6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA-HQ-OAR-2003-0121; FRL-8190-5]

RIN 2060-AM43

National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule; amendments.

SUMMARY: On November 10, 2003, EPA promulgated national emission standards for hazardous air pollutants for miscellaneous organic chemical manufacturing. Several petitions for judicial review of the final rule were filed in the United States Court of Appeals for the District of Columbia Circuit. Petitioners expressed concern with various requirements in the final rule, including applicability of specific operations and processes, the leak detection and repair requirements for connectors, criteria to define affected wastewater streams requiring control, control requirements for wastewater streams that contain only soluble hazardous air pollutants, the definition of "process condensers," and recordkeeping requirements for Group 2 batch process vents. In this action, EPA amends the final rule to address these issues

and to correct inconsistencies that have been discovered during the review process.

EFFECTIVE DATE: [INSERT DATE OF PUBLICATION OF THE FINAL AMENDMENTS IN THE FEDERAL REGISTER].

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2003-0121. All documents in the docket are listed on the www.regulations.gov web site. Although listed in the index, some information is not publicly available, e.g., confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy at the Air and Radiation Docket, Docket ID No. EPA-HQ-OAR-2003-0121, EPA/DC, EPA West, Room B-102, 1301 Constitution Ave., NW, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: Mr. Randy McDonald, Office of Air Quality Planning and Standards, Sector

Policies and Programs Division, Coatings and Chemicals Group (E143-01), U.S. EPA, Research Triangle Park, NC 27711, telephone number: (919) 541-5402, fax number: (919) 541-0246; e-mail address: mcdonald.randy@epa.gov.

SUPPLEMENTARY INFORMATION:

Regulated Entities. Categories and entities potentially regulated by this action include:

Category	NAICS code[1]	Examples of regulated entities
Industry.....	3251, 3252, 3253, 3254, 3255, 3256, and 3259, with several exceptions.	Producers of specialty organic chemicals, explosives, certain polymers and resins, and certain pesticide intermediates.

[1] North American Industry Classification System.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your facility is regulated by this action, you should examine the applicability criteria in 40 CFR 63.2435 of subpart FFFF (national emission standards for hazardous air pollutants (NESHAP) for miscellaneous organic chemical manufacturing). If you have any questions regarding the applicability of this action to a particular entity, consult either the air permit authority for the entity or your EPA regional representative as listed in 40 CFR 63.13 of subpart A (General Provisions).

World Wide Web (WWW). In addition to being available in the docket, an electronic copy of the final action will also available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the final action will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at http://www.epa.gov/ttn/oarpg/. The TTN provides information and technology exchange in various areas of air pollution control.

Judicial Review. Under section 307(b)(1) of the Clean Air Act (CAA), judicial review of the final amendments is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION OF THE FINAL AMENDMENTS IN THE FEDERAL REGISTER]. Under section 307(d)(7)(B) of the CAA, only an objection to the final amendments that was raised with reasonable specificity during the period for public comment may be raised during judicial review. Moreover, under section 307(b)(2) of the CAA, the requirements established by the final amendments may not be challenged separately in any civil or criminal proceedings brought by EPA to enforce these requirements.

Section 307(d)(7)(B) of the CAA further provides that "[o]nly an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review." This section also provides a mechanism for us to convene a proceeding for reconsideration, "[i]f the person raising an objection can demonstrate to the EPA that it was impracticable to raise such objection within [the period for public comment] or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule." Any person seeking to make such a demonstration to us should submit a Petition for Reconsideration to the Office of the Administrator, U.S. EPA, Room 3000, Ariel Rios Building, 1200 Pennsylvania Ave., NW, Washington, D.C. 20460, with a copy to both the person(s) listed in the preceding FOR FURTHER INFORMATION CONTACT section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave., NW, Washington, D.C. 20004.

Organization of This Document. The information presented in this preamble is organized as follows:

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I. Background

On November 10, 2003, we promulgated NESHAP for miscellaneous organic chemical (MON) manufacturing as subpart FFFF of 40 CFR part 63. Petitions for review of the MON were filed in the United States Court of Appeals for the District of Columbia Circuit by American Chemistry Council, Eastman Chemical Company, Clariant LSM (America),

Inc., Rohm and Haas Company, General Electric Company, Coke Oven Environmental Task Force, and Lyondell Chemical Company (collectively "Petitioners").[1] These matters were consolidated into American Chemical Council, et al. v. EPA, No. 04-1004, 04-1005, 04-1008, 04-1009, 04-1010, 04-1012, 04-1013 (District of Columbia Circuit). Issues raised by the petitioners included applicability of the final rule; leak detection and repair requirements for connectors; definitions of process condenser, continuous process vent, and Group 1 wastewater; treatment requirements for wastewater that is Group 1 only for soluble hazardous air pollutants (SHAP); recordkeeping for Group 2 batch process vents; and notification requirements for Group 2 emission points that become Group 1 emission points. In early October 2005, the parties signed a settlement agreement. Pursuant to section 113(g) of the CAA, notice of the settlement was published in the Federal Register on October 26, 2005 (70 FR 61814).

On December 8, 2005, we proposed amendments to subpart FFFF to address the issues raised by Petitioners and made other corrections and clarifications to ensure that the final rule is implemented as intended. We received a total

[1] The Fertilizer Institute and Arteva Specialties S.'ar.l also filed petitions for review but voluntarily withdrew their petitions.

of 20 comment letters from 18 stakeholders. Most of the letters were from companies that will have affected sources under subpart FFFF, three were from industry trade associations, three were from environmental consulting firms, and one was from a law firm on behalf of some of the petitioners. The final amendments reflect full consideration of the petition, and all of the public comments we received on the proposed amendments.

II. Summary of the Final Amendments

The final amendments clarify applicability of subpart FFFF, provide additional compliance options, modify initial and continuous compliance requirements, and simplify recordkeeping and reporting requirements. Significant changes are summarized in the sections below. Additional clarifications and corrections are highlighted in Table 1 to this preamble and in the preamble to the proposed amendments (70 FR 73098, December 8, 2005). Collectively, these provisions will reduce the burden associated with demonstrating compliance without affecting emissions control or the ability of enforcement agencies to ensure compliance.

A. Applicability

The final amendments exempt carbon monoxide production and additional polymer finishing operations from subpart

FFFF. In the definition of the term "miscellaneous organic chemical manufacturing process," the final amendments clarify the end point of processes that produce solid products.

B. Emission Limits, Compliance Options, and Initial Compliance Requirements

Many of the changes in the final amendments involve requirements for process vents. For example, Table 2 in the amended rule allows floating roof technology to control batch process vent emissions from process tanks. The final amendments also change the definition of the term "continuous process vent" to include all continuous operations, not just reactors, air oxidation reactors, and distillation units. A corresponding change has been made in the definition of the term "surge control vessel." Another change to the definition of the term "continuous process vent" requires determinations of continuous process vents prior to combination with emissions from another miscellaneous organic chemical manufacturing process unit (MCPU).

Table 3 in the final rule currently requires control of "particulate matter (PM) hazardous air pollutant (HAP)" emissions from process vents at new sources. The amendments replace requirements for "PM HAP" with

requirements for "HAP metals." One of the related changes is that the emissions threshold above which control is required has been changed from 400 pounds per year (lb/yr) of PM HAP to 150 lb/yr of HAP metals. Another change in the amended rule is that Method 29 of appendix A of 40 CFR part 60 is allowed as an alternative to Method 5 of appendix A of 40 CFR part 60.

We have amended the definition of the term "process condenser" to clarify what it means for a condenser to be "integral to the MCPU." Under the current definition, condensers that receive vapor streams from batch operations in an MCPU at temperatures below the boiling or bubble point of the HAP are not process condensers. The amended definition includes most of these condensers, provided they are capable of and normally used for the purpose of recovering chemicals for fuel value, use, or reuse, or for sale for fuel value, use, or reuse. Exceptions are provided for condensers that are considered to be part of recovery devices.

The final amendments specify corrected procedures for using specified equations to calculate uncontrolled emissions from process condensers. The revised procedures require consideration of the condenser exit gas temperature and composition of the condensate. Alternatively,

uncontrolled emissions from process condensers may be estimated based on engineering assessments under the same conditions as the final rule currently allows for estimating emissions directly from the process vessels. The final amendments also specify initial compliance requirements for process condensers. You must either measure the exhaust gas temperature and show it is less than the boiling or bubble point of the substance in the process vessel or perform a material balance around the vessel and condenser to show that at least 99 percent of the material vaporized while boiling is condensed.

The final amendments specify that biofilters are an option for complying with the 95 percent reduction emission limit for batch process vents (see Table 2 to subpart FFFF of part 63). Related amendments in 40 CFR 63.2460(c)(9) specify initial and continuous compliance requirements for biofilters. A performance test must be conducted to demonstrate initial compliance. Either temperature or organic monitoring devices are required to demonstrate continuous compliance. Average temperatures must be determined if you elect to measure temperature at several locations in the biofilter bed. As for other types of control devices, the amendments related to biofilters also cross-reference the testing and continuous parameter

monitoring system(s) (CPMS) requirements in 40 CFR part 63, subpart SS.

The final amendments add a compliance option in Table 3 of subpart FFFF of 40 CFR part 63 for hydrogen halide and halogen HAP emissions from process vents. A halogen atom mass flow rate emission limit of 0.45 kilograms per hour (kg/hr) is allowed as an alternative to the current emission limits that require either a 99 percent reduction or control to an outlet concentration limit of 20 parts per million by volume (ppmv). This mass emission limit applies to each individual continuous process vent and to the collection of all batch process vents within an MCPU.

The final amendments change several of the requirements for wastewater. The concentrations and mass discharge rates of partially soluble HAP (PSHAP), SHAP, and total HAP that define a Group 1 wastewater stream have been changed. The definition of the term "point of determination" (POD) has been changed to specify that the point where effluent is discharged from a scrubber or other control device is a POD. Methyl ethyl ketone has been removed from the list of PSHAP in Table 8 to subpart FFFF of part 63.[2] A new 40 CFR 63.2485(o) requires the CPMS records specified in 40 CFR 63.998(c)(1) in addition to the

[2] MEK has been removed as a result of its removal from the CAA section 112(b)(1) list of HAP. [70 FR 75047, December 19, 2005]

records specified in 40 CFR 63.147(d) for non-flare control devices. Finally, a new compliance option is included in 40 CFR 63.2485(n) that allows certain waste management units in a biotreatment system to be uncovered if the wastewater being treated is Group 1 only for SHAP. This option also allows lift stations with a volume larger than 10,000 gallons to have openings sized as necessary for proper venting as an alternative to the currently specified vent pipe dimensions in 40 CFR 63.136(e)(2)(ii)(A). Amendments in 40 CFR 63.2485(n) also added initial compliance procedures that are specific to the new compliance option.

For equipment leaks, the final amendments allow compliance with 40 CFR part 63, subpart H as an alternative to compliance with either 40 CFR part 63, subpart UU or 40 CFR part 65, subpart F. The amendments eliminate the option for existing sources of complying with 40 CFR part 63, subpart TT. However, the final amendments also allow two exceptions to the three available options. First, for pumps at an existing affected source, you may elect to comply with a leak definition of 10,000 parts per million (ppm) as an alternative to the leak definitions specified in the cross-referenced rules. Second, for connectors in gas service or light liquid service at any affected source,

you may elect to comply with the requirements for connectors in heavy liquid service. The final amendments also specify that bench-scale processes are exempt from the equipment leak requirements.

The final amendments eliminate reporting requirements for offsite cleaning and reloading facilities that control emissions from rail cars and tank trucks that are used in vapor balancing for storage tanks at the affected source. For an offsite cleaning or reloading facility that is subject to any other NESHAP under 40 CFR part 63, the final amendments specify that compliance with the monitoring, recordkeeping, and reporting requirements in the other rule demonstrates compliance with the requirements in subpart FFFF of 40 CFR part 63.

Final amendments to 40 CFR 63.2445 clarify that an initial compliance demonstration must be conducted within 150 days after any of the following process changes: a Group 2 emission point becomes a Group 1 emission point, hydrogen halide and halogen HAP emissions from the sum of all process vents in a process increase to more than 1,000 lb/yr, or a small control device for process vent or transfer rack emissions becomes a large control device.

C. Monitoring Requirements

The final amendments include several changes to the parameter monitoring requirements specified in 40 CFR 63.2450(k). For halogen scrubbers, monitoring caustic strength of the effluent is allowed as an alternative to measuring pH. If the halogen scrubber controls emissions only from batch process vents, the caustic strength or pH may be measured daily instead of continuously. For absorbers that control organic compounds and use water as the scrubbing fluid, liquid and gas flow rates may be monitored instead of the parameters in the current rule. The periodic verification option for control devices that control less than 1 ton per year of HAP is now allowed for all control devices, not just those that control only batch process vents.

D. Recordkeeping and Reporting

The final amendments reduce or eliminate recordkeeping requirements in 40 CFR 63.2525(e) for Group 2 batch process vents. Recordkeeping is eliminated for Group 2 batch process vents that are always controlled with either a flare that meets the requirements of 40 CFR 63.987 or any other control device that meets the requirements for Group 1 batch process vents, provided the worst-case conditions for the control device includes the contribution of all Group 2 batch process vents. Reduced recordkeeping is

allowed if non-reactive organic HAP is the only HAP in the process and usage is less than 10,000 lb/yr or if emissions are less than 1,000 lb/yr. Estimating uncontrolled organic HAP emissions is not required if you demonstrate that non-reactive organic HAP usage is less than 10,000 lb/yr. Data and supporting rationale explaining why non-reactive organic HAP usage will be less than 10,000 lb/yr must be included in your notification of compliance status report.

The final amendments also reduce or clarify reporting requirements. As clarification for process changes in 40 CFR 63.2520(e)(10), it should be noted that a new MCPU is created when a new product is made which is not part of an existing family of materials. Process changes to an existing MCPU such as the addition of new or different equipment, use of different feedstock, or addition of a parallel process may be a change in the operating scenario, but do not constitute a new MCPU. The definition of the term "batch process vent" has been amended to eliminate reporting requirements associated with determinations that emissions from batch operations have HAP emissions below the thresholds for batch process vents. The final amendments eliminate the requirement in 40 CFR 63.2520(e)(10)(ii)(C) of the final rule to provide a 60-day advance notification before batch process vents change from

Group 2 to Group 1. Under the amended rule, you must document such a change in status in your notification of compliance status report in accordance with 40 CFR 63.2520(e)(10)(i). We changed 40 CFR 63.2465(b) to specify that the results of engineering assessments used to estimate uncontrolled hydrogen halide and halogen HAP emissions are to be documented in your notification of compliance status report, not your precompliance report. Finally, the amended rule requires operating logs (and copies of the applicable logs in compliance reports) only for processes with batch process vents from batch operations, not all processes.

III. Response to Comments

A. Applicability

Comment: Although not directly related to the proposed amendments, one commenter expressed concern that, despite previous attempts at clarification, a potential for overlap and conflict between the applicability provisions in the Miscellaneous Organic Chemical Manufacturing NESHAP (40 CFR part 63, subpart FFFF) and the miscellaneous coating manufacturing NESHAP (40 CFR part 63, subpart HHHHH) still exists. Based on the rules as currently written and additional guidance from EPA (70 FR 25678, May 11, 2005), the commenter understands that any process that

produces a material that is used as a coating is subject to 40 CFR part 63, subpart HHHHH. The commenter has two concerns with this requirement. First, it is not clear which rule applies to the production of materials that have both coating and non-coating uses. Second, some coating manufacturing processes involve traditional chemical manufacturing operations, including reactions, which differ significantly from the processes consisting of mixing and blending operations that were used to develop the maximum achievable control technology (MACT) floor and regulatory requirements in 40 CFR part 63, subpart HHHHH. On the other hand, these processes are similar to processes that were used to develop the MACT floor and regulatory requirements in 40 CFR part 63, subpart FFFF.

