
- EPA should allow facilities to get credit for prior efforts, and should allow sources to opt into the more restrictive area source rule if more than one applies.

Support for Other Provisions and Proposed Modifications

Finally, SOCMA supports many other aspects of the proposed rule, and offers a few additional modifications. For example, SOCMA supports the provision of reasonable compliance time for existing sources, but believes that adequate compliance time should also be allowed for new affected sources, existing sources which become subject to the rule in the future, and sources just starting construction, as well as for equipment that becomes subject to the rule in the future.

EPA should clarify text language and eliminate all cross-references in the rule. The agency should also clarify the averaging periods for determining compliance with process vent requirements.

SOCMA supports EPA's proposal not to require Title V permits for regulated sources and the proposed R&D exemption (with two modifications). Lastly, SOCMA believes that EPA should formally confirm that its "once in, always in" policy does not apply to this rule.

III. EPA Dramatically Understates the Impacts of the Proposed Rule

SOCMA believes the proposed rule would have a much greater impact than EPA estimates, particularly on the specialty/batch industry. SOCMA commissioned Dixon Environmental to assess the impacts of the proposed rule on its membership. Dixon's report, attached, concludes that EPA has (i) omitted many covered facilities from its cost estimates, (ii) misjudged the amount of uncontrolled emissions from covered facilities, and (iii) substantially underestimated the costs of the rule on specialty batch manufacturers. Dixon's findings are summarized below.

A. EPA's Cost Analysis Omitted Many Facilities Subject to the Proposed Rule

Dixon interviewed five SOCMA member facilities, representing a cross-section of SOCMA's membership. SOCMA's survey indicates that each of the five plants surveyed processes, uses, produces or generates at least one of the 15 chemical manufacturing urban air toxics (UATs) and would thus be subject to the rule – yet only two were reflected in EPA's database after it was parsed by EPA's contractor RTI, International, Inc. (see Dixon Report, Table 3, p. 1-4). Based on this limited sample, it seems reasonable to conclude that the proposed rule will impose costs on many more SOCMA members than EPA anticipates.

Also, as Dixon's report points out (see pp. 1-3 to 1-4), RTI's cost analysis dropped facilities that process, use, produce or generate only metal UATs. (This includes one of SOCMA's five surveyed facilities, Plant 2 (see Table 3, p. 1-4).)² This was a mistake, because the rule requires compliance with respect to organic *and* metal HAPs at any facility processing, using, producing or generating any amount of any UAT, whether organic or metal. In other words, a facility whose only UAT is chromium, but which has uncontrolled emissions of 20,000 lbs/year of organic HAPs from process vents, would be subject to substantial compliance costs – yet RTI's analysis omits such facilities.

B. EPA Dramatically Underestimates Uncontrolled Emissions from Chemical Manufacturing Area Sources

EPA's database suggests that only four plants nationwide emit more than 19,000 lbs/year of total organic HAPs (p. 1-3). However, two of the five SOCMA facilities that Dixon evaluated exceed that threshold, and would be subject to very costly controls for their batch process vents based on their total uncontrolled HAP emissions (even though the UAT emission totals for four of the five plants were very low) (see Table 6, p. 2-1). SOCMA believes that this is not a random finding but illustrative of significant undercounting of uncontrolled emissions.

² Plant 2 actually does have organic HAPs, see Table 6, p. 2-1, another indicator of how flawed EPA's database is.

Dixon discovered another indication of how significantly the RTI database underestimates uncontrolled emissions, and how unreliable the database may be generally: of the top six facilities that the database assumes would be subject to the process vent standards, at least three and possibly four are actually major sources complying with MACT standards (see Table 4, p. 1-4).

As Dixon explains, EPA underestimated uncontrolled emissions for two reasons:

- RTI assumed that facilities in the National Emissions Inventory (NEI) database reported uncontrolled emissions unless the emissions were specifically noted as controlled. In fact, however, a great many of the facilities without any such notation actually reported controlled emissions (see p. 1-3).
- The NEI database is heavily reliant on the TRI database, which (i) does not even include emissions unless a facility's manufacture, processing or use of a chemical exceeds 25,000 lb/yr, and (ii) reports actual, i.e., after controls, emissions (see p.1-3).

C. The Impacts of the Proposed Requirements Will Be Much Greater than EPA Estimates

Not only does EPA's analysis exclude many covered facilities and understate facilities' emissions, it also does not adequately estimate the actual impact of the proposal on regulated and unregulated facilities. This central portion of SOCMA's comments first explains how the analysis improperly uses data from continuous processes to estimate impacts on batch processes. It then looks in detail at EPA's impact estimates for organic process vents, wastewater operations, management practices, and monitoring and recordkeeping. Finally, it explains how the proposal would impose costs – unassessed by EPA – even on unregulated facilities.

1. Continuous process facilities cannot be used as a proxy for batch facilities

As noted above, SOCMA represents the batch chemical industry primarily. EPA's reliance on data from continuous processes thus systematically understates the feasibility of compliance for, and the costs the proposal would impose on, the bulk of SOCMA's covered members.

Batch processing provides an efficient, and frequently the only, method to make small quantities ("batches") of chemicals to meet specific needs and consumer demands for specialized products. Batch processors must be able to respond quickly to new requirements by customers, fill small market niches, and develop new products. Because the products and the processes change, process operating conditions and even the configuration of equipment can change as well. A single piece of equipment can be put to multiple uses, and may well contain a range of different materials over the course of a

year. In fact, a SOCMA study found that one member company produced a total of 566 different products over a seven-year period at one facility.³

EPA cannot extrapolate ability to comply and cost of compliance from continuous to batch facilities. Continuous operations have a constant raw material feed to, and continual product withdrawal from, each unit operation. By contrast, batch processes have an intermittent introduction of frequently changing raw materials into the process, with varying process conditions imposed on the process within the same vessel.

Because of their frequent variations and changes in product lines, and the unique aspects of batch processing, specialty chemical manufacturers would be disproportionately impacted by this proposal. Unlike the burdens imposed on facilities with static product lines, moreover, the burdens likely to be imposed on batch manufacturers could increase exponentially as the number of chemicals produced increases.

2. Organic Process Vents

EPA concluded that GACT for organic process vents is \$3,000/ton for continuous vents and \$2,300 for batch vents (see Dixon Table 1, p. 1-2). But according to Dixon's analysis, the real cost is closer to \$87,000/ton (see pp. 1-5 to 1-6). Specifically, for the two plants in Dixon's study from which uncontrolled HAP emissions from process vents exceeded EPA's proposed 19,000 lb/yr threshold, the incremental cost per ton of HAP removed ranges from \$126,000 to \$488,000. These conclusions are explained below.

Dixon developed a costing model that it believes is more accurate than RTI's. This model was based on Dixon's survey of and feedback from SOCMA member companies, as well as on Dixon's experience with other Clean Air Act Section 112 standards, particularly the MON. Dixon's report calculated the cost of the various proposed controls and associated HAP reductions. Since the plants that would be required to meet the proposed 90% facility-wide organic HAP reduction already use control equipment, the incremental cost per ton of HAP reduction that would actually be produced by the rule was calculated in addition to the theoretical reduction in "uncontrolled" HAPs for which the proposal takes credit.

As Dixon demonstrates, the two plants in the survey that exceed the batch process vent threshold of 19,000 lb/yr of organic HAP (OHAP) emissions (Plants 2 and 5, see Table 6, p. 2-1) have an overall cost-effectiveness of approximately \$50,000/ton of uncontrolled OHAP removed (see Table 7, page 2-2). This is roughly 17 times EPA's \$3,000 cost projection.

³ SOCMA Comments on Establishing National Emission Standards for Hazardous Air Pollutants from Miscellaneous Organic Chemical Manufacturing and Miscellaneous Coating Manufacturing, June 28, 2002 (EPA Docket No. A-96-04).

When incremental costs and reductions are considered – the actual improvements that would result from the additional or new controls required to meet the 90% facility-wide reduction target – the disparity is even more striking. For relatively small improvements in emission reductions -- 1.7 TPY for Plant 2 and 7.2 TPY for Plant 5 – the difference in cost-effectiveness is significant and, in at least one of the cases, staggering. The incremental cost-effectiveness for Plant 5 jumps to \$126,000/ton OHAP removed, and for Plant 2 leaps to \$488,000/ton OHAP removed (see Table 7, pp. 2-2 to 2-3).

Key characteristics of the specialty batch industry underlie these widely varying cost estimates. In its analysis, RTI assumed the use of condensers (“Option 1”) in its cost model. However, as Dixon points out in its report, most SOCMA member facilities operate with high gas flowrates – and low concentrations of HAPs – making condensers impractical and requiring use of thermal oxidizers (RTI’s “Option 2”). As Dixon concludes (on pp. 1-4 to 1-5):

Due to the wide variety of operations, chemical characteristics and the likelihood of high-volume, low-concentration streams at some plants, specialty chemical manufacturers cannot universally achieve the 90% reduction with condensers. While condensers could be one part of a compliance strategy, our information indicates that multiple process units would require control to meet the proposed 90% plant-wide reduction. If multiple locations must be controlled, then larger flowrates would be required to collect and convey to a centralized location.

Moreover, the true costs of controls would be even greater, because scrubbers would be needed at many facilities to address halogen gases, including both of the SOCMA study plants requiring controls. Again, Dixon discusses this issue on page 1-5, observing that “[t]he RTI memorandum incorrectly assumes that the thermal oxidizers can be estimated without the need for halogen reduction.” A 2005 study conducted by Dixon as part of a MON compliance evaluation for specialty chemical manufacturing plants (Table 5, p. 1-5 in the 2008 Dixon report) details the significant costs associated with oxidizers, even if one was to exclude capital costs from consideration.

