

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 63**

[AD-FRL-6923-8]

RIN 2060-AH81

**National Emission Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry and Other Processes Subject to the Negotiated Regulation for Equipment Leaks**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule; amendments.

**SUMMARY:** On April 22, 1994 and June 6, 1994, the EPA issued the "National Emission Standards for Hazardous Air Pollutants for Source Categories: Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry and Other Processes Subject to the Negotiated Regulation for Equipment Leaks." This rule is commonly known as the Hazardous Organic National Emission Standards for Hazardous Air Pollutants (NESHAP) or the HON. On January 20, 2000, the EPA proposed amendments to the definition of the term "process vent" and to add procedures for identifying "process vents" in order to ensure consistent interpretation of the term. The EPA also proposed revisions to several provisions of the rule to reflect the terminology used in the revised definition of process vent. These changes were proposed to reduce the burden associated with developing operating permits for facilities subject to the rule. The January 20, 2000 document also proposed to add provisions to allow off-site control of process vent emissions and to add provisions for establishing a new compliance date under certain circumstances. In that action, EPA also proposed to add an alternative procedure for use in determining compliance with wastewater treatment requirements. Today's action takes final action on those proposed amendments.

These amendments to the rule will not change the basic control requirements of the rule or the level of health protection it provides. The rule requires new and existing major sources to control emissions of hazardous air pollutants to the level reflecting application of the maximum achievable control technology.

**EFFECTIVE DATE:** January 22, 2001.

**ADDRESSES:** Docket No. A-90-19 contains the supporting information for the original NESHAP and this action. You may inspect this docket and copy materials between 8:00 a.m. and 5:30 p.m., Monday through Friday. The EPA's Air and Radiation Docket and Information Center is located at Waterside Mall, Room M-1500, first floor, 401 M Street, SW, Washington, DC 20460. The telephone number for the Air Docket and Information Center is (202) 260-7548 or (202) 260-7549. You may have to pay a reasonable fee for copying materials.

**FOR FURTHER INFORMATION CONTACT:** For general questions, contact Dr. Janet Meyer, Coatings and Consumer Products Group, at (919) 541-5254 (meyer.jan@epa.gov). For technical questions on appendix C and wastewater provisions, contact Elaine Manning, Waste and Chemical Processes Group, telephone number (919) 541-5499 (manning.elaine@epa.gov). The mailing address for the contacts is Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

**SUPPLEMENTARY INFORMATION:** *Docket.* The docket is an organized file of the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file, because material is added throughout the rulemaking development. The docketing system is intended to allow members of the public and industries involved to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the proposed and promulgated standards and their preambles, the contents of the docket, except for certain interagency documents, will serve as the record for judicial review. (See the Clean Air Act (CAA), section 307(d)(7)(A).)

*Judicial Review.* Under Section 307(b)(1) of the CAA, judicial review of this final action is available only on the filing of a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by March 23, 2001. Under Section 307(b)(2) of the CAA, the requirements established by these final rule amendments may not be challenged later in civil or criminal proceedings brought by EPA to enforce these requirements.

*World Wide Web (WWW).* In addition to being available in the docket, an electronic copy of this rule amendment will also be available on the WWW through the Technology Transfer Network (TTN). Following signature, a

copy of the rule amendments 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. If more information regarding the TTN is needed, call the TTN HELP line at (919) 541-5384.

*Regulated Entities.* The regulated category and entities affected by this action include:

Category	Examples of regulated entities
Industry .....	Synthetic organic chemical manufacturing industry (SOCMI) units, e.g., producers of benzene, toluene, or any other chemical listed in table 1 of 40 CFR part 63, subpart F.

This table is not intended to be exhaustive but, rather, provides a guide for readers regarding entities likely to be interested in the revisions to the regulation affected by this action. This action is expected to be of interest to owners and operators subject to this rule who have process vents that may be affected by these rule amendments and to those owners or operators who are sending vent streams (gas streams) to another facility for disposal. This action may also be of interest to owners and operators subject to this rule, or another rule in part 63, who plan to use biological treatment to comply with control requirements for wastewater streams. Entities potentially regulated by the HON are those which produce as primary intended products any of the chemicals listed in table 1 of 40 CFR part 63, subpart F, and are located at facilities that are major sources as defined in section 112 of the CAA. Potentially regulated entities generally are companies that manufacture industrial organic chemicals and cyclic organic crude and intermediates. To determine whether your facility is regulated by this action, you should carefully examine all of the applicability criteria in 40 CFR 63.100. If you have questions regarding the applicability of this action to a particular entity, consult Dr. Janet Meyer (see FOR FURTHER INFORMATION CONTACT).