To resolve the conflicts, the commenter requested that we issue a separate rulemaking to revise definitions in the Miscellaneous Coating Manufacturing NESHAP. The commenter, in conjunction with other companies, suggested changes to definitions in earlier communications with EPA. If changes are made before the compliance dates of both rules, needless effort to prepare and review precompliance reports for these situations can be avoided.

Response: We share the commenter's concern about the potential for conflict in applicability determinations. To

clarify the applicability and eliminate the conflict, we have proposed changes to the definition of the term "coating" in the Miscellaneous Coating Manufacturing NESHAP (71 FR 28639, May 17, 2006). One of the proposed changes would clarify that only material produced by blending, mixing, dilution, or other formulation operations would be a coating. Thus, a process that involves only formulation operations would be subject to 40 CFR part 63, subpart HHHHH if the product is a coating. A second proposed change would clarify applicability for processes that involve chemical synthesis or separation of formulation components prior to the formulation operations. If the synthesized or separated material is stored as an isolated intermediate or final product prior to use in the formulation operation, the synthesis or separation process is subject to 40 CFR part 63, subpart FFFF. Thus, applicability of 40 CFR part 63, subpart FFFF would end with the storage vessel fed from the synthesis or separation operation, and 40 CFR part 63, subpart HHHHH would apply following storage through final production of the coating. When the synthesized or separated component is not stored before use in a formulation step, the second proposed change to the definition of the term "coating" would specify that a coating does not include materials

made in processes where a formulation component is synthesized by chemical reaction or separation activity and then transferred to another vessel (without storage) where it is formulated to produce a material used as a coating. The preamble to these proposed amendments to the Miscellaneous Coating Manufacturing NESHAP states that comments must be received on or before July 3, 2006.

Comment: One commenter described how they think several tanks in a specific miscellaneous organic chemical manufacturing process would be classified under the amended rule. According to the commenter, a molten material from batch reactors is collected in tank A. Typically, the material from tank A is sent to a continuous centrifuge to remove a catalyst. The catalyst-free material is then transferred to either tank B or tank C. Still molten, material in tanks B and C is either transferred to rail cars for shipment or used onsite as feed material for a flaker or pastille maker. The flaker and pastille maker operates continuously, except when it is necessary to switch from one feed tank to the other. The commenter believes tank A is a surge control vessel, and tanks B and C are either storage tanks or surge control vessels.

Response: Although this is not the proper forum for a site-specific applicability determination, we will provide

a general assessment based on the limited available information. Because it is managing the flow of material into a continuous operation, tank A is a surge control vessel. Since the material in tanks B and C is sometimes sold, these tanks mark the end of the process, and the tanks are storage tanks. In this case, the flaker and pastille maker is a separate process.

The determination would be more difficult if all of the material in tanks B and C was used onsite. If material were sometimes added to and withdrawn from these tanks simultaneously, then they would be managing flow to a continuous operation, and they would be surge control vessels. On the other hand, if it could be demonstrated that the tanks are being used solely for storage, then the molten material would be an isolated intermediate, and tanks B and C would be storage tanks. Note that in table 1 to this preamble we describe a change in the final amendments to the definition of "isolated intermediates." This change clarifies that storage equipment for isolated intermediates is part of the MCPU that produces the isolated intermediate.

Comment: One commenter thinks polymer products should not be regulated as "volatile organic liquids" under either subpart FFFF or other regulatory programs because they have

very high molecular weights and negligible vapor pressure.

Response: Processes that produce certain polymer products are regulated under 40 CFR part 63, subpart FFFF if HAP are used in the process. However, only the HAP are subject to emission limits. The non-HAP polymer products themselves are not subject to emission limits under 40 CFR part 63, subpart FFFF. The requirements in other regulatory programs are not addressed in this response because today's action deals only with amendments to 40 CFR part 63, subpart FFFF.

B. Requirements for Process Vents

Comment: The proposed amendments included an additional compliance option for batch process vents that would allow the use of biofilters to comply with the 95 percent reduction option. One commenter requested that this option be made available for continuous process vents as well. The commenter realizes that, technically, biofilters may be used to comply with the 98 percent reduction option in table 1 to subpart FFFF, but the commenter believes this is not feasible with current biofilter technology. To support his request, the commenter noted that biofilters have environmental benefits relative to the combustion devices they are likely to supplant. Specifically, both the consumption of fossil

fuels and the generation of criteria pollutant emissions would be lower if continuous process vents are controlled using biofilters. The commenter also noted that there is no technological barrier to using biofilters to control emissions from continuous operations, and there is regulatory precedent for their use to control emissions from continuous operations (i.e., 40 CFR part 63, subpart DDDD and subpart UUUU).

Response: We have decided not to include the requested biofilter option at this time. Although we agree that biofilters have some environmental advantages over combustion devices, we are concerned that the difference between 98 percent and 95 percent reduction in HAP emissions is not offset by the benefits of reduced fuel use and criteria pollutant emissions. Analysis of the offsets was not necessary for batch process vents because the rule already included a 95 percent reduction option before the biofilter option was proposed.

This issue is not closed. We have initiated a study to investigate the applicability of biofilters for continuous process vent emissions from miscellaneous organic chemical manufacturing processes. Some of the things we would like to determine are as follows. What level of control can be achieved? Does the level of

control vary for different HAP? What effect do other emission stream characteristics such as flow rate and temperature have on the control efficiency? How much of the HAP removed from the emission stream is transferred to wastewater discharges? How much electricity is needed to run fans and pumps associated with a biofilter? How much solid waste is generated by biofilters, and how must it be disposed? Using the information collected, we will also reassess the environmental impacts of biofilters versus combustion devices. Depending on the results, we may decide to propose some type of biofilter option for continuous process vents in 40 CFR part 63, subpart FFFF in the future.

Comment: One of the proposed amendments added a compliance option for process vents that emit hydrogen halide and halogen HAP. This option, in entry 1.b. of Table 3 to subpart FFFF of 40 CFR part 63, would allow compliance by reducing the "halogen atom mass emission rate to ≤0.45 halogen HAP kg/hr by venting through a closed vent system to a halogen reduction device." Three commenters noted that it is unclear which vents need to be controlled when the collective hydrogen halide and halogen emissions from all vents in a process are at least 1,000 lb/yr. The commenters suggested clarifying that the limit applies to

each individual process vent. According to two of the commenters, if a stream that is controlled to <0.45 kg/hr is in compliance, then it seems logical that any uncontrolled stream from the process that contains <0.45 kg/hr should also be in compliance.

Response: Application of the 0.45 kg/hr limit for hydrogen halide and halogen HAP differs for batch and continuous process vents. It applies to the sum of all batch vents and to each individual continuous process vent. This approach is consistent with the way limits are applied for organic HAP emissions from batch and continuous process vents. The language in Table 3 to subpart FFFF of 40 CFR part 63 has been changed to clarify the requirements.

Comment: One commenter requested clarification of the language in 40 CFR 63.2450(o), which currently states that "you may not use a flare to control halogenated vent streams or hydrogen halide and halogen HAP emissions." The commenter is concerned that this language appears to prohibit all vent streams with hydrogen halide and halogen HAP from flares, even if no control of hydrogen halide and halogen HAP is required for the stream. To clarify the paragraph, the commenter suggests changing it to read as follows: "You may not use a flare to control halogenated

vent streams or as a control device for hydrogen halide and halogen HAP emissions to comply with Table 3."

Response: We have changed 40 CFR 63.2450(o) as suggested by the commenter because the suggested language is consistent with our intent, and it may eliminate confusion. If hydrogen halide and halogen HAP in a vent stream must be controlled to meet the emission limits in Table 3 to subpart FFFF of 40 CFR part 63, then that vent stream may not be vented to a flare. All other vent streams that contain hydrogen halide and halogen HAP may be vented to a flare. For example, a continuous process vent stream containing less than 0.45 kg/hr of hydrogen halide and halogen HAP could be sent to the flare.

Comment: Two commenters noted that the language in entry 1.a of Table 3 to subpart FFFF of 40 CFR part 63 appears to require the use of a single closed-vent system to convey hydrogen halide and halogen HAP from all process vents in a process to a control device(s). According to the commenters, this could be a problem because it is possible that the process vents within a process that must be controlled may be separated by distances that would make collection into a single closed-vent system impractical or uneconomical. The commenters suggested changing the

language to allow for the use of a "combination of closed-vent systems."

Response: We did not intend to force the use of a single control device (or series of control devices) for all process vents within the process. Therefore, we have changed entries 1.a and 1.b in Table 3 to subpart FFFF of 40 CFR part 63 to allow venting through "one or more closed-vent systems." We also amended entries 1.a, 1.b, and 1.c in Table 2 to subpart FFFF of 40 CFR part 63 in the same manner. These changes provide flexibility to use as many separate control devices as necessary.

Comment: One commenter requested clarification of the language in 40 CFR 63.2495(b)(1), which currently specifies that "Hydrogen halides that are generated as a result of combustion control must be controlled according to the requirements of 40 CFR 63.994 and the requirements referenced therein." The commenter is concerned that this language appears to require the use of halogen reduction devices regardless of the halogen atom concentration in the emission stream that is combusted. This conflicts with provisions elsewhere in the rule that require the use of halogen reduction devices only when halogenated vent streams are combusted.

Response: To eliminate the inconsistency that the commenter identified, we have amended 40 CFR 63.2495(b)(1) to require control of hydrogen halides generated by combustion control only "if any vent stream routed to a combustion control is a halogenated vent stream."

Comment: One commenter stated that regenerative thermal oxidizers (RTO) should be recognized as a form of incineration that can be used for control as long as any combined control system meets the 98 percent control efficiency or outlet concentration limit.

Response: RTO are acceptable control devices under the rule. Nothing in the rule prohibits their use alone or in combination with other devices to meet specified emission limits for organic HAP.

C. Requirements for Wastewater

Comment: One commenter requested clarification of the POD for scrubbers. According to the commenter, the point where effluent is discharged from a scrubber should be a POD, and the effluent itself should be process wastewater, only when the scrubber is used to comply with the emission limits for process vents. The commenter suggested adding language like that in 40 CFR 63.1256(a)(1)(iii) of the Pharmaceuticals Production NESHAP.

Response: We agree with the commenter that the requirements for scrubber effluent need to be clarified. On July 1, 2005, we published direct final rule amendments (70 FR 38554) and a parallel proposal (70 FR 38562) that specified requirements for effluent from control devices. We later withdrew these amendments because of adverse comment (70 FR 51269, August 30, 2005). As a result, the rule is now silent on the requirements for scrubber effluent.

We disagree with the commenter's assertion that only scrubbers that are used to meet emission limits for process vents should have a POD. If a process operates a few hours per year, it may have Group 2 batch process vent emissions with high HAP concentrations. If such emission streams are controlled with a scrubber, we believe that the effluent discharges should be considered for possible compliance with wastewater requirements.

After consideration of the comment and evaluation of requirements in other rules, we have decided to resolve the existing ambiguity by modifying the definition of "point of determination" in the final amendments. In general, 40 CFR part 63, subpart FFFF references the wastewater requirements in the Hazardous Organic NESHAP (HON), 40 CFR part 63, subpart G, including the POD definition in 40 CFR

63.111. According to this definition, a POD is each point where process wastewater exits the chemical manufacturing process unit (CMPU) (or MCPU, in the case of 40 CFR part 63, subpart FFFF). However, the term does not have the same meaning under 40 CFR part 63, subpart FFFF as it does in the HON due to an unintended consequence created by the decision to exclude control devices from the MCPU (whereas they are part of CMPU under the HON). To make the application of POD under 40 CFR part 63, subpart FFFF consistent with their application in the HON, the final amendments include a freestanding (i.e., non-cross-referenced) term "point of determination" in 40 CFR 63.2550(i) of 40 CFR part 63, subpart FFFF. This revised definition specifies that a POD is each point where process wastewater exits the MCPU or control device.

As a result of this change, effluent discharge points from all scrubbers, not just those that are used to meet emission limits for process vents, are POD. Discharge points from other types of control devices are also POD. The effluent also is process wastewater, as under the HON. To determine if the effluent is subject to requirements for wastewater, you must determine if it meets any of the Group 1 wastewater criteria, just like for other process wastewater streams.

Comment: Several commenters requested that methyl ethyl ketone (MEK) be deleted from the list of PSHAP in Table 8 to subpart FFFF of 40 CFR part 63 because MEK was removed from the list of HAP in the CAA on December 19, 2005 (70 FR 75047). One of the commenters suggested a separate rulemaking to address the situation before the compliance date.

Response: We agree with the commenters that MEK should no longer be listed in Table 8 to subpart FFFF of 40 CFR part 63 because MEK has been removed from the HAP list. Therefore, we removed MEK from Table 8 to subpart FFFF of 40 CFR part 63 in the final rule amendments.

D. Requirements for Equipment Leaks

Comment: One commenter requested that bench-scale operations be exempt from the MON just as in the HON at 40 CFR 63.160(f) and 40 CFR 63.190(f), the Pharmaceuticals Production NESHAP at 40 CFR 63.1255(a)(6), and the Pesticide Active Ingredient Production NESHAP at 40 CFR 63.1363(a)(6). The commenter states that the justification for excluding bench-scale operations from the other rules, as stated in the preamble to an amendment for the HON (60 FR 18071, April 10, 1995), is equally applicable to the MON source category.

Response: We agree with the commenter and have corrected this oversight by adding an exemption for bench-scale batch operations in a new 40 CFR 63.2480(d). Although the term "bench-scale batch operations" is defined in 40 CFR 63.161 of the HON, we also added the same definition in the final amendments to 40 CFR 63.2550(i) because the term is not defined in 40 CFR part 63, subpart UU or in 40 CFR part 65, subpart A.

Comment: One commenter opposed the proposed amendments to the requirements for equipment leaks at existing sources in Table 6 to subpart FFFF. These changes would eliminate the 40 CFR part 63, subpart TT option for MCPU with no continuous process vents in favor of a new above-the-floor option that would require all MCPU to comply with either 40 CFR part 63, subpart UU, or 40 CFR part 65, subpart F, both modified to allow sensory monitoring of connectors in place of Method 21 monitoring.

The commenter stated four objections to the proposed changes. First, the commenter does not believe we have met the statutory requirement to demonstrate that the costs of the new option are reasonable, particularly for equipment in an MCPU with no continuous process vents. To illustrate this concern, the commenter provided information for an example pump and concluded that the additional cost to

comply with 40 CFR part 63, subpart UU instead of 40 CFR part 63, subpart TT could be over $70,000 per ton of HAP removed.

Second, the commenter disagrees with our assertion that a consistent set of options for all MCPU will simplify applicability because this determination needs to consider other rules that apply at the MON facilities. For example, if a facility with MON batch operations is also subject to the Organic Liquid Distribution NESHAP, for which 40 CFR part 63, subpart TT is a compliance option, then eliminating the 40 CFR part 63, subpart TT option from the MON could make applicability more complicated.

Third, even if the nationwide benefits of reduced connector monitoring for continuous operations more than offsets the additional nationwide burden to comply with the 40 CFR part 63, subpart UU for all MCPU, the commenter is concerned that the offsets are inequitably distributed. Facilities primarily engaged in batch chemical manufacturing would incur additional costs but receive little or no benefit, whereas facilities that primarily operate continuous chemical manufacturing processes will receive the benefits but incur little or no cost.

Fourth, the commenter stated that the new leak detection and repair (LDAR) options do not appropriately

recognize the difference in potential environmental impact between batch and continuous operations. The commenter noted that, prior to the amendments, 40 CFR part 63, subpart FFFF allowed for the fundamental differences of scale and modes of operation between continuous and batch operations by properly allocating the stringency of equipment leak requirements. The commenter argued that the proposed change does neither. The higher stringency of 40 CFR part 63, subpart UU is appropriate for large continuous operations but not for small batch operations.