A closer examination of the two facilities in the Dixon report which exceed the 19,000 lb/year threshold details these costs even further. Plant 2, for example, has one urban air toxic (methylene chloride) based on 2007 uncontrolled emission estimates. The plant has only 70 lbs/year of uncontrolled stack emissions of this UAT. The plant already controls its organic HAP emissions with condensers and scrubbers, and under the proposed rule, the incremental reduction would amount to approximately 2% of uncontrolled emissions. (See pp. 2-4 to 2-5.)

While no UAT emission reductions are expected from the proposed rule, due to the excessive cost of trying to reduce such low methylene chloride emissions, it would cost the plant approximately \$2.5 million initially, and \$800,000 annually, to install and operate the required controls for batch process vents to achieve the additional 1.7 TPY of OHAP emissions that compliance would produce. The rule would have an incremental

cost-effectiveness of more than \$300,000 per ton of HAP reduced. (Again, please refer to pp. 2-4 to 2-5.)

Plant 5 data is very similar. The plant has only one urban air toxic (acetaldehyde), and already controls its organic HAPs using scrubbers. The incremental reduction on OHAP emissions produced by the proposed rule would only be about 26% of “uncontrolled” emissions. While plant-wide organic HAP emissions from all emission points would be reduced by approximately seven tons per year under the proposal, controls for process vents would cost approximately \$3 million initially and \$900,000 annually. As previously noted, the incremental cost effectiveness would be more than \$125,000/ton of HAP reduced. See pp. 2-6 to 2-7.

3. Wastewater systems

EPA determined that the cost effectiveness of GACT for wastewater systems would be \$1,600 per ton of HAP removed. However, EPA’s analysis completely omitted some very costly procedural requirements that compliance would entail, principally the need to make determinations of whether a wastewater stream contains partially soluble HAPs of 10,000 ppmw. These determinations would potentially need to be made at each point that a wastewater stream was generated. As shown in Dixon’s Table 6, p. 2-1, the five SOCMA study plants all have numerous such wastewater “points of determination,” ranging from 10 - 250. The costs of these determinations could be substantial, depending on whether facilities had to do sampling and analysis or could rely on process knowledge. They would be exacerbated by the fact that batch plants commonly run numerous campaigns using different chemistry – each of which could require wholly new wastewater characterizations. None of the SOCMA study plants currently make such assessments, but all would be required to do so under the rule. The resulting costs are not accounted for by EPA.

4. Management practices

SOCMA appreciates that sensory leak detection and repair (LDAR), required quarterly, is less burdensome than any other LDAR requirement yet proposed by EPA. However, SOCMA submits that LDAR for batch facilities is fundamentally problematic, given the particular characteristics of those facilities and how they operate. EPA’s paradigm for LDAR is petroleum refining or continuous commodity chemical manufacturing, which frequently involve highly volatile gas streams, operating continuously, in huge volumes, in large, often flanged equipment. Batch plants, however, only operate intermittently, usually manage liquids, and handle those liquids in much smaller volumes, in smaller, often completely welded equipment. Batch processes thus pose vastly less potential for significant leakage of VOCs, and consequently there is vastly less potential for LDAR at such facilities to produce environmental benefits by detecting and correcting significant losses.

Instead, the main effect of the proposed requirements would be to create a new set of regulatory challenges for facilities to inadvertently run afoul of. Additionally, sensory

methods are highly subjective, and facilities will feel compelled to protect themselves against disagreements with enforcement personnel by using costly mechanical LDAR. Thus, the proposal will cost much more than estimated, certainly well over EPA's estimate of \$280 per facility per year.

5. Monitoring and recordkeeping

The great variety in chemical products manufactured by batch facilities leads to proportionally increased environmental monitoring, recordkeeping and reporting obligations regulations. The fact that nearly 75% of SOCMA's membership are small businesses further highlights the potential impact of this proposal's monitoring, recordkeeping and reporting requirements.

The proposal requires compliance with MACT General Provisions Section 63.8(a)(2), which EPA has proposed to modify to reference PS17 and P4.⁴ As SOCMA will explain more fully in its comments on that proposal, it would impose significant new monitoring requirements that go beyond existing MACT and NSPS standards. Increased frequency of calibrations and data verification for instruments is not necessary, and will bring with it a fairly significant additional cost with no measurable environmental benefit. There may also be additional costs in revalidating instrumentation per the proposed standards. Finally, the proposed required accuracy for pH monitoring instrumentation is very tight, and may not be readily achievable for field installed pH probes. Based on SOCMA member company estimates, the annual cost for monitoring under PS17/P4 would be orders of magnitude higher than those estimated by EPA.

EPA's final rule should require monitoring that is similar to but less stringent than that required by the Pharma MACT rule.

6. The proposal will impose substantial costs on facilities that are not regulated

EPA's cost estimates only take into account facilities that will have to comply with the rule. But the rule will also impose costs on a much larger universe of facilities that are potentially covered by the rule, but will end up ultimately not being regulated, either by choice or by the happenstance of what HAPs they process, use, produce, or generate. The responsible majority of chemical manufacturing sources that are not major HAP sources will have to design and implement management systems to ensure that they catch any planned usage of a UAT, so they can either come into compliance or choose not to use that substance. Such efforts will, of course, cost significant amounts of money and time, and could result in lost business opportunities for those facilities. EPA never estimated these costs, but it should attempt to do so.

⁴ 73 Fed. Reg. 59956, 60002 (Oct. 9, 2008).

IV. EPA Should Establish a De Minimis Threshold for Applicability of the Rule

As proposed, the rule would apply to a facility processing, etc., one of the listed urban HAPs in any quantity whatsoever, no matter how minute. The inadvertent generation of an ounce of chloroform as a reaction byproduct at a process unit at a source would subject all process units at the entire source to the rule. The single alteration of the proposal that would produce the greatest savings in compliance costs, and most enhance its cost-effectiveness, would be to establish a de minimis threshold for applicability of the rule. As discussed below:

- EPA has ample legal authority to set a de minimis threshold;
- That threshold should have two parts: (i) 2,000 lb/yr actual (controlled) UAT emissions facility-wide, and (ii) 25,000 lb/yr plant-wide total UATs manufacture or process (either would suffice to exempt a facility); and
- EPA should establish a one-year lookback for determining if the rule applies.

A. EPA has Ample Legal Authority to Set a De Minimis Threshold

1. The Clean Air Act does not prevent EPA from establishing thresholds for the applicability of GACT standards

EPA staff have informally asked commenters to explain the basis for our view that the Clean Air Act would permit EPA to set de minimis thresholds for determining the applicability of this rule. At the outset, SOCMA notes that EPA has previously established at least one de minimis threshold under a Section 112 MACT standard: under the MON, a “batch process vent” does not include “[a] vent from a unit operation, or a vent from multiple unit operations that are manifolded together, from which total uncontrolled HAP emissions are less than 200 lb/yr”⁵ Having done so under a Section 112(d)(2) MACT standard, EPA should not be reluctant to do so under a Section 112(d)(5) GACT standard. And, in fact, EPA has done so already: under the acrylic/modacrylic fibers production area source standard, the definition of “equipment” is limited to a device “in organic HAP service which contains or contacts greater than 10 percent by weight of acrylonitrile and operates more than 300 hours per year.”⁶ Also, in this proposal, EPA has set de minimis *concentrations* for chemical manufacturing urban HAPs, which would have the effect of exempting from the rule sources whose feedstocks and products contain such HAPs, but only at levels below those concentrations.⁷ Despite the fact that EPA has already included so many de minimis provisions in Section 112 standards, SOCMA explains below why those actions were legally justifiable.

⁵ 40 C.F.R. § 63.2550(i) (definition of “batch process vent,” paragraph (8)).

⁶ *Id.* § 63.11398 (definition of “equipment”).

⁷ 73 Fed. Reg. 58376 (proposed 40 C.F.R. § 63.11494(a)).

2. Section 112 allows EPA to use thresholds to define area source categories

EPA's obligations to regulate area sources flow from:

- Section 112(b), in which Congress created “a list of hazardous air pollutants” that EPA is to review and revise from time to time;⁸
- Section 112(c)(1), which instructs EPA to “publish . . . a list of all categories and subcategories of major sources and area sources listed under paragraph (3) [see below] of the air pollutants listed pursuant to subsection (b)”⁹
- Section 112(c)(3), the paragraph just referenced, which focuses on area sources, and which states EPA “shall . . . list . . . sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health in the largest number of urban areas are subject to regulation under this section”;¹⁰
- Section 112(c)(2), which says that EPA “shall establish emissions standards under subsection (d)” for listed categories and subcategories of major and area sources;¹¹
- Section 112(d)(1), which says that EPA “shall promulgate regulations establishing emission standards for each category or subcategory of major sources and area sources of hazardous air pollutants listed for regulation pursuant to subsection (c)”;¹² and
- Section 112(d)(5), which says that EPA “may, in lieu of [MACT and residual risk requirements], elect to promulgate standards or requirements applicable to [area] sources which provide for the use of generally available control technologies or management practices by such sources to reduce emissions of hazardous air pollutants.”¹³

⁸ 42 U.S.C. § 7412(b).

⁹ *Id.* § 7412(c)(1).

¹⁰ *Id.* § 7412(c)(3). This sentence adds more specific content to, and is not merely an illustrative example of, the rather circular sentence that proceeds it, which says that EPA “shall list . . . each category or subcategory of area sources which the Administrator finds presents a threat of adverse effects to human health or the environment (by such sources individually or in the aggregate) warranting regulation under this section.” *Id.*

¹¹ *Id.* § 7412(c)(2).