*Outline.* The information presented in the preamble is organized as follows:

- I. Background on the Rule
- II. Public Comment on the January 20, 2000 Proposal
- III. Summary of Major Comments and Changes to the Proposed Amendments to the Rule

- A. Definition of Process Vent and Associated Changes
- B. Appendix C to Part 63
- C. Miscellaneous Corrections and Clarifications to the Rule
- IV. Technical Corrections
- V. Administrative Requirements
  - A. Executive Order 12866, Regulatory Planning and Review
  - B. Executive Order 13132, Federalism
  - C. Executive Order 13084, Consultation and Coordination with Indian Tribal Governments
  - D. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks
  - E. Unfunded Mandates Reform Act of 1995
  - F. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601, *et seq.*
  - G. Paperwork Reduction Act
  - H. National Technology Transfer and Advancement Act
  - I. Congressional Review Act

### I. Background on the Rule

On April 22, 1994 (59 FR 19402), and June 6, 1994 (59 FR 29196), EPA published in the **Federal Register** the NESHAP for the synthetic organic chemical manufacturing industry (SOCMI) and for several other processes subject to the equipment leaks portion of the rule. This rule was promulgated as subparts F, G, H, and I in 40 CFR part 63 and are commonly referred to as the hazardous organic NESHAP, or the HON. We have published several amendments to clarify various aspects of the rule since their promulgation. See the following **Federal Register** documents for more information: September 20, 1994 (59 FR 48175); October 24, 1994 (59 FR 53359); October 28, 1994 (59 FR 54131); January 27, 1995 (60 FR 5321); April 10, 1995 (60 FR 18020); April 10, 1995 (60 FR 18026); December 12, 1995 (60 FR 63624); February 29, 1996 (61 FR 7716); June 20, 1996 (61 FR 31435); August 26, 1996 (61 FR 43698); December 5, 1996 (61 FR 64571); January 17, 1997 (62 FR 2721); August 22, 1997 (62 FR 44608); and December 9, 1998 (63 FR 67787).

In June 1994, the Chemical Manufacturers Association (CMA) and Dow Chemical Company (Dow) filed petitions for review of the promulgated rule in the U.S. Court of Appeals for the District of Columbia Circuit, *Chemical Manufacturers Association v. EPA*, 94-1463 and 94-1464 (D.C. Cir.) and *Dow Chemical Company v. EPA*, 94-1465 (D.C. Cir.). The petitioners raised over 75 technical issues on the rule's structure and applicability. The petitioners raised issues regarding details of the technical requirements, drafting clarity, and structural errors in the drafting of certain sections of the

rule. On August 26, 1996, we proposed clarifying and correcting amendments to subparts F, G, H, and I of part 63 to address the issues raised by CMA and Dow on the April 1994 rule. On December 5, 1996 and January 17, 1997, we took final action on the amendments proposed on August 26, 1996. On August 22, 1997, we proposed corrections to the definition of "enhanced biological treatment systems or enhanced biological treatment process" and conforming edits to appendix C of part 63 to reflect these changes to the definition. On December 9, 1998, we took final action on the amendments proposed on August 22, 1997. On January 20, 2000, we proposed revisions to the definition of process vent as well as miscellaneous corrections and clarifying amendments.

### II. Public Comment on the January 20, 2000 Proposal

Five comment letters were received on the January 20, 2000 **Federal Register** proposed amendments to the rule. Comment letters were received from consultants, industry representatives, and one trade association. In general, the comment letters were supportive of the proposed changes, however some of the comment letters included suggested editorial revisions to address drafting clarity concerns or correct errors in cross referencing other sections in the rule. We considered these suggestions and, where appropriate, made changes to the proposed amendments. The significant issues raised and the changes to the proposed amendments are summarized in this preamble. A memorandum containing EPA's response to all comments can be found in Docket A-90-19. The responses to comments may also be obtained from the Internet through the Technology Transfer Network (TTN) at <http://www.epa.gov/ttn/oarpg>.

### III. Summary of Major Comments and Changes to the Proposed Amendments to the Rule

#### A. Definition of Process Vent and Associated Changes Process Vent Definition

One commenter expressed support for the proposed changes to the definition of process vent, but also expressed a concern that the proposed amendments do not adequately address a unique situation that exists at the commenter's facility. Specifically, one of the commenter's HON-covered facilities has a gas stream that passes through a recovery device and has been characterized as a Group 2 process vent

(i.e., a vent stream that is not subject to control requirements). This gas stream is part of an approved emissions average, and the commenter has installed a control device to create credits by controlling this gas stream to offset debits created elsewhere in the chemical manufacturing process unit. The commenter also has another gas stream that is a Group 1 process vent (i.e., subject to control requirements) that is combined with the Group 2 process vent after the last recovery device for the Group 2 process vent stream and prior to the entry into the control device. The commenter is concerned that the proposed definition for "process vent" could be read to deem the two physically separate gas streams as a single "process vent." This occurs because the determination of the location of the "process vent" for the Group 2 gas stream would presumably be "the point of entry into [the] control device." The commenter thought that this would be inconsistent with §§ 63.115(a) and 63.150(g)(2), and with EPA's general intent that the characteristics of these gas streams be determined after the last recovery device and prior to the entrance to a control device. The commenter submitted recommended revisions to the proposed definition for process vents and to § 63.107(a) to address their situation.