Response: In the analysis for the proposed amendments, the MACT floor for all MCPU was an LDAR program equivalent to the requirements in 40 CFR part 63, subpart TT, and the above-the-floor option lowered the leak definition for pumps and valves to the level specified in 40 CFR part 63, subpart UU. Although we stand by our original conclusion that the average nationwide impacts of the proposed above-the-floor option are reasonable, we also share the commenter's concern that the benefits and costs are not distributed equitably among facilities with different types of operations, especially when considering the leak detection and repair program already implemented at the facility.

Upon closer examination of the results of the cost analysis, it is clear that the incremental impacts for pumps in MCPU that have no continuous process vents are much more significant than the impacts for valves in those same processes and the impacts for MCPU that have continuous process vents. To mitigate the excessive burden for batch operations already in compliance with 40 CFR part 63, subpart TT, we have modified the above-the-floor option to lower the pump leak definition only for MCPU with continuous process vents (the option still lowers the leak definition for valves in all MCPU). As a result of this change, the incremental impacts for both batch and continuous operations are reasonable. For the final amendments, we did not change the language in Table 6 to subpart FFFF of 40 CFR part 63 (i.e., the LDAR programs in 40 CFR part 63, subpart UU and 40 CFR part 65, subpart F are still the starting point for all MCPU). However, new language in 40 CFR 63.2480(b)(5) and (c)(5) specifies that you may elect to comply with a leak definition of 10,000 ppm for pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source.

In addition to the changes described above for pumps, the final amendments also include an additional compliance

option for equipment leaks. Many facilities with processes that are subject to 40 CFR part 63, subpart FFFF also have processes that are subject to the equipment leak provisions in 40 CFR part 63, subpart H. The requirements in 40 CFR part 63, subpart H are substantially similar to the requirements in 40 CFR part 63, subpart UU. Therefore, we decided to modify Table 6 of subpart FFFF to 40 CFR part 63 to allow compliance with 40 CFR part 63, subpart H as another alternative. This option provides additional flexibility, and it may reduce the burden for some owners and operators while achieving the same level of emissions control.

E. Initial Compliance Requirements

1. Design Evaluations

Comment: A proposed amendment to 40 CFR 63.2450(h) would clarify that the option to conduct a design evaluation instead of a performance test for a small control device applies only to control devices used to control process vents and transfer racks because other provisions in the rule already allow design evaluations for storage tanks and wastewater. Section 63.2450(h) also references the criteria for design evaluations in 40 CFR 63.1257(a)(1) of the Pharmaceuticals Production NESHAP. One commenter believes it would be preferable to require

compliance with the design evaluation requirements in 40 CFR 63.985(b) for small control devices used to meet the emission limits in Tables 1, 3, and 5 to subpart FFFF of 40 CFR part 63, and require compliance with 40 CFR 63.1257(a)(1) only for control devices used to meet the emission limits specified in Table 2 to subpart FFFF of 40 CFR part 63. According to the commenter, referencing the design evaluation procedures in 40 CFR part 63, subpart SS for the emission types subject to Tables 1, 3, and 5 to subpart FFFF of 40 CFR part 63 is appropriate because the performance test and other requirements in 40 CFR part 63, subpart SS also apply to those emission types. The commenter also recommended adding the following statement: "For continuous process vents the design evaluation shall be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions."

Response: Although written in very different styles, the intent of the design evaluation requirements in 40 CFR part 63, subpart SS and the Pharmaceuticals Production NESHAP are essentially the same, to the extent they overlap. We decided not to reference both sets of requirements because we believe it is clearer to reference only one wherever possible. We selected the criteria in

the Pharmaceuticals Production NESHAP because they are slightly more comprehensive than the procedures in 40 CFR part 63, subpart SS (e.g., they include criteria for scrubbers and non-regenerative carbon adsorbers). Furthermore, the language in the Pharmaceuticals Production NESHAP is nearly identical to the language in 40 CFR 63.139 of the HON, which 40 CFR part 63, subpart FFFF references for wastewater control devices.

We agree with the commenter's suggested clarification regarding the conditions under which the design evaluation should be conducted for a control device that controls continuous process vents. This language is borrowed from 40 CFR 63.997(e)(1)(i), and it will ensure that design evaluations are conducted under the same conditions as performance tests. It also complements the instructions in 40 CFR 63.2460(c)(2)(ii), which specify conditions under which a design evaluation should be conducted for a control device that controls batch process vents. Thus, we added the commenter's suggested language in 40 CFR 63.2450(h). Along these same lines, we also added a statement specifying that a design evaluation for a control device that is used to control transfer racks must demonstrate that the required efficiency is achieved during the reasonably expected maximum transfer loading rate.

2. Requirements after Process Changes

Comment: Proposed amendments in 40 CFR 63.2445(d), (e), and (f) specify requirements that apply after various types of process changes. In each case, the proposed amendments specify that a performance test or design evaluation is required within 150 days of the process change. Two commenters requested clarification of the proposed amendments because they noted that an initial compliance demonstration does not always require a performance test or design evaluation. For example, one commenter pointed out that no performance test should be required if the facility complies with the alternative standard or routes the emission stream to a fuel gas system. The other commenter described a situation where a performance test should not be required because a previous test is still valid. According to this commenter, when production is scaled up so that Group 2 batch process vents become Group 1 batch process vents, production may be shifted to different equipment for which initial compliance was previously demonstrated under worst-case conditions that are not exceeded by the operating scenario for the new process. To clarify the amendments, one commenter suggested replacing the references to performance tests and

design evaluations with a reference to "an initial compliance demonstration as specified in this subpart."

Response: Our intent was to require a performance test or design evaluation after the specified types of process changes only when a performance test or design evaluation would have been required to demonstrate initial compliance if the situation after the change had existed at the time the facility first became subject to 40 CFR part 63, subpart FFFF. The commenters correctly observed that in some situations initial compliance can be demonstrated without a performance test or design evaluation, or it can be demonstrated using a previous performance test. Therefore, we revised 40 CFR 63.2445(d), (e), and (f) in the final rule amendments to require any applicable initial compliance demonstration instead of requiring only a new performance test or design evaluation.

3. Calculation of Uncontrolled Emissions

Comment: One commenter pointed out that the calculation of HAP emissions from process condensers requires knowledge of condensate receiver composition and condenser exit gas temperature (or direct knowledge of exit gas stream composition). In most cases, data on the condensate composition is not available. The commenter stated that typical errors made in estimating emissions

following process condensers include use of condenser exit water temperature instead of exit gas temperature, lack of an applied material balance, and use of reactor vessel liquid phase mole fraction to determine partial pressure of condensables in the condenser exit gas (single most common mistake). When the operator has no knowledge of the liquid condensate mole fractions, a material balance must be used to determine the mole fractions present in equilibrium with the exiting emission stream. The commenter provided an example of a material balance based on noncondensables for a process operation involving toluene and xylene. The commenter further points out that for process operations where temperature and pressure are changing, the material balance may be complex. In summary, the commenter stated that it is essential that the noncondensable material balance be applied in conjunction with an iterative solution to solve condensate liquid mole fraction for cases where liquid composition in the receiver is not known.

Response: We agree with the commenter that the required procedures to calculate uncontrolled emissions when a vessel is equipped with a process condenser should be corrected to reflect the condenser exit gas temperature and composition of the condensate. The following

assumptions apply for calculating uncontrolled emissions from process vent from a process condenser:

(1) For all condenser calculations one would use the condenser exit gas temperature and pressure as the reference conditions.

(2) It should be assumed that the condenser exit vent gas is in equilibrium with the liquid condensate which is also leaving the condenser based on the exit gas temperature. Therefore, the calculated vapor pressure for each volatile component in the condensate would have approximately the same calculated partial pressure of the same component in the exit vent gas from the condenser.

(3) Dalton's Law would be used to calculate the partial pressure of the noncondensable component (air, nitrogen, ...) contained in the condenser exit vent gas. This is where the sum of all of the partial pressures is equal to the total system pressure and the partial pressure of the noncondensable component would be calculated by subtracting the sum of all volatile component vapor pressures from the total system pressure.

(4) Material balance considerations should be taken into account for each component at the condenser. The amount of each component that enters the condenser should be approximately equal to the amount that is calculated to

leave the condenser through the exit vapor stream and the exit condensate liquid stream.

(5) The amount of each component that is emitted from the condenser should be determined first. The total HAP that are emitted from the condenser may then be calculated from the component emission totals. It is likely that many of the compounds that are emitted from the condenser may not be HAP but would need to be calculated as part of the overall condenser solution.

In all but the simplest cases (single component systems) the solution to the condenser problem will require a numerical iteration as part of the basic procedure. We are changing the procedures for calculating emissions from condensers to be as technically correct as possible. This is important because uncontrolled emission estimates are used as a threshold for requiring installation and operation of control devices.

Comment: As part of the proposed amendments, a new paragraph was added at 40 CFR 63.2460(b)(4) to require the use of procedures in 40 CFR 63.1257(d)(3)(i)(B) to calculate uncontrolled batch process vent emissions from a vessel equipped with a process condenser. Three commenters noted that there are some batch process steps where a process condenser is used, but the required equations do

not adequately estimate the emissions. The commenters cited the following as examples: intermittent vents from continuous distillation columns, maintenance purges, or regenerator operations. To estimate uncontrolled emissions for such steps, the commenters believe 40 CFR part 63, subpart FFFF should allow the use of engineering assessments in accordance with 40 CFR 63.1257(d)(2)(ii) of the Pharmaceuticals Production NESHAP. According to one commenter, engineering assessments also should be allowed for emission episodes covered by the equations if the owner or operator can demonstrate to the Administrator that those methods are not appropriate.

Response: We agree with the commenters that the specified equations do not address all possible types of emission episodes from process condensers, just as they do not address all possible types of emission episodes directly from process equipment. Therefore, we have modified 40 CFR 63.2460(b)(4) in the final amendments to allow the use of engineering assessments for types of emission episodes not covered by the specified equations. However, the revised procedure for calculating condenser emissions will always apply. We also added the provision that allows engineering assessments covered by the equations in 40 CFR 63.1257(d)(3)(i)(B) if you can

demonstrate that those methods are not appropriate. These changes make the procedures for estimating uncontrolled emissions from process condensers consistent with the procedures for estimating uncontrolled emissions directly from process equipment.

Comment: A proposed amendment in 40 CFR 63.2465(b) clarifies that uncontrolled hydrogen halide and halogen HAP emissions may be estimated using either the equations in 40 CFR 63.1257(d)(2)(i) or an engineering assessment in accordance with 40 CFR 63.1257(d)(2)(ii), whichever is appropriate. One commenter noted that in order to use an engineering assessment for emission episodes covered by the equations, 40 CFR 63.1257(d)(2)(ii) requires a demonstration that the equations are not appropriate. The commenter asked if information to support the demonstration should be documented in the notification of compliance status report.

Response: According to 40 CFR 63.1257(d)(2)(ii)(E), all information must be documented in the precompliance report. However, we understand that the emission equations in 40 CFR 63.1257(d)(2)(i) were developed for organic HAP and decided that a demonstration that the equations are not appropriate for hydrogen halide and halogen HAP emissions would be an unnecessary burden. Therefore, 40 CFR

63.2465(b) of the final amendments specifies that the information to support an engineering assessment for estimating hydrogen halide and halogen HAP emissions must be submitted in the notification of compliance status report.

F. Monitoring Requirements

1. Absorbers

Comment: Five commenters objected to the proposed amendments to the monitoring requirements for absorbers in 40 CFR 63.2450(k)(5). These amendments would require continuous monitoring of liquid and gas flow, and records of the liquid-to-gas ratio, in addition to the monitoring and recordkeeping required in 40 CFR 63.990(c)(1), 63.993(c)(1), and 63.998(a)(2)(ii)(C). According to the commenters, the current monitoring requirements (liquid temperature and specific gravity) are sufficient to demonstrate compliance, and they believe we have not explained why these requirements are inadequate. They also noted that there is no precedent for the proposed monitoring (except for halogen scrubbers, for which flow monitoring is already required in 40 CFR 63.994), and it would add significant burden and cost to monitoring absorbers. Therefore, the commenters believe the proposed amendments should not be finalized.

Response: Our intent was to require liquid and gas flow monitoring only for absorbers where water is used as the scrubbing fluid. As the commenters pointed out, the rule already requires this monitoring for halogen scrubbers by referencing the requirements in 40 CFR 63.994. However, water can also be used to scrub organic compounds from an emission stream. We believe the same monitoring requirements that apply to halogen scrubbers should also apply to any other absorber that uses water as the scrubbing liquid. Therefore, 40 CFR 63.2450(k)(5) in the final amendments has been revised to require the liquid and gas flow monitoring only for absorbers that control organic compounds and use water as the scrubbing fluid.

2. Organic Monitoring Devices

Comment: The proposed amendments added a new 40 CFR 63.2460(c)(9) to specify requirements for biofilters that are used as control devices for batch process vents. Section 63.2460(c)(9)(iii) specified requirements for temperature monitoring devices and organic monitoring devices. This section also indicated that general requirements for continuous emissions monitoring system(s) (CEMS) are specified in 40 CFR 63.2450(j) and in Table 12 to subpart FFFF of 40 CFR part 63. The preamble to the proposed amendments explained that this rule language means

the quality assurance/quality control and other requirements for CEMS in subpart A of 40 CFR part 63 would apply to organic monitoring devices. Three commenters disagreed with this statement. One of the commenters pointed out that a CEMS must provide a record of the emissions, whereas an organic monitoring device is required to provide an indication of concentration. As an example, this commenter noted that the monitored parameter for an organic monitoring device could be a calibrated indicator of HAP concentration such as the millivolts generated by a concentration sensor. According to another commenter, the references to CEMS in the amended explanations for citations in Table 12 to subpart FFFF of 40 CFR part 63 should be applicable only to CEMS that are used for compliance with the alternative standard in 40 CFR 63.2505. Thus, the three commenters recommended removing the proposed changes from 40 CFR 63.2460(c)(9)(iii), Table 12 to subpart FFFF of 40 CFR part 63, and all associated preamble discussions.

Response: The commenters' interpretation of the differences in requirements for CEMS and organic monitoring devices is correct. Requirements for CEMS were inappropriately applied to organic monitoring devices in 40 CFR 63.2460(c)(9)(iii) of the proposed amendments, and they

have been removed from the final amendments. As a result of these changes, the use of an organic monitoring device with a biofilter is subject to the parameter monitoring requirements in 40 CFR part 63, subpart SS. All other organic monitoring devices, except those used with controls for wastewater systems, are also subject to the requirements in 40 CFR part 63, subpart SS. Organic monitoring devices used with controls for wastewater systems are subject to the similar parameter monitoring requirements in 40 CFR part 63, subpart G of the HON.

We disagree with the comments regarding the proposed changes in Table 12 to subpart FFFF of 40 CFR part 63. Nothing in the rule prohibits the use of a CEMS to monitor pollutant concentrations to demonstrate continuous compliance with a percent reduction requirement. For example, a control device might reduce HAP concentrations to less than 100 ppm. This would not be enough to demonstrate compliance with the alternative standard, but it might be more than 98 percent reduction. Most owners and operators in this situation might choose to comply with the organic monitoring device provisions and monitor a parameter like the millivolts generated by the concentration sensor. That would be acceptable. However, you also have the option to directly monitor the

concentration. We believe that monitoring the concentration continuously makes the equipment a CEMS, and the requirements for CEMS should apply. The proposed changes to Table 12 to subpart FFFF of 40 CFR part 63 make it clear that requirements for CEMS apply anytime a CEMS is used (i.e., emissions concentrations are continuously monitored), but they do not apply to an organic monitoring device. Thus, the proposed changes to Table 12 to subpart FFFF of 40 CFR part 63 are retained in the final amendments.