¹² *Id.* § 7412(d)(1).

¹³ *Id.* § 7412(d)(5).

None of these provisions expressly prohibits EPA from using thresholds to define the applicability of GACT standards. Nor do they implicitly mandate the conclusion that EPA must regulate every HAP emission, no matter how minor, from an area source. Rather, they leave EPA free to set applicability thresholds for GACT. Moreover, they offer a straightforward way by which EPA can do so: by defining the chemical manufacturing area source category under subsection (c)(3) to include only sources that emit UATs above a de minimis threshold. In other words, the threshold can be an inherent part of the definition of the category itself.

In the *National Lime II* case, the D.C. Circuit relied on a six-word phrase in subsection (d)(1) (“hazardous air pollutants listed for regulation”) to conclude that EPA could not set “no control” MACT floors.¹⁴ EPA staff have informally raised the question whether this decision would prohibit EPA from setting de minimis thresholds in defining categories of area sources, on the theory that doing so would allow some HAPs to go uncontrolled.

The answer is no. As can be seen from the bullets above, the relevant sentence in subsection (d)(1) uses the words “of hazardous air pollutants” to modify the phrase “categor[ies] . . . of area sources . . . listed for regulation pursuant to subsection (c).”¹⁵ As can also be seen above, subsection (c) concerns listing *sources*, not HAPs, which are listed pursuant to subsection (b). Thus, the mandate in subsection (d)(1) to “establish emission standards for each category . . . of area sources” already assumes that EPA will have defined those source categories at the time that it “listed [them] for regulation pursuant to subsection (c).” If EPA establishes those categories by reference to de minimis thresholds, then subsection (d)(1) merely requires EPA to set emissions standards for those categories – it does not force EPA to redefine them.

Without questioning the precedential value of *National Lime II* for major sources (or for MACT analyses), it need not be read to require that EPA has control every HAP emission point when it sets GACT requirements.¹⁶

¹⁴ *National Lime Association v. EPA*, 233 F.3d 625, 633-34 (D.C. Cir. 2000).

¹⁵ 42 U.S.C. § 7412(d)(1).

¹⁶ The same points similarly distinguish the statement in *Mossville Environmental Action Now v. EPA*, that “Section 112(d)(1) requires the EPA to set emission standards for every HAP emitted from each category or subcategory of major sources.” 370 F.3d 1232, 1236 (D.C. Cir. 2004) (citing *National Lime II*). *Mossville* addressed whether EPA had shown a sufficient correlation between vinyl chloride (VC) and other HAPs to allow it to use VC as a surrogate for those other HAPs. *Id.* It did not address how EPA defined the relevant categories of facilities.

B. The De Minimis Exemption Threshold Should Have Two Parts: 2,000 lb/yr Actual Total UAT Emissions Facility-Wide and 5,000 lb/yr Plant-Wide Total UATs Manufactured or Processed

SOCMA urges EPA to set a de minimis exemption with a two-part threshold: (i) 2,000 lbs/year actual (i.e., controlled) total UAT emissions facility-wide, and (ii) 25,000 lb/yr plant-wide total UATs manufactured or processed. A facility falling below either threshold would be exempt from the rule.

The former threshold is SOCMA's view as to what constitutes a well-controlled small source. This 2,000 lb/yr standard plant-wide is still an order of magnitude below the Section 112 major source threshold (potential to emit 50,000 lbs/year total HAPs¹⁷). Because it is expressed as actual emissions, it would be a performance standard, allowing facilities to exempt themselves by whatever means was most technically feasible or cost-effective. Actual emissions is also preferable because virtually all responsible facilities know what their actual emissions are, whereas very few facilities have taken the considerable and usually unproductive time and effort to determine their uncontrolled emissions. The 2,000 lb/yr threshold for the whole plant is also about 8% of the alternative threshold, meaning it equates to well-controlled version of that threshold.

The 25,000 lb/yr. manufactured or processed threshold comes from EPA's Toxic Release Inventory Program, but is more conservative in that the TRI value represents management of any one chemical,¹⁸ whereas SOCMA's proposal represents total UATs.

Given the potential costs of the proposed rule for low UAT reductions, as described in some detail in the Dixon report, this proposed two-part de minimis threshold would offer extremely significant burden relief, yet would still allow the rule to capture substantial area source emissions of UATs. Setting the threshold on a source-wide basis would maximize its value, as it would avoid forcing sources to estimate their emissions on a unit-by-unit basis, which could require hiring a consultant to do and thus be quite costly.

For facilities that do not fall below either part of the facility-wide de minimis threshold, EPA should apply the rule on a chemical manufacturing process unit (CMPU) basis, as shown in Diagram 1. In other words, and as more fully explained below in Part V.B of these comments, at an area source that emits more than 2,000 lb/yr actual UATs plantwide and manufactures or processes >25,000 lb/yr total UATs, only those CMPUs that emit UATs should be regulated, and only for the type of HAPS they emit.

¹⁷ See 42 U.S.C. § 7412(a)(1).

¹⁸ See 40 C.F.R. § 372.25(a).

C. Batch Facilities Need Some Look-back Period to Assess Area Source Applicability.

Because SOCMA's proposed de minimis thresholds are based on total UAT facility-wide annual emissions, manufacturing or processing, the facility would determine applicability by assessing emissions over the previous year. But even if EPA does not adopt SOCMA's proposed threshold, it still needs to set some sort of retrospective mechanism for determining the rule's applicability, because the rule as currently written is unmanageable for a batch facility. A facility that brings in multiple materials for varying batch production with varying campaigning based on customer needs cannot practically and economically assess the applicability of a rule that is triggered based on the instantaneous, one-time use of a UAT.

A much more practical approach would be to establish a look-back period for determining applicability. For example, the introduction of a UAT into a batch plant would not immediately trigger the rule's obligations. Rather, a plant should only have to review its materials usage initially and annually thereafter. Applicability would be established at the time of review.

Importantly, this approach would not necessarily lead to any longer compliance periods. Under the look back approach, the three-year compliance period would begin to run at the date during the prior year at which the UAT was first used – the same clock provided for in the proposal as long as new equipment is not installed (i.e., as long as a new UAT is used or generated in existing equipment.) (Please refer to Section VI.B for additional details.) The difference is that the facility would have an orderly and manageable period of time over which to assess applicability and begin the compliance process. (Please refer to Part VI of these comments for more comprehensive comments on compliance time issues.)

V. EPA Can Make Numerous Changes to the Rule to Faithfully Reflect GACT and Dramatically Reduce the Rule's Burdens

In this part of its comments, SOCMA explains a host of ways in which EPA can revise and tailor the applicability and terms of the proposed rule to more truly reflect what constitutes generally available control technology and to avoid imposing serious (and quite possibly unintended) compliance costs. We begin by endorsing EPA's overall GACT approach.

A. SOCMA Strongly Supports EPA's Decisions to Impose GACT Instead of MACT Controls, and Not to Require Controls for Smaller Vents, Tanks and Cooling Towers

In authorizing EPA to mandate GACT rather than MACT at area sources, Congress recognized that those sources, by definition, are small emission sources. Because they generally cannot take advantage of economies of scale, they will tend to have higher unit costs of control. They also are likely to have less access to capital, and

less likely to be able to shift cash flows or human resources to comply with new control technology or work practice requirements.

The custom and batch specialty chemical industry is largely made up of small sources, but several other factors combine to make our industry uniquely vulnerable to regulatory costs, and make it very misleading to simply transfer commodity chemical control approaches to our facilities.

For example, many batch facilities will make literally dozens of different products in a year, oftentimes on very short notice. As a result, it is vitally important for them to be able to maintain operational flexibility. Figuring out what this rule would require, especially with its extensive cross-references, would be very difficult to do in a short period of time, and could lead to companies missing lucrative opportunities. Compliance with rules such as this one can impose costs even on facilities that decide (or simply turn out) not to be regulated, as they have to devote staff time, and potentially even forego business opportunities, as they assess whether a proposed campaign would trigger the rule. For all these reasons, SOCMA supports EPA's decision to impose GACT instead of MACT controls.

SOCMA also supports EPA's decision not to require controls for smaller vents, tanks & cooling towers. Our industry sector is highly competitive, at both the domestic and international levels. For small companies with small sites and very few onsite staff, seemingly minor new requirements that larger companies could readily absorb can be extremely consequential.

B. EPA Should Apply the Rule's Requirements on a Chemical Manufacturing Process Unit Basis

As noted at the conclusion of Part IV.B of these comments, SOCMA believes EPA should rethink the applicability of the rule so that it applies not to entire facilities, but to individual chemical manufacturing process units. Diagram 1 provides a visual depiction of the decision tree implicit in SOCMA's approach.

As EPA has proposed, SOCMA agrees the rule should apply only to sources whose primary NAICS code is 325. SOCMA also agrees that the next question should be whether a source within that code uses or produces a Table 1 urban HAP. If so, the next question would be whether the facility meets either of SOCMA's proposed de minimis thresholds; i.e., whether (i) actual controlled emissions of UATs are less than 2,000 lbs/year, and (ii) plant-wide manufacture or processing of total UATs is less than 25,000 lbs/year. The entire source should be exempt from the rule if either is true.