3. Scrubber Monitoring

Comment: Sections 63.994(c) and 63.2450(k)(3) require continuous monitoring of either pH or caustic strength in the effluent from halogen scrubbers. One commenter argued that the requirement for continuous monitoring is "arbitrary and particularly burdensome to batch operators" and should be changed to daily monitoring to match the Pharmaceuticals Production NESHAP and the Pesticide Active Ingredient Production NESHAP.

Response: We decided to modify 40 CFR 63.2450(k)(3) in the final amendments to allow daily monitoring of pH or caustic strength as an alternative to continuous monitoring for halogen scrubbers used to control only batch process vents. This change minimizes the burden for batch

operations and brings the monitoring requirements for such operations at MON sources in line with the monitoring requirements for batch operations at pharmaceutical and pesticide active ingredient (PAI) sources.

4. Periodic Verification

Comment: Section 63.2460(c)(5) of the final rule specifies alternative monitoring provisions, called periodic verifications, for control devices that control less than 1.0 ton per year HAP from batch process vents. One commenter suggested that the periodic verification option should be available for monitoring control devices that control emissions from all types of emission points, not only batch process vents. To support this suggestion, the commenter noted that both the proposed rule (67 FR 16154, April 4, 2002) and the pharmaceuticals production NESHAP did not limit the use of the periodic verification provision to batch process vents.

Response: The purpose of the periodic verification option is to minimize the monitoring burden on small operations that are expected to contribute only a small fraction of the total emissions. We agree with the commenter that there is no need to restrict the option to controls for batch process operations. As the commenter noted, the proposed rule and other rules (pharmaceuticals

production and PAI production) did not limit the option to controls for batch process vents. To correct this inadvertent oversight, the final amendments move the periodic verification requirements from 40 CFR 63.2460(c)(5) to 40 CFR 63.2450(k)(6) so that they will apply to control devices that control less than 1.0 ton per year of HAP from any emission points.

G. Recordkeeping and Reporting Requirements

1. Wastewater Control Devices

Comment: As part of the proposed amendments, a new paragraph with recordkeeping requirements for flare monitors was added in 40 CFR 63.2485(o)(1). One commenter believes the proposed provision mistakenly references requirements for nonflares. The commenter recommended revising the proposed language to match the subpart SS recordkeeping requirements for flares.

Response: Flares that are used to control wastewater emissions are subject to the requirements in 40 CFR part 63, subpart G of the HON. The proposed language in 40 CFR 63.2485(o)(1) was added to make the recordkeeping and reporting requirements for flares used to control wastewater systems consistent with the requirements in 40 CFR 63.998(a)(1)(iii) of subpart SS. Since proposal of the amendments we realized that the proposed language is

unnecessary because 40 CFR 63.147(d)(1) contains the same recordkeeping requirement, and Table 20 to subpart G of 40 CFR part 63 (as referenced from 40 CFR 63.146(e)(1)) contains the same reporting requirement. Therefore, the proposed amendments to 40 CFR 63.2485(o)(1) were not included in the final amendments.

Comment: According to one commenter, the proposed 40 CFR 63.2485(o)(2) creates a recordkeeping conflict for nonflare control devices used for wastewater emissions. The section requires compliance with both 40 CFR 63.152(f) of subpart G and 40 CFR 63.998(c)(1) of subpart SS. Because some of the requirements are not consistent with each other, the commenter recommended revising 40 CFR 63.2485(o)(2) to read, "you must keep records as specified either in §63.998(c)(1) or §63.152(f) in addition to the other records required in §63.147(d)."

Response: We disagree with the suggested change. Section 63.152(f) specifies requirements such as the frequency of monitoring measurements, procedures for developing daily or other average values, and the amount of time records must be kept. These procedures would overlap with procedures in 40 CFR 63.998(b), but subpart FFFF does not reference 40 CFR 63.998(b) for wastewater control devices. On the other hand, 40 CFR 63.998(c)(1) requires

records of information such as calibration results, periods when the CPMS is inoperative, and the occurrence and duration of startup, shutdown, and malfunction of CPMS. For a source subject to the HON, comparable records may be required by 40 CFR 63.103, but this section of the HON is not referenced from 40 CFR part 63, subpart FFFF. Therefore, we retained the proposed requirement in the final amendments so that the same CPMS monitoring records are required for non-flare control devices regardless of the emission point that is controlled.

2. Operating Logs

Comment: As part of the proposed amendments, §§63.2520(e)(5)(ii)(C), 63.2520(e)(5)(iii)(K), and 63.2525(c) were modified to require operating logs only for "processes with batch vents." The preamble to the proposed amendments also stated that operating logs are not needed for processes that consist entirely of continuous operations. Two commenters agree with the preamble language, but they noted that the proposed rule language still requires operating logs for continuous operations with intermittent emissions because these operations fit the definition of "batch vents." Therefore, the commenters recommended changing the proposed language to refer to batch "operations."

Response: As the commenters noted, by referring to "processes with batch vents," the proposed rule language did not fully accomplish our goal as stated in the proposal preamble because continuous operations with intermittent emissions are defined as batch process vents. Therefore, 40 CFR 63.2520(e)(5)(ii)(C), 63.2520(e)(5)(iii)(K), and 63.2525(c) were revised in the final amendments to require operating logs only for "processes with batch process vents from batch operations."

3. Frequency of Recordkeeping Calculations for Group 2 Batch Process Vents

Comment: Sections 63.2520(e)(2) and (3) of the proposed amendments specified recordkeeping requirements for MCPU with Group 2 batch process vents for which you documented that the amount of non-reactive HAP used is less than 10,000 lb/yr or the uncontrolled organic HAP emissions are less than 1,000 lb/yr. These sections also require you to calculate daily rolling annual sums of either the non-reactive HAP usage or number of batches operated. Data may be accumulated for up to a month, and all calculations for each day in the month may be performed at one time. One commenter requested that these daily rolling annual sums be changed to monthly rolling annual sums.

According to the commenter, calculations on a daily basis will add to the compliance burden because a new system would be needed to ensure that production is assigned to the correct day. Of particular concern to the commenter is how to comply when a batch operates for longer than 1 day. The commenter believes that new procedures will need to be developed to arbitrarily assign products to individual days during the batch cycle. On the other hand, the commenter pointed out that many facilities already have monthly recordkeeping systems in place under their title V permits, and these systems include procedures to ensure that the monthly data is complete and accurate.

The commenter also argued that the daily calculations would not provide better information than monthly calculations. According to the commenter, the purpose of both procedures is to "track emissions from processes that are well below the Group 1 process vent standards," and a monthly sum would ensure this threshold was not exceeded.

Response: We rejected the suggestion to change the rolling annual sums from a daily to monthly basis for several reasons. First, daily calculation of the annual usage or number of batches is consistent with the basis for the 10,000 lb/yr emission threshold for Group 1 batch process vents. Less frequent calculations increases the

potential that short-term fluctuations and periods of non-compliance will be masked. Second, usage at 10,000 lb/yr is not necessarily "well below" the Group 1 emission threshold of 10,000 lb/yr. For example, usage may nearly equal batch process vent emissions for a process that consists of little more than a batch reactor. Third, we are not persuaded that the burden to collect data for daily calculations will be significantly different than collecting data for monthly calculations. The fundamental information about production and HAP usage that would be collected for monthly calculations most likely would be developed on a batch or daily basis. Handling data for processes that take more than one day also should not be difficult. Any consistent procedure should be acceptable. For example, your system could account for each batch on the day the batch is completed. Similarly, the amount of non-reactive HAP used in each batch could be assigned to the day the batch is completed, or you could elect to define some procedure to assign a percentage of the total usage to each day over which the process operated.

H. Overlap with Other Rules

Comment: The proposed amendments modified provisions in 40 CFR 63.2535(k) that are intended to minimize the burden of complying with equipment leak requirements when

both 40 CFR part 63, subpart FFFF and another rule apply to the same process. The first sentence in this section specifies that an owner or operator may elect to comply with only 40 CFR part 63, subpart FFFF for equipment that is part of the affected source under 40 CFR part 63, subpart FFFF and is also subject to either 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V. If an owner or operator elects this method of compliance, the proposed second sentence requires all organic compounds, minus methane and ethane, to be considered as if they were HAP. One commenter noted that in this context the second sentence is unnecessary because all of the equipment described by the first sentence must be in HAP service. However, the commenter believes that this section also should allow sources to apply the requirements in 40 CFR part 63, subpart FFFF to equipment in an MCPU that is subject to 40 CFR part 60, subpart VV or 40 CFR part 61, subpart V, but is not subject to 40 CFR part 63, subpart FFFF. The commenter notes that this requirement in conjunction with the proposed second sentence would make sense, and together these provisions would be consistent with 40 CFR 63.160(c) of the HON.

Response: Our intent with the proposed amendments was to include provisions in 40 CFR 63.2435(k) that are

consistent with the provisions in 40 CFR 63.160(c) of the HON. We inadvertently neglected to include the first sentence from 40 CFR 63.160. Therefore, the final amendments to 40 CFR 63.2535(k) include the additional sentence as suggested by the commenter to make the provisions consistent with the provisions in 40 CFR 63.160(c).

Comment: Section 63.2535(c) specifies provisions that are intended to minimize the compliance burden when 40 CFR part 63, subpart FFFF and another rule (either 40 CFR part 60, subpart Kb or 40 CFR part 61, subpart Y) apply to the same storage tank. One commenter requested that this section be revised to include provisions similar to those for equipment leaks in 40 CFR 63.2535(k). The commenter believes such provisions would simplify compliance for storage tanks that are assigned to an MCPU but are not subject to the storage tank requirements in 40 CFR part 63, subpart FFFF because they contain little or no HAP. According to the commenter, such flexibility is provided in the HON.

Response: Although a storage tank with little or no HAP may be subject to 40 CFR part 60, subpart Kb or 40 CFR part 61, subpart Y and also be assigned to an MCPU, there is essentially no overlap because no requirements in 40 CFR

part 63, subpart FFFF apply to such a tank. This situation is similar to that for shared storage tanks that are assigned to a process unit that is subject to one rule but is also used with a process unit that is subject to another rule. Unlike the situation for equipment leaks, we believe any reduction in burden achieved by complying with 40 CFR part 63, subpart FFFF for storage tanks in an MCPU that are not subject to requirements in 40 CFR part 63, subpart FFFF would be negligible. Furthermore, the HON does not include the provisions described by the commenter. Therefore, we have decided not to amend 40 CFR 63.2435(c) as suggested by the commenter.

I. Definitions

1. Miscellaneous Organic Chemical Manufacturing Process

Comment: As part of the amendments, the definition of "miscellaneous organic chemical manufacturing process" in 40 CFR 63.2550(i) was changed to specify an endpoint to processes that manufacture solid products. One commenter concurred with the concept of defining an end point for such processes. However, the commenter is concerned that the proposed definition could be misapplied on polymer production processes that have no dryer and no extruder or die-plate. The commenter explained that their solid-state polymerization process for polyethylene terephthalate (PET)

operates without any of this equipment. The finished polymer is discharged from the reactors as a coarse, ready-to-use powder. Without clarification, the commenter is concerned that the proposed definition conceivably extends the PET process into the subsequent film manufacturing process, which would conflict with previous guidance EPA has provided regarding the applicability of 40 CFR part 63, subpart FFFF. To clarify this situation, the commenter suggested the endpoint for solid-state polymerization processes be "at the container or vessel used to collect or store the reacted polymer if subsequent drying is not required and the polymer is in a form amenable to its intended manufacturing purpose."

Response: We agree with the commenter that the proposed definition needs to be modified to clarify the endpoint of a solid-state polymerization process that does not include a dryer. We believe the reactor is the appropriate end of such a process, provided there are no HAP removal steps following the reactor. This point is comparable to the end points specified for other processes that manufacture solid products. The definition in the final amendments has been revised to reflect this decision.

Comment: In addition to the proposed endpoint described above for processes that produce solid products,

one commenter thinks the miscellaneous organic chemical manufacturing process definition also should specify an endpoint for processes that produce liquid products. The commenter cited acrylic polymer manufacturing processes as examples of processes for which an endpoint is needed. According to the commenter, after the polymerization reaction, the product is an emulsion of polymer solids in water, and the residual HAP monomer concentration generally is low. The commenter suggested that EPA could establish an option that would exempt from regulation all processing steps after the point where the residual HAP monomer falls below some reasonable threshold concentration. The commenter pointed to the 5 weight percent HAP option in the Miscellaneous Coating Manufacturing NESHAP as a good example.

Response: This comment is similar to several comments on the original proposed rule. The earlier commenters wanted the rule to exempt processing steps where the HAP content is less than 5 weight percent or HAP is present only as an impurity. In our response to those comments (see docket item No. EPA-HQ-OAR-2003-0121-0036), we explained that the rule includes numerous applicability cutoffs and exemptions that we think are sufficient.

For example, equipment leak requirements do not apply to equipment that contains or contacts fluid that is less than 5 percent organic HAP by weight. Storage tanks are not subject to requirements if the stored material has a maximum true vapor pressure less than 6.9 kilopascals. Emissions from transfer operations are exempt if the rack-weighted average partial pressure of organic HAP is less than 1.5 pounds per square inch absolute. Emissions from many continuous process operations are exempt if the HAP content is less than 0.005 weight percent, and emissions from other continuous operations and batch operations are exempt if the HAP concentration is less than 50 ppm. In addition, continuous process vents are exempt from some or all requirements if the total resource effectiveness, which is inversely related to the HAP emission rate, is greater than 1.9 or 5.0, respectively. Batch process vents are exempt from all but some recordkeeping requirements if the total organic HAP emissions from the collection of all batch vents in the process are less than 10,000 lb/yr. Strictly speaking, all Group 1 batch process vents are subject to control, regardless of their emission rate, but vents with low emission rates may not actually have to be controlled if the control or recovery from other vents in the process meets the overall reduction requirement. All

of these exemption levels are based directly or depend on concentration of HAP. Furthermore, they were all developed as part of the MACT floor.

Although our earlier response did not address the issue of emulsions (or dispersions), we do not believe this should have any bearing on the exemption levels because such fluids are managed the same as other liquids. Finally, the 5 weight percent option in the Miscellaneous Coating Manufacturing NESHAP is not comparable or relevant to this discussion. That 5 percent limit was based on a determination that reducing the HAP content of existing HAP-based coating products to less than 5 percent would achieve comparable reductions to the MACT floor. A similar analysis is not feasible for miscellaneous organic chemical manufacturing processes. Therefore, we do not believe an additional exemption level is needed, and we have not created an exemption as suggested by the commenter.

2. Continuous Process Vent

Comment: Two commenters strongly objected to the proposed changes introduced in the new item 7 in the definition of the term "continuous process vent." The proposed language specified, in part, that "when a gas stream that originates as a continuous flow from a continuous operation is combined with gas streams from

other process operations [], the determination of whether the gas stream is a continuous process vent must be made prior to the combination of the gas streams." One of the commenter's concerns was that the proposed changes will alter how some vents are handled under the HON and other NESHAP because the proposed language is not confined to gas streams from MCPU. For example, emission streams from batch operations within a HON process (which are batch process vents under 40 CFR part 63, subpart FFFF) that are combined with emissions from continuous operations within the HON process should not affect the point at which a continuous process vent is determined under the HON.

The commenters also believe the proposed regulatory language is far more expansive than needed to satisfy our stated reason for the change in the preamble, which they noted was to meet our intent that continuous process vents and batch process vents be separate, distinct streams. According to the commenters, only the mixing of potential continuous process vents with Group 2 process vents needs to be addressed because the rule is already clear that anything mixed with Group 1 batch process vents must be controlled. Furthermore, mixing potential continuous process vents with any other types of emission streams is already addressed by the referenced language in 40 CFR

63.107 of the HON and is consistent with the database used to determine the MACT floor for continuous process vents. As a result, both commenters strongly recommended revising the proposed language to minimize differences from the continuous process vent provisions in the HON.

Response: We agree with the commenter's assessment that several changes are needed to avoid confusion over the regulatory status of continuous process vents. First, the proposed language should have specified that the continuous operations of interest were only those in MCPU because we did not intend to affect determinations under other rules. After reconsideration, we also decided that there is no need to address the combination of potential continuous process vents and batch process vents. As the commenters pointed out, if a combined stream includes Group 1 batch process vents, the combined stream must be controlled as required for the Group 1 batch process vents. However, note that when Group 2 batch process vent emissions are combined with emissions from potential continuous process vents, the recordkeeping requirements for the Group 2 batch process vents still apply. In addition, by referring only to other process operations in the proposed language, we were trying to indicate that continuous process vent determinations could be downstream of the point where

emissions from continuous process operations combine with emissions from storage tanks, wastewater systems, or other sources, consistent with 40 CFR 63.107.

Although our discussion in the preamble to the proposed amendments neglected to explain it, a related objective of the proposed language was to ensure that separate determinations are made for emissions from each MCPU. This concept is not part of the provisions in 40 CFR 63.107, and we continue to believe that it is important because it is consistent with the data used to develop the MACT floor for continuous process vents. Therefore, in the final amendments, we have revised item 7 in the definition of "continuous process vent" to specify that separate determinations are required for the emissions from each MCPU, even if emission streams from two or more MCPU are combined.

3. Continuous Operation

Comment: One commenter believes the definition of the term "continuous operation" should allow for the interruption of product flow during a switch from one feed tank to another if the materials are similar in nature. The commenter described a situation where a flaker or pastille maker is fed from either of two storage tanks. The commenter noted that the flaker and pastille maker

equipment operates continuously, except when switching from one feed tank to the other.

Response: We have not changed the definition in the final rule because the rule already allows you to consider an operation to be a continuous operation even if there are periodic breaks in operation. We think the commenter may be misinterpreting the definition of "batch operation." Although this definition says a batch operation involves intermittent or discontinuous feed, it also says addition of raw material and withdrawal of product do not occur simultaneously in a batch operation. Both conditions must be met to be a batch operation. Thus, even though there may be a break in operation when switching from one feed tank to another, as long as material is being added and withdrawn simultaneously while it is in operation, it is a continuous operation.

Comment: One commenter expressed concern that in our discussion of changes to the definition of "continuous process vent," we appeared to conclude that all atmospheric dryers are continuous operations with continuous process vents. The preamble stated that many atmospheric dryers "have emission characteristics that are sufficiently similar to other continuous process vents in our database such that they should be included in the definition of

"continuous process vents." The commenter argued that atmospheric dryers used in batch specialty chemical manufacturing are substantively dissimilar to continuous process vents because emissions vary with time as a function of the batch cycle. Therefore, the commenter requested that we clarify that atmospheric dryer vents can be either batch or continuous process vents and that the classification is determined by an evaluation of the emission characteristics of the vent.

Response: The commenter is correct. Some atmospheric dryers are continuous operations with continuous process vents and others are batch operations with batch process vents. We did not mean to imply otherwise. As part of our analysis of the MACT floor for continuous process vents, we determined the characteristics of controlled dryers in both our continuous process database and batch process database. We confirmed that some of these dryers were continuous operations. Other dryers with controlled emissions were confirmed to be batch operations, and these were excluded from our analysis of continuous process vents.

4. Process Condenser and Recovery Device

Comment: Two commenters believe the proposed definition of the term "process condenser" is too expansive. The proposed definition reads as follows:

> Process condenser means a condenser whose primary purpose is to recover material as an integral part of an MCPU. A primary condenser or condensers in series are considered to be integral to the MCPU if they are capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse or for sale for fuel value, use, or reuse. All condensers recovering condensate from an MCPU at or above the boiling point or all condensers in line prior to a vacuum source are considered process condensers.

One of the commenters recommended modifying the definition to clarify that a condenser is not "integral to the process" if the condenser was intended to be a control device and it can be demonstrated that the process could technically or economically operate without it. This commenter described a situation where several condensers are used in a process to recover materials from gas streams. Condensate from these condensers is collected in single vessel and later reused in the process. Displaced gases from the collection vessel are routed through another condenser. Even though the final condenser recovers small amounts of material that are re-used, the commenter does not think it should be a process condenser.

The second commenter requested changes that would allow condensers to be considered an integral part of recovery devices. According to the commenter, if HAP are to be recovered from a vapor stream that is at a temperature below their bubble point, condensation must be

involved at some point. For example, condensation may be necessary to dehumidify a vent stream before it enters a carbon adsorber. The commenter suggested two ways that the rule could be modified to allow condensers to be part of recovery devices. One way would be to modify the definition of the term "process condenser" to exclude condensers that meet the conditions of the second sentence of the proposed definition if those condensers also receive an emission stream that is below its bubble point, and they are located prior to any recovery device that is not a condenser. Alternatively, the commenter suggested editing the definition of the term "recovery device" to delete condensers from the list of examples of equipment that may be recovery devices, and indicate that the remaining examples of recovery devices include any integral condensation equipment.

Response: As discussed in the preamble to the proposed amendments, the main purpose of proposing a new definition was to align the requirements in the rule with the data that were used to develop the MACT floor for batch process vents. The final rule referenced the definition of "process condenser" in the Pharmaceuticals Production NESHAP. According to this definition, a condenser is a process condenser only if it supports a vapor-to-liquid

phase change for periods of source equipment operation that are above the boiling or bubble point of substances at the liquid surface. Petitioners objected to this definition because they explained that it is inconsistent with the way industry representatives interpreted the term when they reported uncontrolled emissions in response to our information collection request (ICR) in 1997. They indicated that companies considered condensers to be integral to a process whenever condensate was returned to the process or used for fuel value, even if the inlet gas stream was at a temperature below the boiling or bubble point of the corresponding liquid. Thus, the final rule requires determination of uncontrolled emissions at different points than had been used in the processes that formed the basis for the MACT floor and the 10,000 lb/yr uncontrolled emissions threshold for Group 1 batch process vents.

To align the rule with the data provided in the ICR responses, we developed the proposed definition as shown above. One consequence of this definition is that it will reduce the number of condensers that can be used to comply with the 95 percent reduction recovery device option because designation as a process condenser is intended to preclude the recovery option. After considering the

comments and review of the data, we have decided that the proposed definition is more expansive than it needs to be to address the issue raised by the petitioners. None of the 44 processes in the project data base that were used to establish the 10,000 lb/yr threshold for Group 1 batch process vents was controlled with a non-condenser recovery device. Therefore, we believe that condensers can be considered as part of a recovery device if they are followed by a device that is clearly a recovery device, and the condenser is needed for the proper functioning of the downstream recovery device. Rather than leave this determination open to subjective determinations, we decided to specify such exceptions to the process condenser definition in the definition itself. These situations involve condensers that remove moisture in order to prevent icing in a following condenser, remove moisture that would negatively affect adsorption capacity in a following carbon adsorber, or remove high molecular weight organic compounds or other organic compounds prior to a carbon adsorber if those compounds would be difficult to remove during regeneration of the carbon.

In the preamble to the proposed amendments, we noted that the proposed definition of “process condenser” makes the concept of recovering chemicals with a condenser the

same regardless of whether the vent is associated with a batch unit operation or a continuous unit operation. This was our intent, and, in addition, the recovery device definition also needs to be modified to allow recovery of chemicals for fuel value by devices associated with continuous process vents. To correct this oversight, the recovery device definition in the final amendments has been changed to allow equipment that is associated with continuous process vents to be a recovery device when it recovers chemicals for fuel value. The final definition retains the intent of the original definition for recovery devices that are used to reduce emissions from batch process vents; this equipment must recover chemicals to be reused in a process on site.

Finally, all of the changes described above have created a conflict between the definition of "process condenser" and "recovery device." Both definitions refer to recovery of chemicals for fuel value, use, or reuse. Thus, a condenser could meet both definitions. However, a process condenser is part of the MCPU and can not be considered a control device to meet the 95 percent control alternative in table 2.

J. Miscellaneous Technical Corrections

We have made several changes throughout subpart FFFF to correct inconsistencies that have been discovered during the review processes. Other editorial changes have also been made to improve clarity. These changes are described in Table 1 in this preamble.

Table 1. Miscellaneous Technical Corrections to 40 CFR Part 63, Subpart FFFF

Section of subpart FFFF	Description of correction
40 CFR 63.2435(b)(2) and 63.2525(e)(1)(i)	Replaced the word "produces" with the word "generates" to clarify that generation of any HAP, not only HAP that are an intended product, makes the MCPU subject to 40 CFR part 63, subpart FFFF.
40 CFR 63.2450(d), (e), and (f)	1. Redesignated paragraphs (d), (e), and (f) as paragraphs (e)(1), (2), and (3). 2. Reserved paragraph (d). 3. Added a new paragraph (f) to clarify flare compliance assessment procedures. Section 63.11(b)(6) of the General Provisions contains alternative procedures for flares that control hydrogen emissions. The alternative procedures are not included in 40 CFR part 63, subpart SS. The new provisions in paragraph (f) clarify that the alternative in the General Provisions is available under 40 CFR part 63, subpart FFFF.

40 CFR 63.2470(e)(2)(i) and (ii) and 63.2535(a)(2)	Offsite cleaning and reloading facilities must control emissions from tank trucks and railcars that are used in vapor balancing for storage tanks at the affected source. The final amendments include these new paragraphs to specify that such facilities may comply with the monitoring, recordkeeping, and reporting requirements in other applicable rules in 40 CFR part 63 as an alternative to the requirements in subpart FFFF. These changes make the requirements consistent with parallel requirements in 40 CFR part 63, subpart GGG.
40 CFR 63.2485(n)(2)(iv)(B)	Replaced "F_{bio}" with "f_{bio}."
40 CFR 63.2520(d)(2)(ix)	Replaced incorrect reference to 40 CFR 63.2535(i)(1) with correct reference to 40 CFR 63.2535(l)(1).
40 CFR 63.2520(e)(9) and 63.2525(a)	Restored references to 40 CFR part 63, subpart UU that were mistakenly removed in the proposed amendments.
40 CFR 63.2525(e)(1)(iii)	Replaced the undefined term "Group 2 batches" with the defined term "Group 2 batch process vents."
40 CFR 63.2550(b)	Added reference to terms defined in section 63.2 of 40 CFR part 65, subpart F.
40 CFR 63.2550(c)	Did not finalize proposed amendment that mistakenly removed this paragraph.
40 CFR 63.2550(i) introductory text	Restored reference to 40 CFR 63.1020, which was mistakenly removed in the proposed amendments.

40 CFR 63.2550(i)	1. Added definitions for the term "emission point" 2. Added a sentence to the definition of "isolated intermediate" to clarify that the storage equipment is part of the process that produces the isolated intermediate, not a process that uses the isolated intermediate as a raw material. The new sentence also clarifies that isolated intermediate storage equipment is not subject to the storage tank assignment procedures in 40 CFR 63.2445(d).
Table 3	Removed the extraneous word "with" from item 1.a.
Tables 4 and 5	Replaced references to 40 CFR 63.984 with references to 40 CFR 63.982(d). 40 CFR 63.982(d) not only references 40 CFR 63.984, but it also makes it clear that requirements for boilers and process heaters do not apply to fuel gas systems.

IV. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), EPA must determine whether the regulatory action is "significant" and, therefore, subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

It has been determined that this rule is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

B. Paperwork Reduction Act

This action does not impose any new information collection burden. The final amendments give owners and operators options to some requirements. For example, biofilters are allowed as an option to meet the emission

limit for batch process vents. Other changes may result in a minor reduction in the burden. For example, one option allows an owner or operator to conduct sensory monitoring as an alternative to instrument monitoring of connectors. Another change eliminates the requirement to include data and results from an engineering assessment of emissions from batch operations in the precompliance report if the HAP concentration is determined to be less than 50 ppmv. Since all of these changes are either options or have the potential to result in minor reductions in the information collection burden, the ICR has not been revised.

OMB has previously approved the information collection requirements contained in the existing regulations (40 CFR part 63, subpart FFFF) under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq., and has assigned OMB control number 2060-0533 (EPA ICR number 1969.02). A copy of the OMB approved ICR may be obtained from Susan Auby, Collection Strategies Division; U.S. EPA (2822T); 1200 Pennsylvania Ave., NW., Washington, DC 20460, or by calling (202) 566-1672. Include the ICR or OMB number in any correspondence.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a

Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR part 9.

C. Regulatory Flexibility Act

EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with the final rule amendments.

For purposes of assessing the impacts of the final rule amendments on small entities, small entity is defined as: (1) a small business ranging from up to 500 employees to up to 1,000 employees, depending on the NAICS code; (2)

a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; or (3) a small organization that is any not-for-profit enterprise that is independently owned and operated and is not dominant in its field. The maximum number of employees to be considered a small business for each NAICS code is shown in the preamble to the proposed rule (67 FR 16178).

After considering the economic impacts of the final rule amendments on small entities, EPA has concluded that this action will not have a significant economic impact on a substantial number of small entities. In determining whether a rule has a significant economic impact on a substantial number of small entities, the impact of concern is any significant adverse economic impact on small entities, since the primary purpose of the regulatory flexibility analyses is to identify and address regulatory alternatives "which minimize any significant economic impact of the proposed rule on small entities." 5 U.S.C. Sections 603 and 604. Thus, an agency may conclude that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, or otherwise has a positive economic effect on all of the small entities subject to the rule.

The final amendments include additional compliance options for process tanks, batch process vents, equipment leaks, and SHAP-containing wastewater that provide small entities with greater flexibility to comply with the standards. Other amendments potentially reduce the recordkeeping and reporting burden. We have therefore concluded that the final rule amendments will relieve regulatory burden for all small entities.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act (UMRA) of 1995, Public Law 104–4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of $100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least-costly, most cost-effective, or least-burdensome alternative that

achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that the final amendments do not contain a Federal mandate that may result in expenditures of $100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any 1 year. The maximum total annual costs of the final rule for any year was estimated to be about $75 million,

and the final amendments do not add new requirements that would increase that cost. Thus, the final amendments are not subject to the requirements of sections 202 and 205 of the UMRA. In addition, the final amendments contain no regulatory requirements that might significantly or uniquely affect small governments because they contain no requirements that apply to such governments or impose obligations upon them. Therefore, the final amendments are not subject to the requirements of section 203 of the UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

The final rule amendments do not have federalism implications. They will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution

of power and responsibilities among the various levels of government, as specified in Executive Order 13132. None of the affected facilities are owned or operated by State or local governments. Thus, Executive Order 13132 does not apply to the final rule amendments.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

Executive Order 13175 (65 FR 67249, November 9, 2000), requires EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications." The final rule amendments do not have tribal implications, as specified in Executive Order 13175. The final rule amendments provide an owner or operator with several additional options for complying with the emission limits and other requirements in the rule. Therefore, the final rule amendments will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes. Thus, Executive Order 13175 does not apply to the final amendments.

G. Executive Order 13045: Protection of Children From Environmental Health and Safety Risks

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically significant" as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, EPA must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5–501 of the Executive Order has the potential to influence the regulation. The final amendments are not subject to the Executive Order because they are based on technology performance and not on health or safety risks.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

The final rule amendments do not constitute a "significant energy action" as defined in Executive Order

13211, "Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use" (66 FR 28355, May 22, 2001) because they are not likely to have a significant adverse effect on the supply, distribution, or use of energy. The final amendments include additional compliance options that provide affected sources with greater flexibility to comply with the standards. Further, we have concluded that the final rule amendments are not likely to have any adverse energy effects.