On the other hand, if the source exceeded both of those thresholds, controls would be determined on a chemical manufacturing process unit by unit basis. If a process unit at the area source did not manufacture or process UATs, it would not be subject to the proposed rule's controls. If it did, however, then the process unit would be further assessed by the types of emissions produced:

- If the process unit only emitted metal UATs, then that unit would need to control only for total metal HAPS, and not for organic HAPS.
- If, on the other hand, the process unit emitted only organic UATs, the unit would have to control for total organic HAPS, and not for metal HAPS;
- Finally, if the process unit emitted both organic and metal UATs, then that unit would have to control for both total metal and total organic HAPS.

SOCMA strongly believes that such an approach, with multiple checkpoints, offers the best of both worlds. Most importantly, the approach undoubtedly targets the urban air toxics that EPA seeks to control. It also captures other HAPs in those cases. But it does so in the most cost-effective manner possible, principally because it would not require control of HAPs at units that do not emit UATs. It would thus provide much needed relief to many SOCMA members, the majority of whom are small or medium-sized businesses. As SOCMA has described earlier in these comments, the proposed rule would impose far greater costs on SOCMA members than EPA has anticipated and thus, any steps taken to alleviate those costs would be invaluable to SOCMA members.

By specifically targeting individual process units, and then those units by emission types, this proposed approach would directly regulate the emissions (and the process units) EPA – and Congress – are most concerned about: UATS and the units that emit them. The proposed approach would also provide significant relief by focusing controls on the other emission points (wastewater, storage tanks, loading racks) only to the extent they are associated with a process unit that is being regulated.

For all these reasons, SOCMA believes that this approach represents a strong compromise which provides both environmental protection and regulatory relief.

C. EPA Needs to Set a Minimum Quantity for “Contains Organic Haps”

Throughout the rule, EPA keys its applicability to particular types of emissions points by whether they “contain” HAPs, without any sort of minimum threshold. The result is that sources could be faced with major analytic challenges, and potentially staggering control costs, trying to identify, and then control, equipment with tiny concentrations of HAPs.

Accordingly, EPA needs to quantify, either in ppm or lb/yr, the phrase “contains organic HAPs” as it is used in the definitions of “batch process vent,” “continuous process vent,” “equipment,” “in organic HAP service,” “storage tank,” and “transfer operations.” Similarly, the terms “metal HAP-containing” and “contains any HAP listed in Table 9 to 40 CFR part 63” in the definitions of “metal HAP process vent” and “wastewater” need to be quantified. Finally, the term “contains any HAP listed in Table 4 to 40 CFR part 63, subpart F” in § 63.11495(g)(1) should be quantified as well.

The simplest way to do this would be to provide that the concentrations that trigger applicability of the rule to a source, in proposed § 63.22494(a), also determine the

applicability of the rule to any given emission point. EPA has done this in many MACT standards.

D. Process Vent Issues

1. EPA needs to sharply limit control requirements for process vents to achieve GACT

As SOCMA explained in Part III.C.2, both Dixon's and RTI's analyses agree that cost per ton of uncontrolled HAP removed for process vents is an order of magnitude higher than EPA's GACT cost threshold of \$2,300-3,000/ton HAP removed. The real, incremental cost is multiple orders of magnitude greater. This is primarily because EPA's analysis of control options from batch process vents improperly assumes that condensers will meet the reduction requirements, when in fact, due to the nature of the specialty chemical manufacturing industry, thermal oxidizers and scrubbers will need to be used. Using these actual costs of compliance, Dixon's analysis shows that, if EPA wanted to maintain the \$3,000/ton cost-effectiveness standard for GACT, the cutoff for applicability of control requirements should be at least 87,000 lb/yr uncontrolled HAP emissions per vent, not 19,000 (see Dixon Report pp. 1-5 to 1-6). As noted in Part IV.B, SOCMA's proposed de minimis threshold would be far lower than that.

SOCMA's proposed unit-by-unit applicability approach would also better approximate GACT. At non-exempt facilities, SOCMA proposes that:

- all CMPUs which emit any urban HAPS would be regulated by management practices; and
- the agency should set a per-emissions unit threshold for process vent emissions, which EPA could model on the MON's definition of Group 1 batch process vents. Process vent control requirements would only apply, then, to chemical manufacturing process units with uncontrolled emissions of 10,000 lb/yr or more of total organic HAPs (> 50 ppm concentration) from process vents.¹⁹ Such units would have to meet 90% control requirements. (The 90% requirements would apply to the sum of total HAPS, including urban HAPS.) This would impose a stringent emission reduction standard, but would only do so at units where the costs would be reasonable.

2. EPA should exempt batch driers emitting < 50 ppm UAT

On November 16, 2007, SOCMA met with EPA staff at Research Triangle Park in North Carolina to discuss the impact of the area source rule on our membership. That discussion focused in particular on batch driers. During the meeting, SOCMA urged EPA to exempt batch spray dryers or other batch dryers with high flow rates from the future proposal. Although EPA did not ask for comment on this important issue, we would like to offer the following example to document our previous argument that batch driers should be exempt from this rule:

¹⁹ *Id.* § 63.2550.

A SOCMA member facility which did not participate in the Dixon study operates several point sources that have uncontrolled HAP emissions >19,000 lb/yr. These point sources include three batch spray dryers with a total exhaust flow rate of approximately 45,000 scfm. The exhaust vents from each drier are very dilute (e.g., they normally contain < 1 ppm acetaldehyde, but could contain a maximum of 3 ppm). It is clear that it will never be cost-effective to control these streams and it is also clear that the GACT analysis did not assume the presence of this type of vent in the control evaluation. Thus, there is no basis for requiring their control.

In addition, there is precedent for exempting these types of sources. Under other regulations (such as the MON and the Pharmaceutical MACT), batch process vents are defined to exclude low concentration and low mass streams¹¹. These criteria are important because they eliminate from consideration streams that are not technically feasible or cost-effective to control. Furthermore, they significantly reduce the burden of trying to identify extremely low HAP content streams. However, under this area source proposal, batch process vents containing even 1 ppm of HAP would require HAP emission estimates and would be subject to the management practice requirement and, if triggered, the control requirements (no matter how minor they are). For these reasons, SOCMA does not believe that these burdens and controls are justified. There is no environmental benefit and the impacts are not accurately reflected in the rule's cost and burden estimates. Furthermore, without this proposed exemption, this proposal would not be reflective of GACT. Treating these streams as batch process vents is not the practice in the industry and is not cost-effective, and such streams are likely not included in the NEI database. Therefore, SOCMA strongly encourages EPA to exempt batch spray drier vents that emit <50 ppm urban HAP.

2. Continuous process vents

SOCMA has two proposals to moderate the cost of the rule as it applies to continuous process vents:

- **Vents that combine in a header.** EPA should confirm that, if multiple process vents are combined into one header, the source may calculate the TRE index for the combined vents, or it may calculate the TRE index of the individual vent that is expected to have the lowest TRE index and use that result for the entire group of vents. SOCMA believes would be allowed under the current proposal, since proposed § 63.11502 references § 63.101, and that provision in turn defines a "process vent" to be a gas stream's "point of discharge into the atmosphere (or point of entry into a control device)," but SOCMA requests confirmation of this. EPA could add clarifying language at the end of proposed § 63.11496(b).
- **Industrial furnace exhaust gas.** SOCMA believes that when an industrial furnace is used as a control device, its exhaust gas should be exempted from the

definition of continuous process vent. These gases have already undergone combustion, which provides high destruction efficiency for organics. As such, any organics remaining are low-concentration, high-flow, making further control unwarranted. Although the TRE for these gases will almost certainly be well above 4.0, it seems unnecessary to require the calculation. SOCMA believes such gas streams are already exempted, since the definition of "chemical manufacturing process unit" in § 63.101(b) excludes control devices, and gas streams are not regulated under § 63.107(h)(4) when they exit from a control device. However, we request EPA to clarify that this is the case.

3. Metals HAP process vents

a. The metal HAP control requirements should be on a per vent basis

EPA is proposing to require control of all metal HAP-containing chemical manufacturing process vents at a site where metal HAP emissions exceed 100 or 400 pounds. However, the supporting analysis in docket document EPA-HQ-OAR-2008-0334-0005 is based on model plants where all emissions are assumed to come from a single vent and where a single control system was estimated. The cost effectiveness data and GACT determination were therefore based on individual vents with the co-proposed 100 and 400 lb/yr control trigger. Yet, the proposal applies the requirement based on the sum of metal HAP emissions from all metal HAP-containing vents at a site, no matter how many of them there are or how many separate control systems would be required. Unlike for organic HAPs where streams can be piped, albeit at a high cost, to centralized controls, particulate-containing vents can only be ducted small distances.

Accordingly, SOCMA believes that the rulemaking record only supports imposing the metal HAP control requirements on an individual vent basis and that the final rule should be revised accordingly.

b. The incremental cost of setting the metal HAP control trigger at 100 lb/yr is not justified

On page 5 of EPA-HQ-OAR-2008-0334-0005, EPA indicates that by setting the control trigger at 100 lb/yr, an additional reduction of 40 tpy of particulate (3.1 tpy metal HAP) is obtained, versus the 570 tpy of particulate (40.7 tpy metal HAP) obtained with the 400 lb/yr trigger. The cost of this increment is \$1,370,000 per year, yielding a cost effectiveness of \$33,660 per ton of particulate (\$442,000 per ton of metal HAP). The incremental cost is 11 times the cost per ton for the 400 lb/yr trigger, and thus SOCMA believes that it is not justified.

c. Process types where metals need to be considered should be clear.

SOCMA urges EPA to be very clear how sources are to determine when metal emissions are to be evaluated. Given the pervasive nature of metals, it is critical that sources not be required to dedicate extensive resources searching for impurity levels of metals in feeds or process streams. To this end, it is critical that MSDS data be allowed for all chemicals used in the process.