I. National Technology Transfer and Advancement Act

As noted in the proposed rule, Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995, Public Law No. 104-113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. VCS are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by VCS bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency does not use available and applicable VCS.

During the rulemaking, the EPA conducted searches to identify VCS in addition to EPA test methods referenced by

the final rule. The search and review results have been documented and placed in the docket for the NESHAP (Docket EPA-HQ-OAR-2003-0121). The final amendments do not require the use of any additional technical standards beyond those cited in the final rule. Therefore, EPA is not considering the use of any additional VCS for the final amendments.

J. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801, et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing the final rule amendments and other required information to the United States Senate, the United States House of Representatives, and the Comptroller General of the United States prior to publication of the final rule amendments in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2). The final rule amendments are effective on [INSERT DATE OF PUBLICATION OF THE FINAL AMENDMENTS IN THE FEDERAL REGISTER].

List of Subjects in 40 CFR Part 63

Environmental protection, Administrative practice and procedure, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

Dated: June 23, 2006.

Stephen L. Johnson,
Administrator.

For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of the Federal Regulations is amended as follows:

PART 63--[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

Subpart FFFF--[Amended]

2. Section 63.2435 is amended by:

a. Revising "product transfer racks" to read "transfer racks" in paragraph (b) introductory text;

b. Revising paragraphs (b)(1)(i), (ii), and (2);

c. Revising paragraph (c) introductory text;

d. Revising paragraph (c)(4); and

e. Adding new paragraph (c)(7) to read as follows:

§63.2435 Am I subject to the requirements in this subpart?

* * * * *

(b) * * *

(1) * * *

(i) An organic chemical(s) classified using the 1987 version of SIC code 282, 283, 284, 285, 286, 287, 289, or 386, except as provided in paragraph (c)(5) of this section.

(ii) An organic chemical(s) classified using the 1997 version of NAICS code 325, except as provided in paragraph (c)(5) of this section.

* * * * *

(2) The MCPU processes, uses, or generates any of the organic HAP listed in section 112(b) of the CAA or hydrogen halide and halogen HAP, as defined in §63.2550.

* * * * *

(c) The requirements in this subpart do not apply to the operations specified in paragraphs (c)(1) through (7) of this section.

* * * * *

(4) Fabricating operations (such as spinning or compressing a solid polymer into its end use); compounding operations (in which blending, melting, and resolidification of a solid polymer product occur for the purpose of incorporating additives, colorants, or stabilizers); and extrusion and drawing operations (converting an already produced solid polymer into a different shape by melting or mixing the polymer and then forcing it or pulling it through an orifice to create an extruded product). An operation is not exempt if it involves processing with HAP solvent or if an intended purpose of the operation is to remove residual HAP monomer.

* * * * *

(7) Carbon monoxide production.

* * * * *

3. Section 63.2445 is amended by:

a. Revising paragraph (b) and the first sentence in paragraph (c); and

b. Adding new paragraphs (d), (e), and (f) to read as follows:

§63.2445 When do I have to comply with this subpart?

* * * * *

(b) If you have an existing source on November 10, 2003, you must comply with the requirements for existing sources in this subpart no later than May 10, 2008.

(c) You must meet the notification requirements in §63.2515 according to the dates specified in that section and in subpart A of this part 63. * * *

(d) If you have a Group 2 emission point that becomes a Group 1 emission point after the compliance date for your affected source, you must comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

(e) If, after the compliance date for your affected source, hydrogen halide and halogen HAP emissions from process vents in a process increase to more than 1,000 lb/yr, or HAP metals emissions from a process at a new affected source increase to more than 150 lb/yr, you must comply with the applicable emission limits specified in Table 3 to this subpart and the associated compliance requirements beginning on the date the emissions exceed the applicable threshold. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

(f) If you have a small control device for process vent or transfer rack emissions that becomes a large control device, as defined in §63.2550(i), you must comply with monitoring and associated recordkeeping and reporting requirements for large control devices beginning on the date the switch occurs. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.

4. Section 63.2450 is amended by:

a. Revising paragraphs (d), (e), and (f);

b. Revising the first sentence in paragraph (h);

c. Revising paragraph (k) introductory text, paragraph (k)(3), paragraph (k)(4) introductory text, and paragraph (k)(4)(i); and

d. Adding new paragraphs (k)(4)(iv), (k)(5), and (k)(6) to read as follows:

§63.2450 What are my general requirements for complying with this subpart?

* * * * *

(d) Reserved

(e) Requirements for control devices.

(1) Except when complying with §63.2485, if you reduce organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, you must meet the requirements of §63.982(c) and the requirements referenced therein.

(2) Except when complying with §63.2485, if you reduce organic HAP emissions by venting emissions through a closed-vent system to a flare, you must meet the requirements of §63.982(b) and the requirements referenced therein.

(3) If you use a halogen reduction device to reduce hydrogen halide and halogen HAP emissions from halogenated vent streams, you must meet the requirements of §63.994 and

the requirements referenced therein. If you use a halogen reduction device before a combustion device, you must determine the halogen atom emission rate prior to the combustion device according to the procedures in §63.115(d)(2)(v).

(f) Requirements for flare compliance assessments.

(1) As part of a flare compliance assessment required in §63.987(b), you have the option of demonstrating compliance with the requirements of §63.11(b) by complying with the requirements in either §63.11(b)(6)(i) or §63.987(b)(3)(ii).

(2) If you elect to meet the requirements in §63.11(b)(6)(i), you must keep flare compliance assessment records as specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) Keep records as specified in §63.998(a)(1)(i), except that a record of the heat content determination is not required.

(ii) Keep records of the flare diameter, hydrogen content, exit velocity, and maximum permitted velocity. Include these records in the flare compliance report required in §63.999(a)(2).

* * * * *

(h) Design evaluation. To determine the percent reduction of a small control device that is used to comply with an emission limit specified in Table 1, 2, 3, or 5 to this subpart, you may elect to conduct a design evaluation as specified in §63.1257(a)(1) instead of a performance test as specified in subpart SS of this part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For transfer racks, the design evaluation must demonstrate that the control device achieves the required control efficiency during the reasonably expected maximum transfer loading rate.* * *

* * * * *

(k) Continuous parameter monitoring. The provisions in paragraphs (k)(1) through (6) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in subpart SS of this part 63.

* * * * *

(3) As an alternative to continuously measuring and recording pH as specified in §§63.994(c)(1)(i) and 63.998(a)(2)(ii)(D), you may elect to continuously monitor

and record the caustic strength of the effluent. For halogen scrubbers used to control only batch process vents you may elect to monitor and record either the pH or the caustic strength of the scrubber effluent at least once per day.

(4) As an alternative to the inlet and outlet temperature monitoring requirements for catalytic incinerators as specified in §63.988(c)(2) and the related recordkeeping requirements specified in §63.998(a)(2)(ii)(B)(2) and (c)(2)(ii), you may elect to comply with the requirements specified in paragraphs (k)(4)(i) through (iv) of this section.

(i) Monitor and record the inlet temperature as specified in subpart SS of this part 63.

* * * * *

(iv) Recording the downstream temperature and temperature difference across the catalyst bed as specified in §63.998(a)(2)(ii)(B)(2) and (b)(2)(ii) is not required.

(5) For absorbers that control organic compounds and use water as the scrubbing fluid, you must conduct monitoring and recordkeeping as specified in paragraphs (k)(5)(i) through (iii) of this section instead of the monitoring and recordkeeping requirements specified in §§63.990(c)(1), 63.993(c)(1), and 63.998(a)(2)(ii)(C).

(i) You must use a flow meter capable of providing a continuous record of the absorber influent liquid flow.

(ii) You must determine gas stream flow using one of the procedures specified in §63.994(c)(1)(ii)(A) through (D).

(iii) You must record the absorber liquid-to-gas ratio averaged over the time period of any performance test.

(6) For a control device with total inlet HAP emissions less than 1 tpy, you must establish an operating limit(s) for a parameter(s) that you will measure and record at least once per averaging period (i.e., daily or block) to verify that the control device is operating properly. You may elect to measure the same parameter(s) that is required for control devices that control inlet HAP emissions equal to or greater than 1 tpy. If the parameter will not be measured continuously, you must request approval of your proposed procedure in the precompliance report. You must identify the operating limit(s) and the measurement frequency, and you must provide rationale to support how these measurements demonstrate the control device is operating properly.

* * * * *

5. Section 63.2460 is amended by:

a. Revising paragraph (b) introductory text and paragraphs (b)(1), (b)(2), and (b)(3);

b. Redesignating paragraph (b)(4) as paragraph (b)(5) and revising "paragraph (b)(4)(i) or paragraph (b)(4)(ii)" to read "paragraph (b)(5)(i) or paragraph (b)(5)(ii)" in redesignated paragraph (b)(5) introductory text;

c. Adding new paragraphs (b)(4), (b)(6), and (b)(7);

d. Revising paragraph (c) introductory text, paragraph (c)(1), paragraph (c)(2)(iii), and the first sentence in paragraph (c)(2)(v);

e. Removing and reserving paragraph (c)(5), and

f. Adding new paragraphs (c)(8) and (c)(9) to read as follows:

§63.2460 What requirements must I meet for batch process vents?

* * * * *

(b) Group status. If a process has batch process vents, as defined in §63.2550, you must determine the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in §63.1257(d)(2)(i) and (ii), except as specified in paragraphs (b)(1) through (7) of this section.

(1) To calculate emissions caused by the heating of a vessel without a process condenser to a temperature lower than the boiling point, you must use the procedures in §63.1257(d)(2)(i)(C)(3).

(2) To calculate emissions from depressurization of a vessel without a process condenser, you must use the procedures in §63.1257(d)(2)(i)(D)(10).

(3) To calculate emissions from vacuum systems for the purposes of this subpart, the receiving vessel is part of the vacuum system, and terms used in Equation 33 to 40 CFR part 63, subpart GGG, are defined as follows:

P_{system} = absolute pressure of the receiving vessel;
P_i = partial pressure of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;
P_j = partial pressure of condensables (including HAP) determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;
MW_{HAP} = molecular weight of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver.

(4) To calculate uncontrolled emissions when a vessel is equipped with a process condenser, you must use the procedures in §63.1257(d)(3)(i)(B), except as specified in paragraphs (b)(4)(i) through (vii) of this section.

(i) You must determine the flowrate of gas (or volume of gas), partial pressures of condensables, temperature

(T), and HAP molecular weight (MW_{HAP}) at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver.

(ii) You must assume that all of the components contained in the condenser exit vent stream are in equilibrium with the same components in the exit condensate stream (except for noncondensables).

(iii) You must perform a material balance for each component.

(iv) For the emissions from gas evolution, the term for time, t, must be used in Equation 12 to 40 CFR part 63, subpart GGG.

(v) Emissions from empty vessel purging shall be calculated using Equation 36 to 40 CFR part 63, subpart GGG and the exit temperature and exit pressure conditions of the condenser or the conditions of the dedicated receiver.

(vi) You must conduct an engineering assessment as specified in §63.1257(d)(2)(ii) for each emission episode that is not due to vapor displacement, purging, heating, depressurization, vacuum operations, gas evolution, air drying, or empty vessel purging. The requirements of paragraphs (b)(3) through (4) of this section shall apply.

(vii) You may elect to conduct an engineering assessment if you can demonstrate to the Administrator that the methods in §63.1257(d)(3)(i)(B) are not appropriate.

* * * * *

(6) You may change from Group 2 to Group 1 in accordance with either paragraph (b)(6)(i) or (ii) of this section. You must comply with the requirements of this section and submit the test report in the next Compliance report.

(i) You may switch at any time after operating as Group 2 for at least 1 year so that you can show compliance with the 10,000 pounds per year (lb/yr) threshold for Group 2 batch process vents for at least 365 days before the switch. You may elect to start keeping records of emissions from Group 2 batch process vents before the compliance date. Report a switch based on this provision in your next compliance report in accordance with §63.2520(e)(10)(i).

(ii) If the conditions in paragraph (b)(6)(i) of this section are not applicable, you must provide a 60-day advance notice in accordance with §63.2520(e)(10)(ii) before switching.

(7) As an alternative to determining the uncontrolled organic HAP emissions as specified in §63.1257(d)(2)(i) and

(ii), you may elect to demonstrate that non-reactive organic HAP are the only HAP used in the process and non-reactive HAP usage in the process is less than 10,000 lb/yr. You must provide data and supporting rationale in your notification of compliance status report explaining why the non-reactive organic HAP usage will be less than 10,000 lb/yr. You must keep records of the non-reactive organic HAP usage as specified in §63.2525(e)(2) and include information in compliance reports as specified in §63.2520(e)(5)(iv).

(c) Exceptions to the requirements in subparts SS and WW of this part 63 are specified in paragraphs (c)(1) through (9) of this section.

(1) Process condensers. Process condensers, as defined in §63.2550(i), are not considered to be control devices for batch process vents. You must determine whether a condenser is a control device for a batch process vent or a process condenser from which the uncontrolled HAP emissions are evaluated as part of the initial compliance demonstration for each MCPU and report the results with supporting rationale in your notification of compliance status report.

(2) * * *

(iii) As an alternative to conducting a performance test or design evaluation to demonstrate initial compliance with a percent reduction requirement for a condenser, you may determine controlled emissions using the procedures specified in §63.1257(d)(3)(i)(B) and paragraphs (b)(3) through (4) of this section.

* * * * *

(v) If a process condenser is used for any boiling operations, you must demonstrate that it is properly operated according to the procedures specified in §63.1257(d)(2)(i)(C)(4)(ii) and (d)(3)(iii)(B), and the demonstration must occur only during the boiling operation.

* * *

* * * * *

(5) [Reserved]

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(8) Terminology. When the term "storage vessel" is used in subpart WW of this part 63, the term "process tank," as defined in §63.2550(i), applies for the purposes of this section.

(9) Requirements for a biofilter. If you use a biofilter to meet either the 95 percent reduction requirement or outlet concentration requirement specified in Table 2 to this subpart, you must meet the requirements

specified in paragraphs (c)(9)(i) through (iv) of this section.

(i) Operational requirements. The biofilter must be operated at all times when emissions are vented to it.

(ii) Performance tests. To demonstrate initial compliance, you must conduct a performance test according to the procedures in §63.997 and paragraphs (c)(9)(ii)(A) through (D) of this section. The design evaluation option for small control devices is not applicable if you use a biofilter.

(A) Keep up-to-date, readily accessible continuous records of either the biofilter bed temperature averaged over the full period of the performance test or the outlet total organic HAP or TOC concentration averaged over the full period of the performance test. Include these data in your notification of compliance status report as required by §63.999(b)(3)(ii).

(B) Record either the percent reduction of total organic HAP achieved by the biofilter determined as specified in §63.997(e)(2)(iv) or the concentration of TOC or total organic HAP determined as specified in §63.997(e)(2)(iii) at the outlet of the biofilter, as applicable.

(C) If you monitor the biofilter bed temperature, you may elect to use multiple thermocouples in representative locations throughout the biofilter bed and calculate the average biofilter bed temperature across these thermocouples prior to reducing the temperature data to 15 minute (or shorter) averages for purposes of establishing operating limits for the biofilter. If you use multiple thermocouples, include your rationale for their site selection in your notification of compliance status report.

(D) Submit a performance test report as specified in §63.999(a)(2)(i) and (ii). Include the records from paragraph (c)(9)(ii)(B) of this section in your performance test report.