As these comments explain in Part V.B and Diagram 1, if a process unit only emits metal UATs, then that unit would need to control only for total metal HAPs, and not for organic HAPs.

Furthermore, it is also clear from the source information listed on page 2 of EPA-HQ-OAR-2008-0334-0005 that metals are only an issue where products containing metals are being produced. In the case of catalysts, for example, it is their production and recycling that has potential metal HAP emissions, not their use in fixed beds. Thus, to avoid wasteful and unnecessary burdens, SOCMA believes that sources should not have to consider potential incidental emissions from catalysts and adsorbents in fixed beds, and thus requests an exemption from the metal HAP emission estimating requirements for processes where metal HAP is only present in fixed bed installations.

d. The rule's Subpart references to Subpart NNNNNN are inconsistent with the preamble

The preamble at 58371 states that testing and reporting per Subpart NNNNNN would be required for new and existing sources, and monitoring for new sources, only if metal HAP emissions are \geq [100 or 400] lbs/yr. It adds that existing sources would have to develop monitoring plans. By contrast, proposed § 63.11496(f)(3) provides that Subpart NNNNNN would apply to all metal HAP vents regardless of emissions. EPA should correct this error.

e. Recordkeeping

The number of batches and processing hours are not necessarily relevant to ensure that metal HAP emissions remain $<$ [100 or 400] lbs/yr. For example, if the source of metal HAPs is waste fuels, then the concentration of metals in the fuel and the quantity of each fuel combusted are the critical parameters. Thus, § 63.11496(f)(2) should read "then you must keep records of the number of batches operated per month, the process operating hours, and/or other parameters that are consistent with the basis used in the initial estimate of emissions per year."

f. Control requirements

SOCMA also encourages EPA to alter language in Table 2 for greater clarification. Specifically, we believe that Table 2, Item (3)(a) should be reworded to

clarify that 95% control is for total metal HAPs (not individually) and that a combination of control devices may be used. The following language could be adopted:

If total metal HAP emissions are equal to or greater than [100 lb/yr or 400 lb/yr], reduce uncontrolled emissions of total metal HAP emissions by 95 percent by weight or greater by routing emissions from all metal process vents through a closed-vent system to one or more control device(s).

4. Control via BIF-permitted units

Some SOCMA members have noted that their facilities already meet the proposed organic, halogen, and metal controls for process vents because they control those vents with BIF units that are comprehensively regulated under 40 C.F.R. Part 266, Subpart H, and operate under final permits issued under 40 C.F.R. Part 270. These units are heavily regulated, with extensive testing and monitoring. Additionally, these permits generally have already considered risk in setting limits, thus already going beyond the strict technology focus of GACT (and MACT). Accordingly, and consistent with several of the MACT standards and to avoid duplicative regulation, SOCMA believes that no further testing, monitoring, recordkeeping, or reporting should be required when a permitted BIF unit is used to meet the proposed area source standards.

To that end, SOCMA proposes the following changes to the proposed rule:

Definitions – Add a definition of “BIF unit” to § 63.11502: “A boiler or industrial furnace regulated under 40 C.F.R. Part 266, Subpart H.”

Batch Process Vents - Add the following text to the beginning of items (i) and (ii) in Table 2, Item 1: “Except as provided in item (iv).”. Add item (iv) as follows: “If a BIF unit is used to achieve the required overall 90% reduction in organic HAPs, include demonstration of such in the notification of compliance status, and paragraphs (i) and (ii) of Table 2 Item 1 do not apply.”

Continuous Process Vents - Add the following text to the beginning of items (i) and (ii) in Table 2, Item 2: “Except as provided in item (iv) of Table 2, Item 2”. Add item (iv) as follows: “If a BIF unit is used to achieve the required 95% reduction in organic HAPs, include demonstration of such in the notification of compliance status, and items (i) and (ii) of Table 2, Item 2 do not apply.”

Halogen Reduction Device - Add this sentence to the end of § 63.11496(d): “If a BIF unit is used to achieve the halogen reduction standard, include demonstration of such in the notification of compliance status, and no further testing, monitoring, recordkeeping, or reporting is required.”

Metal HAP vents - Add this sentence at the end of § 63.11496(f): “For new and existing sources, if a BIF unit is used to achieve the metal HAP reduction standard,

include demonstration of such in the notification of compliance status, and this paragraph does not apply.”

E. Wastewater systems

1. EPA Should re-determine GACT, taking into account the costs of making wastewater determinations

As SOCMA noted in Part III.C.3, Dixon’s analysis has revealed that EPA’s determination of the cost effectiveness of GACT for wastewater systems -- \$1,600 per ton of HAP removed -- omitted expensive procedural requirements and consequently underestimates compliance costs. For example, facilities would seem to need to make determinations of whether a wastewater stream contains partially soluble HAPs of 10,000 ppmw at each point that a wastewater stream was generated. As shown in Dixon’s Table 6 (p. 2-1), the five SOCMA study plants all have numerous such wastewater “points of determination,” ranging from 10 - 250. After EPA has a more accurate assessment of the cost to do all these wastewater determinations, the agency should then determine what PSHAP cutoff would equal \$1,600/ton of HAP removed.

2. EPA Should Drop Acetaldehyde from the PSHAP list

Section 63.11500(a) in the proposed rule requires wastewater with partially soluble HAPs $\geq 10,000$ ppm to be decanted prior to treatment. The rationale for this requirement given in the preamble is that partially soluble HAPs will form an organic layer at concentrations above 10,000 ppmw. However, examples provided by SOCMA members suggest that this requirement can be problematic.

For example, acetaldehyde is listed as a partially soluble HAP, but it is miscible in water (<http://www.epa.gov/ttn/atw/hlthef/acetalde.html>) and unlikely to form an organic phase. Furthermore, with a vapor pressure of 740 mm Hg at 20 °C, even if acetaldehyde could be decanted, it would readily evaporate. One member facility has a wastewater stream that contains approximately 40,000 ppmw of acetaldehyde. This stream is conveyed to onsite treatment via hard pipe. The wastewater stream is mixed and diluted with other wastewater streams at the point of treatment, driving the fate of acetaldehyde more toward biological destruction than evaporation. Certainly in this case, SOCMA believes that the current practice provides better control than the proposed rule would.

The solution to this perverse result would be to drop acetaldehyde from the PSHAP list.

F. Storage Tanks

The proposed rule essentially requires control of all tanks. This management practice is unworkable, certainly does not reflect GACT, and should not be finalized. To correct this problem, the “storage tank” definition should be made consistent with the preamble, and several additional compliance options should be authorized.

1. **“Storage tank” should exclude vessels storing organic liquids that contain HAP only as impurities and wastewater storage tanks.**

The preamble states that a “storage tank” is defined as:

A storage tank is a tank or other vessel that is used to store organic or inorganic HAP that are used in or produced by the chemical manufacturing operations, except for the following: Vessels permanently attached to motor vehicles, pressure vessels, vessels storing organic liquids that contain HAP only as impurities, wastewater storage tanks, and process tanks.²⁰

Yet the definition in the proposed rule (§ 63.11502) does not exclude vessels storing organic liquids that contain HAP only as impurities or wastewater storage tanks. Both of these are important exceptions. The first greatly reduces the burden of the rule, because sources do not have to evaluate storage vessels that contain minor amounts of organic HAP, and the second eliminates conflicts between the wastewater requirements of the rule and the storage tank requirements. Both of these exemptions specified in preamble should be added to the storage tank definition in §63.11502.

2. **Storage tank control requirements should be limited to large storage tanks storing materials with organic HAP vapor pressures of ≥ 0.75 psi**

On page 58368 of the preamble, EPA notes that

for the subcategory of large storage tanks (i.e., those that exceed the size and MTVP thresholds in subpart Kb), we are proposing GACT to be: (1) Management practices ... and (2) each storage tank must be equipped with an internal or external floating roof, or the displaced vapors must be routed to a control device that reduces emissions by at least 95 percent.²¹

However, the proposed rule (Table 2, Item 4) does not explicitly limit the control requirements to storage tanks that exceed the size and maximum true vapor pressure (MTVP) thresholds in subpart Kb – it merely states that the source must maintain a floating roof or closed vent system and control device “in accordance with 40 CFR 60.112b.” Arguably, this cross-reference incorporates the applicability provisions of § 60.112b(a). However, EPA should make this clear. Moreover, the MTVP in subpart Kb is for total volatile organic liquids. For this rule, the MTVP should be based on organic HAP vapor pressure, since the rulemaking is addressing HAPs, and because that is the

²⁰ 73 Fed. Reg. 58356.

²¹ *Id.* at 58368.

basis used in both the MACT rules for the chemical manufacturing industry and for the GACT and cost analyses presented in the preamble and docket documents.

SOCMA therefore believes that EPA should add the Subpart Kb size and HAP vapor pressure criteria to Item 4 of Table 2 and should only apply the control requirements currently listed in the table to storage vessels exceeding those criteria. Specifically, as indicated in the preamble and the docket, controls are GACT only for storage tanks exceeding a 20,000 gallon capacity and a HAP vapor pressure of 4.0 psia and for tanks exceeding a 40,000 gallon capacity and 0.75 psia HAP vapor pressure.

3. Grandfathering provisions are a particular concern for storage tanks.

As discussed in the general grandfathering discussion,²² many chemical manufacturing area source tanks are likely to be controlled with condensers or other controls that do not achieve the 95% control required under this proposal. The incremental cost of replacing such existing controls is very high and can cause sources to replace recovery technologies with destruction technologies for a net environmental loss. SOCMA strongly encourages EPA to grandfather storage tank controls which are achieving 85% or higher removals if the agency opts not to provide a general grandfathering exemption.

4. Compliance with Part 63 Subparts SS & WW, and with the CAR, should be allowed in addition to Kb

Subparts SS and WW of Part 63 represent the latest thinking on control of storage tanks and should be allowed as an alternative to NSPS Kb. The rule should also explicitly allow sources to follow the Consolidated Air Rule (40 C.F.R. Part 65) in lieu of NSPS Kb.

5. Vapor balancing should be allowed

The storage tank provisions outlined in Item 4 of Table 2 require that each affected tank operate and maintain a floating roof or closed-vent system and control device in accordance with NSPS Kb. The final rule should also contain a vapor balancing alternative that would allow the owner/operator to capture and route the organic HAP vapors displaced from loading into the storage tank to the railcar or tank truck from which the storage tank is filled. As an example, EPA's MON rule allows for this type of alternative for storage tanks in 40 C.F.R. § 63.2470(e).

G. Transfer Racks

1. The definition of transfer operations should incorporate throughput and vapor pressure exemptions and should clarify

²² *Id.* at 58368-69.

that certain operations are not transfer operations.

The proposed definition of transfer operations is:

Transfer operations means all loading into tank trucks and rail cars of liquid containing organic HAP from a transfer rack. A transfer rack is the system used to fill tank trucks and railcars at a single geographic site. Transfer operations do not include the loading to other types of containers such as cans, drums, and totes.

SOCMA believes that this definition should include throughput and vapor pressure criteria. The chemical manufacturing MACT and RACT rules all include throughput criteria for transfer racks where controls are required, so that loading of wastes is not regulated during maintenance activities and occasional loading operations. Similarly, these rules include vapor pressure criteria, so that controls are not required if there are no significant emissions. The proposed requirements do not reflect industry practice or GACT in such situations and make the control requirements impractical in many cases and not cost effective.

SOCMA further believes that the HON and MON Group 1 throughput and vapor pressure criteria are reasonable reflections of GACT and consistent with the analyses done in support of this rulemaking. These criteria should be incorporated into the transfer operations definition in this rule. Specifically, only transfer operations with an annual throughput of 0.65 million liters of liquid that contain organic hazardous air pollutants with a rack-weighted average vapor pressure greater than or equal to 1.5 psia should be included in the definition.

2. Loading activities should be clarified

Certain loading activities were not considered in developing the proposed rule. Such activities are not normally regulated under transfer operation regulations, and the rule should be clarified to confirm they are not considered transfer operations under this proposal. For example, vacuum trucks are used to collect wastes and wastewaters at chemical manufacturing sites, at both major sources and area sources. These operations do not occur at fixed geographic locations and cannot be easily controlled. It is not cost effective to try to control these occurrences, and therefore SOCMA believes that they should be specifically excluded from the transfer operation definition.

As proposed, the transfer operations requirements would apply if only one molecule of organic HAP were present in a stream. It is true that the addition of the HAP vapor pressure criteria discussed above would eliminate such low HAP streams from control requirements, but facilities would still be subject to the burdens of having to identify them, determine their HAP vapor pressure and keep records. SOCMA recommends that EPA apply the same criteria as those for storage vessels to avoid these unnecessary burdens. In other words, streams where organic HAP is only present as an impurity should be excluded from the transfer rack definition.

Finally, where vapor balancing back to a storage vessel is used for all loading at a transfer operation location, there is no emission potential and these situations are generally excluded from the transfer operation definition; consequently, these situations should be excluded in this proposal. Where vapor balancing is not used for all operations it is treated as a control under most rules and it is so identified in Table 2.

Additionally, for clarity, SOCMA requests that EPA specifically include marine operations in the last sentence of the definition, confirming that these operations are not transfer operations under this rule.

Overall, SOCMA urges EPA to change the transfer operation definition to:

Transfer operations means loading into tank trucks and rail cars of liquid containing organic HAP from a transfer rack, where the liquid has an annual throughput of 0.65 million liters of liquid that contain organic hazardous air pollutants with a rack-weighted average vapor pressure greater than or equal to 1.5 psia. A transfer rack is the system used to fill tank trucks and railcars at a single geographic site.

Transfer operations do not include:

- (i) the loading to other types of containers such as marine vessels, cans, drums, and totes,
- (ii) the loading of liquids containing organic HAP as impurities, or
- (ii) racks, arms, hoses, etc. where all loading is controlled by vapor balancing tank truck or tank car vapor to a storage vessel.

H. Management Practices

As SOCMA argues in III.C.4, EPA's estimate of \$280/facility per year significantly underestimates the costs of the proposed management practice requirements. While less burdensome than other LDAR requirements proposed by EPA, this proposal nonetheless is problematic given the specific characteristics of batch plants and how they operate. The nature of batch processes is that they have vastly less potential for a significant leakage of VOCs, and consequently, there is less potential for LDAR to produce environmental benefits at these facilities. Still, facilities will feel the need to protect themselves against disagreements with enforcement personnel by using mechanical LDAR, causing the proposal to cost much more than estimated. SOCMA argues that GACT should be no requirements in this category.

If EPA retains any requirements in this regard, the final rule should recognize that, due to overlapping RACT, RCRA, and NSPS requirements that may be applicable at a site, fugitive monitoring programs utilizing electronic (database) recordkeeping may already be in place. SOCMA urges that § 63.11498(c) allow electronic recordkeeping via database and allow Method 21 inspections in lieu of sensory inspections.

Finally, in §§ 63.11495(a), (b), (c), and (d), operating under vacuum needs to be an allowed alternative to having all closure mechanisms in the closed position. See 61.348(e)(3) for a way to accomplish this.

I. Monitoring Requirements

The many proposed continuous monitoring requirements would also be highly costly for small facilities. Such requirements are really inappropriate for area sources; at a minimum, they should be limited to significant emission sources of urban air toxics at an area source. As the Dixon study notes (on p. 3-1):

Experience with compliance with the MON rule, even at facilities that required little or no control, have significant administrative burdens for no measurable environmental benefit. Just determining uncontrolled emissions from batch process vents can take hundreds of hours per process in labor for these efforts and would indicate that annual cost would be orders of magnitude higher than those estimated by EPA.

Furthermore, as noted previously, the proposal requires compliance with General Provisions Section 63.8(a)(2), which EPA has proposed to modify to reference PS17 and P4. As SOCMA will explain in its comments on that proposal, it would impose significant new monitoring requirements that go beyond existing MACT and NSPS standards. Consequently, SOCMA urges EPA not to adopt the proposed PS17/P4 modifications, or at least not to incorporate them into this rulemaking.

Fundamentally, when evaluating the costs and cost-effectiveness of various emission control technologies or practices, EPA needs also to take into account what it would cost to monitor compliance with those requirements. Monitoring is an inherent part of a standard, not simply an add-on to it. And given that monitoring costs can often equal or even exceed the costs of controls, it would defy common sense to think that, when Congress spoke about the need to consider costs when setting GACT standards, it was only concerned about the costs of controls and not monitoring.

Finally, SOCMA believes that § 63.11501(d) should allow the required semiannual report to be included in (or subsumed by) the Title V semiannual monitoring report for those facilities with Title V permits.

J. Facilities Only Subject to Management Practices Should Not Have to Comply with SSM Requirements

SOCMA believes that facilities subject only to management practice requirements under the rule should not be subject to the startup, shutdown and malfunction plan requirements of the General Provisions. Such sources by definition have very low potential to emit HAPs, and whatever emissions might be attributable to SSM events should not be consequential. They certainly do not warrant the effort required to develop

and maintain SSM plans. Accordingly, sources that are not subject to control requirements should only have to file an initial notification stating that fact, and retain records on-site to show continued inapplicability.

K. Facilities Should Get Credit for Prior Efforts

SOCMA's experience has shown that many facilities voluntarily became synthetic minor sources of HAPs to avoid the costs of complying with MACT standards. (Such facilities have installed control equipment to bring them below major source levels and voluntarily submitted to state air permits that made those lower levels legally enforceable.) In addition, many facilities in non-attainment areas have recently installed air pollution control equipment to meet state RACT requirements. As a result of these actions, many of these facilities are attaining high control performance (e.g., 80-85%), but cannot meet the proposed 90% control requirement in the proposal. In fact, meeting the new requirement might require these facilities to completely scrap what they have installed to date and start all over. SOCMA believes that it would be unfair to effectively punish these sources for their voluntary expenditures, particularly given the fact that the new control requirement will result in such small incremental increases in performance. (In fact, the closer a facility already is to meeting the proposed limits, the higher the incremental cost of compliance will be – compared to a facility that has done nothing – if the facility has to replace its current control equipment.)

To limit the unfairness of this outcome, SOCMA proposes that if a source installed control equipment after the date of the Federal Register publication of the proposed MACT rule that would apply if the facility were a major source, the source should get some credit for those pollution prevention activities. In addition, EPA should grandfather recently installed RACT equipment. EPA could model this credit on the approach taken in the MON MACT (specifically, 40 C.F.R. § 63.2495), PHARMA MACT, and other EPA rules which have encouraged pollution prevention.