(iii) Monitoring requirements. Use either a biofilter bed temperature monitoring device (or multiple devices) capable of providing a continuous record or an organic monitoring device capable of providing a continuous record. Keep records of temperature or other parameter monitoring results as specified in §63.998(b) and (c), as applicable. General requirements for monitoring are contained in §63.996. If you monitor temperature, the operating temperature range must be based on only the temperatures measured during the performance test; these data may not be supplemented by engineering assessments or

manufacturer's recommendations as otherwise allowed in §63.999(b)(3)(ii)(A). If you establish the operating range (minimum and maximum temperatures) using data from previous performance tests in accordance with §63.996(c)(6), replacement of the biofilter media with the same type of media is not considered a process change under §63.997(b)(1). You may expand your biofilter bed temperature operating range by conducting a repeat performance test that demonstrates compliance with the 95 percent reduction requirement or outlet concentration limit, as applicable.

(iv) Repeat performance tests. You must conduct a repeat performance test using the applicable methods specified in §63.997 within 2 years following the previous performance test and within 150 days after each replacement of any portion of the biofilter bed media with a different type of media or each replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media.

6. Section 63.2465 is amended by revising the section heading, paragraph (b), and paragraph (d) to read as follows:

§63.2465 What requirements must I meet for process vents that emit hydrogen halide and halogen HAP or HAP metals?

* * * * *

(b) If any process vents within a process emit hydrogen halide and halogen HAP, you must determine and sum the uncontrolled hydrogen halide and halogen HAP emissions from each of the process vents within the process using the procedures specified in §63.1257(d)(2)(i) and/or (ii), as appropriate. When §63.1257(d)(2)(ii)(E) requires documentation to be submitted in the precompliance report, it means the notification of compliance status report for the purposes of this paragraph.

* * * * *

(d) To demonstrate compliance with the emission limit in Table 3 to this subpart for HAP metals at a new source, you must comply with paragraphs (d)(1) through (3) of this section.

(1) Determine the mass emission rate of HAP metals based on process knowledge, engineering assessment, or test data.

(2) Conduct an initial performance test of each control device that is used to comply with the emission limit for HAP metals specified in Table 3 to this subpart. Conduct the performance test according to the procedures in §63.997. Use Method 29 of appendix A of 40 CFR part 60 to determine the HAP metals at the inlet and outlet of each

control device, or use Method 5 of appendix A of 40 CFR part 60 to determine the total particulate matter (PM) at the inlet and outlet of each control device. You have demonstrated initial compliance if the overall reduction of either HAP metals or total PM from the process is greater than or equal to 97 percent by weight.

(3) Comply with the monitoring requirements specified in §63.1366(b)(1)(xi) for each fabric filter used to control HAP metals.

7. Section 63.2470 is amended by:

a. Removing and reserving paragraph (b); and

b. Revising paragraph (e)(2) to read as follows:

§63.2470 What requirements must I meet for storage tanks?

* * * * *

(b) [Reserved]

(e) * * *

(2) To comply with §63.1253(f)(6)(i), the owner or operator of an offsite cleaning or reloading facility must comply with §§63.2445 through 63.2550 instead of complying with §63.1253(f)(7)(ii), except as specified in paragraph (e)(2)(i) or (ii) of this section.

(i) The reporting requirements in §63.2520 do not apply to the owner or operator of the offsite cleaning or reloading facility.

(ii) As an alternative to complying with the monitoring, recordkeeping, and reporting provisions in §§63.2445 through 63.2550, the owner or operator of an offsite cleaning or reloading facility may comply as specified in §63.2535(a)(2) with any other subpart of this part 63 which has monitoring, recordkeeping, and reporting provisions as specified in §63.2535(a)(2).

* * * * *

8. Section 63.2475 is amended by removing paragraph (c).

9. Section 63.2480 is revised to read as follows:

§63.2480 What requirements must I meet for equipment leaks?

(a) You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.

(b) If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.

(1) The requirements for pressure testing in §63.179(b) or §63.1036(b) may be applied to all processes, not just batch processes.

(2) For the purposes of this subpart, pressure testing for leaks in accordance with §63.179(b) or §63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under §63.1022(b)(1) or §63.181(b)(1)(i).

(4) For connectors in gas/vapor and light liquid service at an existing source, you may elect to comply with the requirements in §63.169 or §63.1029 for connectors in heavy liquid service, including all associated recordkeeping and reporting requirements, rather than the requirements of §63.174 or §63.1027.

(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 parts per million (ppm) or greater as an alternative to the values specified in §63.1026(b)(2)(i) through (iii) or §63.163(b)(2).

(c) If you comply with 40 CFR part 65, subpart F, you may elect to comply with the provisions in paragraphs

(c)(1) through (9) of this section as an alternative to the referenced provisions in 40 CFR part 65, subpart F.

(1) The requirements for pressure testing in §65.117(b) may be applied to all processes, not just batch processes.

(2) For the purposes of this subpart, pressure testing for leaks in accordance with §65.117(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.

(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under §65.103(b)(1).

(4) You may elect to comply with the monitoring and repair requirements specified in §65.108(e)(3) as an alternative to the requirements specified in §65.108(a) through (d) for any connectors at your affected source.

(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 ppm or greater as an alternative to the values specified in §65.107(b)(2)(i) through (iii).

(6) When 40 CFR part 65, subpart F refers to the implementation date specified in §65.1(f), it means the compliance date specified in §63.2445.

(7) When §§65.105(f) and 65.117(d)(3) refer to §65.4, it means §63.2525.

(8) When §65.120(a) refers to §65.5(d), it means §63.2515.

(9) When §65.120(b) refers to §65.5(e), it means §63.2520.

(d) The provisions of this section do not apply to bench-scale processes, regardless of whether the processes are located at the same plant site as a process subject to the provisions of this subpart.

10. Section 63.2485 is amended by revising paragraph (a) and paragraphs (c)(1) through (3) and by adding new paragraphs (m), (n), and (o) to read as follows:

§63.2485 What requirements must I meet for wastewater streams and liquid streams in open systems within an MCPU?

(a) You must meet each requirement in Table 7 to this subpart that applies to your wastewater streams and liquid streams in open systems within an MCPU, except as specified in paragraphs (b) through (o) of this section.

* * * * *

(c) * * *

(1) The total annual average concentration of compounds in Table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in Table 8 to this subpart is greater than or equal to 200 lb/yr.

(2) The total annual average concentration of compounds in Table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.

(3) The combined total annual average concentration of compounds in Tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in Tables 8 and 9 to this subpart is greater than or equal to 1 tpy.

* * * * *

(m) When §63.132(f) refers to "a concentration of greater than 10,000 ppmw of Table 9 compounds," it means "a concentration of greater than 30,000 ppmw of total partially soluble HAP (PSHAP) and soluble HAP (SHAP) or greater than 10,000 ppmw of PSHAP" for the purposes of this subpart.

(n) Alternative requirements for wastewater that is Group 1 for soluble HAP only. The option specified in this paragraph (n) applies to wastewater that is Group 1 for

soluble HAP in accordance with paragraph (c)(3) of this section and is discharged to biological treatment. Except as provided in paragraph (n)(4) of this section, this option does not apply to wastewater that is Group 1 for partially soluble HAP in accordance with paragraph (c)(1), (c)(2), or (c)(4) of this section. For wastewater that is Group 1 for SHAP, you need not comply with §§63.133 through 63.137 for any equalization unit, neutralization unit, and/or clarifier prior to the activated sludge unit, and you need not comply with the venting requirements in §63.136(e)(2)(ii)(A) for lift stations with a volume larger than 10,000 gal, provided you comply with the requirements specified in paragraphs (n)(1) through (3) of this section and all otherwise applicable requirements specified in Table 7 to this subpart. For this option, the treatment requirements in §63.138 and the performance testing requirements in §63.145 do not apply to the biological treatment unit, except as specified in paragraphs (n)(2)(i) through (iv) of this section.

(1) Wastewater must be hard-piped between the equalization unit, clarifier, and activated sludge unit. This requirement does not apply to the transfer between any of these types of units that are part of the same structure and one unit overflows into the next.

(2) Calculate the destruction efficiency of the biological treatment unit using Equation 1 of this section in accordance with the procedures described in paragraphs (n)(2)(i) through (vi) of this section. You have demonstrated initial compliance if E is greater than or equal to 90 percent.

$$E = \frac{(QMW_a - QMG_e - QMG_n - QMG_c)(F_{bio})}{QMW_a} \times 100 \qquad \text{(Eq. 1)}$$

where:

E = destruction efficiency of total PSHAP and SHAP for the biological treatment unit including the equalization unit, neutralization unit, and/or clarifier, percent;

QMW_a = mass flow rate of total PSHAP and SHAP compounds entering the equalization unit (or whichever of the three types of units is first), kilograms per hour (kg/hr);

QMG_e = mass flow rate of total PSHAP and SHAP compounds emitted from the equalization unit, kg/hr;

QMG_n = mass flow rate of total PSHAP and SHAP compounds emitted from the neutralization unit, kg/hr;

QMG_c = mass flow rate of total PSHAP and SHAP compounds emitted from the clarifier, kg/hr

F_{bio} = site-specific fraction of PSHAP and SHAP compounds biodegraded in the biological treatment unit.

(i) Include all PSHAP and SHAP compounds in both Group 1 and Group 2 wastewater streams from all MCPU, except you may exclude any compounds that meet the criteria specified in §63.145(a)(6)(ii) or (iii).

(ii) Conduct the demonstration under representative process unit and treatment unit operating conditions in accordance with §63.145(a)(3) and (4).

(iii) Determine PSHAP and SHAP concentrations and the total wastewater flow rate at the inlet to the equalization unit in accordance with §63.145(f)(1) and (2). References in §63.145(f)(1) and (2) to required mass removal and actual mass removal do not apply for the purposes of this section.

(iv) Determine F_{bio} for the activated sludge unit as specified in §63.145(h), except as specified in paragraph (n)(2)(iv)(A) or paragraph (n)(2)(iv)(B) of this section.

(A) If the biological treatment process meets both of the requirements specified in §63.145(h)(1)(i) and (ii), you may elect to replace the F_{bio} term in Equation 1 of this section with the numeral "1."

(B) You may elect to assume f_{bio} is zero for any compounds on List 2 of Table 36 in subpart G.

(v) Determine QMG_e, QMG_n, and QMG_c using EPA's WATER9 model or the most recent update to this model, and conduct testing or use other procedures to validate the modeling results.

(vi) Submit the data and results of your demonstration, including both a description of and the

results of your WATER9 modeling validation procedures, in your notification of compliance status report as specified in §63.2520(d)(2)(ii).

(3) As an alternative to the venting requirements in §63.136(e)(2)(ii)(A), a lift station with a volume larger than 10,000 gal may have openings necessary for proper venting of the lift station. The size and other design characteristics of these openings may be established based on manufacturer recommendations or engineering judgment for venting under normal operating conditions. You must describe the design of such openings and your supporting calculations and other rationale in your notification of compliance status report.

(4) For any wastewater streams that are Group 1 for both PSHAP and SHAP, you may elect to meet the requirements specified in Table 7 to this subpart for the PSHAP and then comply with paragraphs (n)(1) through (3) of this section for the SHAP in the wastewater system. You may determine the SHAP mass removal rate, in kg/hr, in treatment units that are used to meet the requirements for PSHAP and add this amount to both the numerator and denominator in Equation 1 of this section.

(o) Compliance records. For each CPMS used to monitor a nonflare control device for wastewater emissions,

you must keep records as specified in §63.998(c)(1) in addition to the records required in §63.147(d).

11. Section 63.2495 is amended by revising paragraph (b)(1) to read as follows:

§63.2495 How do I comply with the pollution prevention standard?

* * * * *

(b) * * *

(1) You must comply with the emission limitations and work practice standards contained in Tables 1 through 7 of this subpart for all HAP that are generated in the MCPU and that are not included in consumption, as defined in §63.2550. If any vent stream routed to the combustion control is a halogenated vent stream, as defined in §63.2550, then hydrogen halides that are generated as a result of combustion control must be controlled according to the requirements of §63.994 and the requirements referenced therein.

* * * * *

12. Section 63.2520 is amended by:

a. Revising paragraph (c)(4);

b. Revising paragraph (d)(2)(i) and (d)(2)(ix);

c. Revising paragraphs (e)(5) introductory text,

(e)(5)(ii)(C), and (e)(5)(iii)(K) and adding new paragraph (e)(5)(iv);

d. Revising paragraph (e)(9); and

e. Revising the first two sentences of paragraph (e)(10)(i) and paragraph (e)(10)(ii)(C) to read as follows:

§63.2520 What reports must I submit and when?

* * * * *

(c) * * *

(4) Data and rationale used to support an engineering assessment to calculate uncontrolled emissions in accordance with §63.1257(d)(2)(ii). This requirement does not apply to calculations of hydrogen halide and halogen HAP emissions as specified in §63.2465(b), to determinations that the total HAP concentration is less than 50 ppmv, or if you use previous test data to establish the uncontrolled emissions.

* * * * *

(d) * * *

(2) * * *

(i) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP usage or HAP emissions from the affected source.

* * * * *

(ix) Records as specified in §63.2535(l)(1) through (3) of process units used to create a PUG and calculations of the initial primary product of the PUG.

(e) * * *

(5) The compliance report must contain the information on deviations, as defined in §63.2550, according to paragraphs (e)(5)(i), (ii), (iii), and (iv) of this section.

* * * * *

(ii) * * *

(C) Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.

(iii) * * *

(K) Operating logs of processes with batch vents from batch operations for each day(s) during which the deviation occurred.

* * * * *

(iv) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive HAP is the only HAP and usage is less than 10,000 lb/yr, the total uncontrolled

organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, or total uncontrolled hydrogen halide and halogen HAP emissions from all batch process vents and continuous process vents in a process are less than 1,000 lb/yr, include the records associated with each calculation required by §63.2525(e) that exceeds an applicable HAP usage or emissions threshold.

* * * * *

(9) Applicable records and information for periodic reports as specified in referenced subparts F, G, H, SS, UU, WW, and GGG of this part and subpart F of 40 CFR part 65.

(10) * * *

(i) Except as specified in paragraph (e)(10)(ii) of this section, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. * * *

(ii) * * *

(C) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in §63.2460(b)(6)(i).

13. Section 63.2525 is amended by revising paragraphs (a), (c), and (e) to read as follows:

§63.2525 What records must I keep?

* * * * *

(a) Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.

* * * * *

(c) A schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect.

* * * * *

(e) The information specified in paragraph (e)(2), (3), or (4) of this section, as applicable, for each process with Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000

lb/yr. No records are required for situations described in paragraph (e)(1) of this section.

(1) No records are required if you documented in your notification of compliance status report that the MCPU meets any of the situations described in paragraph (e)(1)(i), (ii), or (iii) of this section.

(i) The MCPU does not process, use, or generate HAP.

(ii) You control the Group 2 batch process vents using a flare that meets the requirements of §63.987.

(iii) You control the Group 2 batch process vents using a control device for which your determination of worst case for initial compliance includes the contribution of all Group 2 batch process vents.

(2) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in §63.2460(b)(7), you must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as

specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only usage if the usage during the year is less than 10,000 lb.

(3) If you documented in your notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then you must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions.

(4) If you meet none of the conditions specified in paragraphs (e)(1) through (3) of this section, you must keep records of the information specified in paragraphs (e)(4)(i) through (iv) of this section.

(i) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.

(ii) A record of whether each batch operated was considered a standard batch.

(iii) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.

(iv) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.

* * * * *

14. Section 63.2535 is amended by revising paragraphs (a) and (k) to read as follows:

§63.2535 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?

* * * * *

(a) Compliance with other subparts of this part 63.

(1) If you have an MCPU that includes a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63, you must comply with the emission limits; operating limits; work practice standards; and the compliance, monitoring, reporting, and recordkeeping

requirements for batch process vents in this subpart, and you must continue to comply with the requirements in subparts F, G, and H of this part 63 that are applicable to the CMPU and associated equipment.