L. Where More than One Area Source Rule Applies, Sources Should Be Able to Opt into the More Restrictive One

SOCMA strongly supports the general principle that EPA should avoid imposing duplicative and overlapping requirements. Other area source rules that have partial overlap with Subpart VVVVVV should not impose additional and burdensome requirements on a facility that is already in full compliance with that rule. EPA should thus clarify the current rule to make sure that any operation that is covered by another area source standard is exempt from this rule. As SOCMA previously observed in its comments on the MON proposed rule, a series of memos dating back to 1997 reveal that EPA clearly intended that the MON standard only be applicable to processes not covered by any other MACT standard.²³ In the final MON rule, EPA provided that facilities

²³ Those memoranda included: 1. January 28, 1997 Alpha-Gamma Memorandum, Subject: Presumptive MACT For Continuous Processes at Existing Sources; 2. May 29, 1998 Alpha-Gamma Memorandum, Subject: Preliminary MACT Floors for MON Batch

potentially subject to the both the MON and another MACT standard could elect which standard they would comply with. SOCMA urges EPA to issue a similar provision in the final Subpart VVVVVV rule.

VI. Compliance Time

A. SOCMA supports the provision of reasonable compliance time for existing sources.

Section 63.11494(g) in the proposed rule provides three years for existing affected sources to comply with the rule requirements. This is the precedent established in the MACT rules and provides adequate time to understand requirements, design, purchase, and construct required facilities and to put in place systems for compliance. Assuring adequate time is particularly critical for smaller area sources, which have little or no onsite technical and support personnel and thus take longer to carry out projects.

B. Adequate compliance time should be provided for new affected sources, existing sources not subject to the rule which become subject in the future, and sources just starting construction.

Section 63.11494(h) requires new affected sources (affected facilities which began construction after October 6, 2008) to be in compliance upon startup. Generally, such a requirement to meet a standard at start-up is reasonable, since there is significant lead time when a new facility is being constructed, and consequently, SOCMA supports this requirement for totally new chemical manufacturing sites.

More commonly, however, a new process will be added to an existing site or an existing process will change in a way that causes a UAT to be present in the site's chemical manufacturing operations for the first time. Compliance time for these situations is not addressed in the proposed rule and is not as simple as it would be for the construction of new facilities. In most of these cases, the bulk of the equipment that will become subject to the rule is not being changed. If, for instance, a site has six chemical manufacturing processes that involve organic HAPs, but not UATs, this proposed rule of course would not apply. However, if a new process is added or if one of the existing processes changes (i.e., due to introduction of a new product or process improvements), all six processes would become subject to this rule's requirements because the affected facility is defined as the collection of all chemical manufacturing processes at the site.

If the affected facility is not changed to a process-unit basis, as SOCMA recommends elsewhere in these comments, the requirement to comply at startup should

and Continuous Chemical Manufacturing Process; 3. April 23, 1999 Alpha-Gamma Memorandum, Subject: MACT Floors for Batch and Continuous Chemical Manufacturing Processes at Existing Sources Covered by the MON; and 4. May 20, 1999 Alpha – Gamma Memorandum, Subject: Existing Source MACT Floors for Batch and Continuous Chemical Manufacturing Processes Covered by the MON.

be limited to cases where (i) a UAT is being processed, etc. for the first time; and (ii) new equipment is being installed. After all, the obligation to comply at startup applies only to “new” facilities;²⁴ these are limited to those that are “constructed” or “reconstructed” after October 6 of last year;²⁵ and those terms in turn are defined exclusively in terms of “fabrication, erection, or installation of an existing source” or “addition of equipment”²⁶ – not the use for the first time of a new chemical. If a new UAT is used or generated in existing equipment at an existing process unit after this rule is promulgated, the existing unit should have 3 years to comply under the spirit of proposed § 63.11494(f). Similarly, other chemical manufacturing operations at the site should be given three years to come into compliance. Without fixing the affected source or providing reasonable compliance time for process units that are not being constructed or changed, new product introduction and process improvements will be stifled or, at best delayed, in some cases. The proposed rule’s economic analysis did not consider these significant impacts on industry economics or employment.

Facilities and processes that are just starting construction were not aware such requirements when they were designed and will not be aware of the final requirements until the rule is finalized; their startup could be delayed if they and the entire site at which they are located must comply on startup. Even more critically, these facilities had no way of knowing that the proposed rule would impose requirements on existing processes that are not being added or changed and thus those sites will not have projects in place to comply with this new rule for the processes not under construction. For these reasons, SOCMA urges EPA to modify section 63.11494(h) to allow new sources to comply at startup or at three years from the publication of the final rule, whichever is later.

C. Adequate compliance time should be provided for equipment that becomes subject to the rule due to unplanned process changes or introduction of new products in the future.

Some of the UATs are relatively ubiquitous (e.g., butadiene) and may occur unexpectedly in small amounts as reaction byproducts or become present in a process as impurities in feed, process additives or catalysts. In such cases, their presence may not be known until after the UAT is present, or the process change may be so minor that no significant lead time or process modification or construction is needed. In these cases, compliance at startup for the impacted process and all chemical manufacturing processes at a site cannot be achieved. SOCMA believes that affected facilities should be given up to three years to comply when the presence of a UAT occurs at a site through an unplanned occurrence or when no significant construction or equipment modification is required.

²⁴ Proposed 40 C.F.R. § 63.11494(h).

²⁵ *Id.* § 63.11494(d)(2).

²⁶ Proposed 40 C.F.R. § 63.11502 does not define “construction” or “reconstruction,” but refers to 40 C.F.R. § 63.2550, which defines “construction” and references the definition of “reconstruction” in § 63.2.

Additionally, many sites also must react quickly to market opportunities and begin making new products quickly or run the risk of losing business. If a new product introduces a UAT to the site, the proposed immediate compliance requirement for all chemical manufacturing at the site would prevent the facility from taking advantage of this business opportunity. As we discuss separately in our discussion on rule applicability, the cost of imposing this rule on an entire site in these cases may be such a barrier that the site foregoes the opportunity and the business is lost. A compliance period of three years should be allowed in such situations.

VII. EPA Should Clarify Text Language and Eliminate All Cross-References in the Rule

A. Clarification of “process, use, produce, or generate”

The first sentence in 63.11494(a) uses the phrase “process, use, produce, or generate” while the second sentence uses the phrase “feedstocks and products.” It is not clear that the 0.1% and 1.0% thresholds discussed in connection with “feedstocks and products” also apply to all urban HAPs that are “processed, used, produced, or generated.” More generally, SOCMA believes that these sentences need to use the same terminology. We prefer that “feedstocks and products” be used exclusively, in part because it is not clear how “generate” is different from “produce” or how “use” is different from “process.” If EPA retains those four verbs, it should clearly exclude stationary items like piping and catalyst from the definition of “use.” Further, “produce or generate” should be defined as producing or generating by chemical reaction so that it would exclude a situation whereby an urban HAP gets concentrated in the process (for example, a metal HAP might be present in a waste fuel at <0.1% and be present at >0.1% in ash after being combusted in a furnace.) In this case, the metal HAP itself is not “produced or generated.”

B. Management Practice and Control Requirements for a Given Emission Point Should Be Presented Integrally

It is not helpful to sources to separate the management practice requirements in a separate section from the control requirements, for two reasons:

A source is most likely to look up the applicable requirements on an emission point basis, and expect to find all such requirements there.

Separating the two leads to redundant cross-references and the potential for unintended discrepancies. These are rampant in the proposal:

- Section 63.11495(h) indicates that 63.11500(a) only applies for “wastewater streams that contain HAP listed in Table 3 to this subpart.” However, 63.11500(a) does not repeat this criterion. SOCMA urges EPA to either combine all wastewater requirements in one section (preferred) or repeat the Table 3 HAP criterion in 63.11500(a).

- Section 63.11495(g) indicates that § 63.11500(b) only applies if the cooling tower system serves heat exchangers with process fluid that contains any Part 63, Supart F, Table 4 HAP. However, 63.11500(b) does not repeat this criterion. The rule should either combine all cooling tower requirements in one section (preferred) or repeat the Part 63, Supart F, Table 4 HAP criterion in § 63.11500(b).
- Section 63.11500(b) is largely redundant with 63.11495(g)(2), which already requires compliance with Item 5 in Table 2. The only new information provided in (b)(1) through (b)(3), which customize the section 63.104 requirements. If all the cooling tower requirements were in one section, this redundancy would be avoided.

C. Table 2 Format Consistency Is Needed

In Table 2, for some items, the applicability criteria (TRE < 1.0, for example) is specified in the left-hand column, while for others it is included only in the first item in the middle column (batch vents), and yet others exclude the applicability criteria entirely (storage tanks). Applicability criteria should be consistently listed in the left-hand column of the table. Specifically, the left-hand column of the table should look similar to the example below:

1. Batch process vents with total organic HAP emissions \geq xx lb/yr
2. Each continuous process vent with a TRE \leq 1.0
3. Metal process vents with total metal HAP emissions equal to or greater than xx lb/yr
4. Each storage tank that meets the size and maximum true vapor pressure thresholds for control in 40 CFR part 60 Subpart Kb.
5. Each cooling tower system with a recirculation rate \geq 8,000 gal/min that serves heat exchangers with process fluid that contains xx ppm of any HAP listed in Table 4 to 40 CFR part 63, subpart F
6. Transfer operations with total partial pressure of HAPs \geq xx psia
7. Wastewater stream containing \geq xx ppm Table 9 HAPs
8. Wastewater stream containing partially soluble HAP at a concentration \geq 10,000 ppmw

D. EPA Should Put All Relevant Rule Text in Subpart VVVVVV

SOCMA believes that the myriad cross-references in the proposal are too complicated for most small facilities to interpret. Such facilities would have to hire consultants to interpret all of these references, but may not have the financial resources to do so.

It is especially problematic that EPA has cross-referenced other regulatory provisions, with provisos about how they need to be amended to conform to this rule, in Tables 2 and 4. For example, here is an egregious (but typical) reference from Table 2:

Comply with exceptions and alternatives to requirements in subpart SS as specified in § 63.2450(g) through (i), (k), (l), (m)(3), (p), and (q), except that references to emission limits in Table 1 of subpart FFFF mean the emission limits in item 2.a. of this Table, and references to reporting requirements in § 63.2520 mean Sec. 63.11501 of this subpart.²⁷

It is unfair to expect small facilities to reconstruct what EPA has in mind by navigating – and then cutting and pasting from – such a tangled labyrinth of citations. It is reasonable to expect that EPA would clarify its compliance requirements for facilities, and not require that facilities simply “figure it out.” By welcome contrast, SOCMA notes that, in EPA’s recent Revisions to the Definition of Solid Waste final rule, EPA ultimately decided simply to republish all of the relevant financial assurance language with the necessary conforming changes, rather than cross-reference other language that was not quite right.²⁸

SOCMA encourages EPA to revise the proposal to make it much clearer and to facilitate the subsequent incorporation of enforceable requirements, prevent misunderstandings, and minimize costs to smaller facilities.

VIII. EPA Needs to Clarify the Averaging Periods for Determining Compliance With Process Vent Requirements

The proposed rule’s requirements for large process vents are expressed on a facility-side basis. But they cross-reference numerous MACT standards (e.g., Subpart SS) that are expressed on a chemical process unit basis. Because SOCMA plants generally are batch plants, those units will not be operating continuously. Unless EPA adopts SOCMA’s proposal to apply the rule on a process unit by process unit basis, sources will have no means of determining how they are supposed to average the emissions of the various batch units across their operating and nonoperating periods to determine whether they are meeting the plant-wide 90% reduction limit.

If EPA retains the proposed facility-wide applicability approach, it needs to clarify this very important issue. SOCMA proposes that facilities be free to use different options, including the following:

- 1) If, by the compliance date, the facility is subject to a state permit regarding the relevant emissions, the facility should be able to determine compliance for Subpart VVVVVV purposes using the same averaging periods as it uses under its state permit.
- 2) Otherwise, compliance should be determined using the SOCMA PTE methodology for batch processing plants that was approved by EPA in 1996.

²⁷ 73 Fed. Reg. 58382.

²⁸ See 73 Fed. Reg. 64764-788 (Oct. 30, 2008).

IX. SOCMA Supports EPA's Proposal Not to Require Title V Permits for Regulated Sources

SOCMA agrees with EPA's reasoning for its proposed exemption from Title V permitting requirements for affected sources. As EPA correctly noted in its preamble to the proposed rule, many of the facilities that would be affected are small entities "which lack the technical resources that would be needed to comply with permitting requirements and the financial resources that would be needed to hire the necessary staff or outside consultants."²⁹ SOCMA agrees that "the costs of compliance with Title V would impose a significant burden" on many of these facilities, and that "there would not be significant improvements to the compliance requirements in the proposed rule."³⁰ Many of SOCMA's small and medium-sized members would face significant financial costs if Title V permits were required.

X. SOCMA Supports the Proposed R&D Exemption

SOCMA supports the exemption for R&D facilities in this proposal. As SOCMA has previously explained, R&D is the critical engine that drives the chemical industry, and thus much of this nation's technical innovation and resulting competitiveness. It is crucially important, therefore, that EPA preserve the industry's ability to conduct research and develop (or improve) new products and processes. Additionally, R&D activities have very small levels of emissions which make characterization and measurement of them virtually impossible and mostly meaningless.

But SOCMA urges EPA to allow for more flexibility in the exemption to recognize the nature of batch facilities that comprise a large proportion of the area source community. SOCMA proposes two modifications:

A. Commercial Production Not Involving HAPs

The exemption should allow for significant manufacturing, when both limited research and limited production are carried out at the same facility, so long as the manufacturing does not involve any urban HAPs.

The following example suggests why SOCMA believes such an exemption is necessary. One member facility currently uses the majority of its equipment approximately 100% of the time for research and development, infrequently utilizing an urban HAP and a non-urban HAP (methylene chloride and methanol, respectively). However, the business model for this facility will change beginning in calendar year 2010. During the period of 2010 – 2012, the facility will use its equipment 20 – 30% of the time for R&D, which will still utilize the urban and non-urban HAPs. The remaining time will be used for production of pharmaceutical active ingredients used in clinical trials and commercial production – all of which will utilize no HAPs. After 2012, the

²⁹ *Id.* at 58372-73.

³⁰ *Id.* at 58373.

facility will primarily shift to near-full production, with only limited R&D effort. Even then, however, R&D will still utilize the same two HAPs, whereas production of drug actives used in clinical trials and commercial production will utilize no HAPs.

It is not clear whether the R&D exemption in Section 63.11494(c)(3) of the proposed rule would apply after year 2010 in the above example. This section exempts research and development facilities as defined in CAA section 112(c)(7). That provision defines a “research or laboratory facility” as “any stationary source whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically trained personnel and is not engaged in the manufacture of products for commercial sale in commerce, except in a de minimis manner.”³¹ Since R&D will not be the facility’s primary purpose after 2010, it would seem not to meet the first half of the definition. However, R&D will still be the only activity that utilizes urban HAPs. Logically speaking, the facility should be exempt in 2010 for the same reason that it was exempt in 2008 and 2009.

Accordingly, SOCMA encourages EPA to clarify the proposed exemption by adding the following italicized words to Section 63.11494(c)(3):

“Research and development facilities as defined in CAA section 112(c)(7), or combined research and development/production facilities that only use a Table 1 HAP for research or development activities.”

B. Commercial Development & Optimization Facilities

The primary reasons that EPA has previously exempted research facilities from standards such as this one are that they generally (i) are conducted in glassware (e.g., flasks and beakers with stoppers, etc.), rather than in larger kettles or reactors; (ii) are conducted in laboratories with hoods and other effective control equipment; and (iii) involve very small quantities of a wide, and generally unpredictable, range of substances.

Small sources of the sort that are common among SOCMA’s membership commonly conduct commercial product development and optimization activities which may not qualify as research, but use the same equipment and operating conditions as research. These activities do not rise to the scale of pilot production, but instead are conducted like research: in glassware (or other similar size metallic and non-metallic materials), in process and commercial development laboratories, using very small quantities of a wide and unpredictable variety of substances. The same obstacles and inefficiencies created by applying federal air standards to research and development would be created by applying the proposed rule to these activities. Conversely, EPA can exempt these activities with the same assurance that it could exempt research facilities.

³¹ 42 U.S.C. § 112(c)(7).

XI. EPA Should Formally Confirm that Its “Once In, Always In” Policy Does Not Apply to this Rule

Given the costs and potential compliance liability associated with being subject to this rule, a facility that is covered by it may well decide to avoid those costs and liability by ceasing to process, etc. any of the 15 listed UATs. Some have questioned whether a facility would indeed have this freedom after the effective date of the rule, or whether the 1995 “one in/always in” policy that applies to major HAP sources subject to MACT standards would also apply to minor HAP sources subject to area source standards.

The short answer should be that the “once in, always in” policy, by its terms, only applies to major HAP sources, and so has no applicability to minor sources.³² Further, SOCMA believes that there is no comparable EPA guidance that would purport to limit the ability of area sources to escape coverage by an area source standard. EPA staff has unofficially indicated to SOCMA that both of these statements are correct.

Finally, it is clear that EPA, states and others have all concluded that the “once in, always in” policy should be *replaced* for major sources – which would certainly counsel against *extending* it to apply to area sources. As explained in EPA’s January 3, 2007 proposed rule, the policy “set forth transitional policy guidance and was intended to remain in effect only until such time as the Agency proposed and promulgated amendments to the Part 63 General Provisions.”³³ That notice also explained that STAPPA/ALAPCO³⁴ had asked EPA to revise the policy because it “provides no incentive for sources, after the first substantive compliance date . . . to implement P2 [pollution prevention] measures . . . because there are no benefits to be gained. . . .”³⁵ EPA notes that it has also “heard from others . . . that the [once in, always in] policy serves as a disincentive for sources to reduce emissions of HAP . . .”³⁶ EPA has thus proposed to rescind the policy in favor of a rule that would allow MACT sources at any time to become synthetic area sources by accepting permit limits that would keep them below major source emission potentials.

Given these cogent criticisms of the 1995 and EPA’s announced intention to rescind it, it would be counterintuitive for EPA to adopt a comparable policy for area sources. Nor would it be sensible for EPA to require a source that wishes to avoid being covered by the proposed rule to obtain a permit under which it agrees not to process, produce, use or generate any of the listed UATs. Rather, EPA should simply confirm in the final rule that facilities will remain free at any time to eliminate their processing, etc. of UATs and thus become exempt prospectively from this rule.

³² See memo from John Seitz to EPA Regional Air Division Directors entitled *Potential to Emit for MACT Standards—Guidance on Timing Issues* (May 16, 1995).

³³ 72 Fed. Reg. 71 (Jan. 3, 2007).

³⁴ The organization representing state and local air pollution control agencies, now known as the National Association of Clean Air Agencies.

³⁵ 72 Fed. Reg. 71 (Jan. 3, 2007).

³⁶ *Id.*

XII. Conclusion

SOCMA welcomes this opportunity to comment on the proposed rule, and has appreciated EPA's willingness to listen to the concerns of SOCMA members during the rulemaking process. Please contact Daniel Moss at 202-721-4143 or mossd@socma.org if you have any questions about our comments, or would like additional information.

Sincerely,

Daniel Moss
Manager, Government Relations