(2) After the compliance dates specified in §63.2445, at an offsite reloading or cleaning facility subject to §63.1253(f), as referenced from §63.2470(e), compliance with the monitoring, recordkeeping, and reporting provisions of any other subpart of this part 63 constitutes compliance with the monitoring, recordkeeping, and reporting provisions of §63.1253(f)(7)(ii) or §63.1253(f)(7)(iii). You must identify in your notification of compliance status report required by §63.2520(d) the subpart of this part 63 with which the owner or operator of the offsite reloading or cleaning facility complies.

* * * * *

(k) Compliance with 40 CFR part 60, subpart VV, and 40 CFR part 61, subpart V. After the compliance date specified in §63.2445, if you have an affected source with equipment that is also subject to the requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. After the compliance date specified in §63.2445, if you

have an affected source with equipment to which this subpart does not apply, but which is subject to the requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. If you elect either of these methods of compliance, you must consider all total organic compounds, minus methane and ethane, in such equipment for purposes of compliance with this subpart, as if they were organic HAP. Compliance with the provisions of this subpart, in the manner described in this paragraph (k), will constitute compliance with 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V, as applicable.

* * * * *

15. Section 63.2550 is amended by:

a. Revising paragraph (b);

b. Revising the last sentence in paragraph (i) introductory text;

c. Revising paragraph (8) in the definition of the term “batch process vent” in paragraph (i);

d. Adding new paragraphs (6) and (7) to the definition of the term “continuous process vent” in paragraph (i);

e. Revising the definition of the term “Group 1 continuous process vent” in paragraph (i);

f. Revising the definition of the term “isolated intermediate” in paragraph (i);

g. Adding new paragraph (6) to the definition of the term “miscellaneous organic chemical manufacturing process” in paragraph (i);

h. Revising the definition of the term “recovery device” in paragraph (i);

i. Revising the definition of the term “surge control vessel” in paragraph (i);

j. Revising the introductory text of the definition of the term “wastewater” in paragraph (i); and

k. Adding, in alphabetical order, new definitions for the terms “biofilter,” “continuous operation,” “emission point,” “halogen atoms,” “HAP metals,” “point of determination,” and “process condenser” in paragraph (i) to read as follows:

§63.2550 What definitions apply to this subpart?

* * * * *

(b) For an affected source complying with the requirements in 40 CFR part 65, subpart F, the terms used in this subpart and in 40 CFR part 65, subpart F have the meaning given to them in §65.2.

* * * * *

(i) * * * If a term is defined in §63.2, §63.101, §63.111, §63.981, §63.1020, §63.1061, §63.1251, or §65.2 and in this paragraph (i), the definition in this paragraph (i) applies for the purposes of this subpart.

* * * * *

Batch process vent * * *

(8) Emission streams from emission episodes that are undiluted and uncontrolled containing less than 50 ppmv HAP are not part of any batch process vent. 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 is not a batch process vent; emissions for all emission episodes associated with the unit operation(s) must be included in the determination of the total mass emitted. The HAP concentration or mass emission rate may be determined using any of the following: process knowledge that no HAP are present in the emission stream; an engineering assessment as discussed in §63.1257(d)(2)(ii), except that you do not need to demonstrate that the equations in §63.1257(d)(2)(i) do not apply, and the precompliance reporting requirements specified in §63.1257(d)(2)(ii)(E) do not apply for the purposes of this demonstration; equations specified in §63.1257(d)(2)(i), as applicable; test data using Method 18

of 40 CFR part 60, appendix A; or any other test method that has been validated according to the procedures in Method 301 of appendix A of this part.

* * * * *

Biofilter means an enclosed control system such as a tank or series of tanks with a fixed roof that contact emissions with a solid media (such as bark) and use microbiological activity to transform organic pollutants in a process vent stream to innocuous compounds such as carbon dioxide, water, and inorganic salts. Wastewater treatment processes such as aeration lagoons or activated sludge systems are not considered to be biofilters.

* * * * *

Continuous operation means any operation that is not a batch operation.

Continuous process vent * * *

(6) The references to an "air oxidation reactor, distillation unit, or reactor" in §63.107 mean any continuous operation for the purposes of this subpart.

(7) A separate determination is required for the emissions from each MCPU, even if emission streams from two or more MCPU are combined prior to discharge to the atmosphere or to a control device.

* * * * *

Emission point means each continuous process vent, batch process vent, storage tank, transfer rack, and wastewater stream.

* * * * *

Group 1 continuous process vent means a continuous process vent for which the flow rate is greater than or equal to 0.005 standard cubic meter per minute, and the total resource effectiveness index value, calculated according to §63.2455(b), is less than or equal to 1.9 at an existing source and less than or equal to 5.0 at a new source.

* * * * *

Halogen atoms mean chlorine and fluorine.

HAP metals means the metal portion of antimony compounds, arsenic compounds, beryllium compounds, cadmium compounds, chromium compounds, cobalt compounds, lead compounds, manganese compounds, mercury compounds, nickel compounds, and selenium compounds.

* * * * *

Isolated intermediate means a product of a process that is stored before subsequent processing. An isolated intermediate is usually a product of a chemical synthesis, fermentation, or biological extraction process. Storage of an isolated intermediate marks the end of a process.

Storage occurs at any time the intermediate is placed in equipment used solely for storage. The storage equipment is part of the MCPU that produces the isolated intermediate and is not assigned as specified in §63.2435(d).

Miscellaneous organic chemical manufacturing process

* * *

(6) The end of a process that produces a solid material is either up to and including the dryer or extruder, or for a polymer production process without a dryer or extruder, it is up to and including the extruder, die plate, or solid-state reactor, except in two cases. If the dryer, extruder, die plate, or solid-state reactor is followed by an operation that is designed and operated to remove HAP solvent or residual HAP monomer from the solid, then the solvent removal operation is the last step in the process. If the dried solid is diluted or mixed with a HAP-based solvent, then the solvent removal operation is the last step in the process.

* * * * *

Point of determination means each point where process wastewater exits the MCPU or control device.

Note to definition for point of determination: The regulation allows determination of the characteristics of a wastewater stream (1) at the point of determination or (2)

downstream of the point of determination if corrections are made for changes in flow rate and annual average concentration of soluble HAP and partially soluble HAP compounds as determined according to procedures in §63.144 of subpart G in this part 63. Such changes include losses by air emissions; reduction of annual average concentration or changes in flow rate by mixing with other water or wastewater streams; and reduction in flow rate or annual average concentration by treating or otherwise handling the wastewater stream to remove or destroy HAP.

* * * * *

Process condenser means a condenser whose primary purpose is to recover material as an integral part of an MCPU. All condensers recovering condensate from an MCPU at or above the boiling point or all condensers in line prior to a vacuum source are considered process condensers. Typically, a primary condenser or condensers in series are considered to be integral to the MCPU if they are capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse or for sale for fuel value, use, or reuse. This definition does not apply to a condenser that is used to remove materials that would hinder performance of a downstream recovery device as follows:

(1) To remove water vapor that would cause icing in a downstream condenser, or

(2) To remove water vapor that would negatively affect the adsorption capacity of carbon in a downstream carbon adsorber, or

(3) To remove high molecular weight organic compounds or other organic compounds that would be difficult to remove during regeneration of a downstream carbon adsorber.

* * * * *

Recovery device means an individual unit of equipment used for the purpose of recovering chemicals from process vent streams and from wastewater streams for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. For the purposes of meeting requirements in Table 2 to this subpart, the recovery device must not be a process condenser and must recover chemicals to be reused in a process on site. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. To be a recovery device for a wastewater stream, a decanter and any other equipment based on the operating principle of

gravity separation must receive only multi-phase liquid streams.

* * * * *

Surge control vessel means feed drums, recycle drums, and intermediate vessels as part of any continuous operation. Surge control vessels are used within an MCPU when in-process storage, mixing, or management of flowrates or volumes is needed to introduce material into continuous operations.

* * * * *

Wastewater means water that is discarded from an MCPU or control device through a POD and that contains either: an annual average concentration of compounds in Tables 8 and 9 to this subpart of at least 5 ppmw and has an annual average flowrate of 0.02 liters per minute or greater; or an annual average concentration of compounds in Tables 8 and 9 to this subpart of at least 10,000 ppmw at any flowrate. Wastewater means process wastewater or maintenance wastewater. The following are not considered wastewater for the purposes of this subpart: * * *

* * * * *

16. Table 2 to subpart FFFF of part 63 is amended by revising entry 1 to read as follows:

TABLE 2 TO SUBPART FFFF OF PART 63--EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR BATCH PROCESS VENTS

As required in §63.2460, you must meet each emission limit and work practice standard in the following table that applies to your batch process vents:

For each . . .	Then you must . . .	And you must . . .
1. Process with Group 1 batch process vents.	a. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥98 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices (except a flare); or	Not applicable.
	b. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥95 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of recovery devices or a biofilter, except you may elect to comply with the requirements of subpart WW of this part for any process tank; or	Not applicable.
	c. Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting	For all other batch process vents within the process, reduce

	through a closed-vent system to a flare or by venting through one or more closed-vent systems to any combination of control devices (excluding a flare) that reduce organic HAP to an outlet concentration ≤20 ppmv as TOC or total organic HAP.	collective organic HAP emissions as specified in item 1.a and/or item 1.b of this table.

* * * * * * *

17. Table 3 to subpart FFFF of part 63 is revised to read as follows:

TABLE 3 TO SUBPART FFFF OF PART 63--EMISSION LIMITS FOR HYDROGEN HALIDE AND HALOGEN HAP EMISSIONS OR HAP METALS EMISSIONS FROM PROCESS VENTS

As required by §63.2465, you must meet each emission limit in the following table that applies to your process vents that contain hydrogen halide and halogen HAP emissions or PM HAP emissions:

For each . . .	You must . . .
1. Process with uncontrolled hydrogen halide and halogen HAP emissions from process vents ≥1,000 lb/yr	a. Reduce collective hydrogen halide and halogen HAP emissions by ≥99 percent by weight or to an outlet concentration ≤20 ppmv by venting through one or more closed-vent systems to any combination of control devices, or b. Reduce the halogen atom mass emission rate from the sum of all batch process vents and each individual continuous

	process vent to ≤0.45 kg/hr by venting through one or more closed-vent systems to a halogen reduction device.
2. Process at a new source with uncontrolled emissions from process vents ≥150 lb/yr of HAP metals.	Reduce overall emissions of HAP metals by ≥97 percent by weight.

18. Table 4 to subpart FFFF of part 63 is amended by revising entry 1 to read as follows:

TABLE 4 TO SUBPART FFFF OF PART 63--EMISSION LIMITS FOR STORAGE TANKS

As required by §63.2470, you must meet each emission limit in the following table that applies to your storage tanks:

For each . . .	For which . . .	Then you must . . .
1. Group 1 storage tank	a. The maximum true vapor pressure of total HAP at the storage temperature is ≥76.6 kilopascals	i. Reduce total HAP emissions by ≥95 percent by weight or to ≤20 ppmv of TOC or organic HAP and ≤20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or ii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or iii. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with §63.982(d) and the requirements referenced therein.
	b. The maximum true vapor pressure of total HAP at the storage temperature is <76.6 kilopascals	i. Comply with the requirements of subpart WW of this part, except as specified in §63.2470; or ii. Reduce total HAP emissions by ≥95 percent by weight or to ≤20 ppmv of TOC or organic HAP and ≤20 ppmv of hydrogen halide and halogen HAP by venting emissions

		through a closed vent system to any combination of control devices (excluding a flare); or iii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or iv. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with §63.982(d) and the requirements referenced therein.

* * * * * * *

19. Table 5 to subpart FFFF of part 63 is amended by revising entry 1 to read as follows:

TABLE 5 TO SUBPART FFFF OF PART 63--EMISSION LIMITS AND WORK PRACTICE STANDARDS FOR TRANSFER RACKS

As required in §63.2475, you must meet each emission limit and work practice standard in the following table that applies to your transfer racks:

For each . . .	You must . . .
1. Group 1 transfer rack	a. Reduce emissions of total organic HAP by ≥98 percent by weight or to an outlet concentration ≤20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare); or b. Reduce emissions of total organic HAP by venting emissions through a closed-vent system to a flare; or c. Reduce emissions of total organic HAP

	by venting emissions to a fuel gas system or process in accordance with §63.982(d) and the requirements referenced therein; or d. Use a vapor balancing system designed and operated to collect organic HAP vapors displaced from tank trucks and railcars during loading and route the collected HAP vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected by a common header.
* * * * * * *	

20. Table 6 to subpart FFFF of part 63 is revised to read as follows:

TABLE 6 TO SUBPART FFFF OF PART 63--REQUIREMENTS FOR EQUIPMENT LEAKS

As required in §63.2480, you must meet each requirement in the following table that applies to your equipment leaks:

For all . . .	You must . . .
1. Equipment that is in organic HAP service	a. Comply with the requirements of subpart UU of this part 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or b. Comply with the requirements of subpart H of this part 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or c. Comply with the requirements of 40 CFR part 65, subpart F and the requirements referenced therein, except as specified in §63.2480(c) and (d).

21. Table 8 to subpart FFFF of part 63 is revised by deleting entry 10 and redesignating entries 11 through 61 as entries 10 through 60.

22. Table 12 to subpart FFFF of part 63 is amended as follows:

a. Removing the entries for §§63.8(c)(4)(i)-(ii) and 63.10(e)(1)-(2);

b. Adding new entries for §§63.8(c)(4)(i), 63.8(c)(4)(ii), 63.10(e)(1), 63.10(e)(2)(i), and 63.10(e)(2)(ii); and

c. Revising the entries for §§63.8(c)(4), 63.8(c)(6), 63.8(c)(7)-(8), 63.8(d), 63.8(e), 63.9(g), 63.10(b)(2)(xiii), and 63.10(c)(1)-(6), (7)-(15).

TABLE 12 TO SUBPART FFFF OF PART 63--APPLICABILITY OF GENERAL PROVISIONS TO SUBPART FFFF

As specified in §63.2540, the parts of the General Provisions that apply to you are shown in the following table:

Citation	Subject	Explanation
* * * * * * *		
§63.8(c)(4)	CMS Requirements	Only for CEMS. Requirements for CPMS are specified in referenced subparts G and SS of part 63. Requirements for COMS do not apply because subpart FFFF does not require continuous opacity monitoring systems (COMS).
§63.8(c)(4)(i)	COMS Measurement and Recording Frequency	No; subpart FFFF does not require COMS.
§63.8(c)(4)(ii)	CEMS Measurement and Recording Frequency	Yes.
* * * * * * *		
§63.8(c)(6)	CMS Requirements	Only for CEMS; requirements for CPMS are specified in referenced subparts G and SS of this part 63. Requirements for COMS do not apply because subpart FFFF does not require COMS.
§63.8(c)(7)-(8)	CMS Requirements	Only for CEMS. Requirements for CPMS are specified

		in referenced subparts G and SS of part 63. Requirements for COMS do not apply because subpart FFFF does not require COMS.
§63.8(d)	CMS Quality Control	Only for CEMS.
§63.8(e)	CMS Performance Evaluation	Only for CEMS. Section 63.8(e)(5)(ii) does not apply because subpart FFFF does not require COMS.
* * * * * * *		
§63.9(g)	Additional Notifications When Using CMS	Only for CEMS. Section 63.9(g)(2) does not apply because subpart FFFF does not require COMS.
* * * * * * *		
§63.10(b)(2)(xiii)	Records	Only for CEMS.
* * * * * * *		
§63.10(c)(1)-(6),(9)-(15)	Records	Only for CEMS. Recordkeeping requirements for CPMS are specified in referenced subparts G and SS of this part 63.
* * * * * * *		
§63.10(e)(1)	Additional CEMS Reports	Yes.
§63.10(e)(2)(i)	Additional CMS Reports	Only for CEMS.
§63.10(e)(2)(ii)	Additional COMS Reports	No. Subpart FFFF does not require COMS.
* * * * * * *		