The EPA thoroughly considered the points raised by the commenter and concluded that the commenter's suggested language for the definition of process vent and for § 63.107(a) would not be compatible with the intent of the January 20, 2000 proposed amendments. The commenter's suggested changes to the proposed amendments would alter the intended effect by requiring the identification of gas streams upstream of the discharge point and requiring identification of the last recovery device and of any streams combined after the recovery device. That identification would significantly increase the information that must be submitted as part of the operating permit application.

As part of the consideration of this comment, we reexamined the interaction between the proposed changes to the definition of process vent and the emissions averaging provisions in the rule. We agree with the commenter that there can be situations where the proposed definition of process vent is incompatible with § 63.150(g)(2)(i). Specifically, the language in § 63.150(g)(2)(i) reflects an assumption that there are no combinations of gas streams after the final recovery device and before any control device. Further, it was also

assumed that the gas stream is associated with a specific unit operation or process unit (§ 63.150(g)(2)(ii)(B)). For these reasons, we concluded that for the purposes of emissions averaging, it would be appropriate to retain the designation of a process vent and its characteristics as specified in § 63.150(g)(2)(i). Specifically, it was decided that § 63.150(g)(2)(i) should indicate that the process vent stream characteristics shall be determined before the gas stream is combined with other gas streams following the last recovery device. It was also decided that it was necessary to make other edits to § 63.150 to ensure that there is no confusion with the definition of process vent and the directions in § 63.115 for determining the total resource effectiveness (TRE) of the vent stream. Thus, conforming edits were also made to § 63.150(a) and § 63.150(m)(1)(i) and (2)(i) to ensure that the location of the process vent as used in emissions averaging was determined as specified in § 63.150(g)(2)(i). We are also correcting an error in the drafting of § 63.150(g)(2)(iii)(B)(2) to replace references to “product recovery devices” with references to “recovery devices.” This change was made to make § 63.150(g)(2)(iii)(B)(2) consistent with § 63.115(a) and other provisions for determining the characteristics of a vent stream.

*Section 63.107(h)(9).* One commenter requested that EPA clarify the meaning of the term “process analyzer.” The commenter interprets this provision as covering all gas streams exiting a process analyzer, whether the gas stream represents a sample from within the process (i.e., prior to any recovery and control devices) or a sample after the gas stream has exited a recovery device but prior to entry into a control device (if any).

In the proposed language in § 63.107(h)(9), we used the term of art “process analyzer” to refer to instruments that are used in the field as opposed to instruments that are used in a laboratory setting. The use of this term of art was not intended to make a distinction between analyzers used to monitor the composition of a gas stream prior to the last recovery device or following the last recovery device. We did not intend to limit this exemption to analyzers used within the process and to exclude analyzers used on gas streams after discharge from the process. Consequently, in the final amendments we have revised the wording of the proposed § 63.107(h)(9) to refer to “a gas stream exiting an analyzer.”

*Section 63.110(a).* One commenter disagreed with the proposed revision to

§ 63.110(a). The commenter thought that the proposed change to use the conjunction “and/or” was not as clear as the current version of the rule which uses only the conjunction “and.” According to the commenter, the latter is not only correct, it’s clearer. The commenter recommended that “and/or” be replaced with “and.”

The purpose of this amendment to § 63.110(a) is to add in-process equipment subject to § 63.149 to the list of emission points subject to the provisions in 40 CFR part 63, subpart G. The EPA agrees with the commenter and has revised this text as suggested by the commenter.

#### B. Appendix C to Part 63

In the January 20, 2000 **Federal Register**, we proposed to amend appendix C to 40 CFR part 63 to add a concentration measurement procedure for determining the fraction biodegraded ( $f_{bio}$ ) in biological treatment units that are not thoroughly mixed, and thus, have multiple zones of mixing. In the proposed amendments, we specified that you would identify zones with substantially uniform characteristics and would measure representative organic compound concentrations in each zone as well as the inlet and outlet of the biological treatment unit. We received one comment requesting that we clarify that it is acceptable in some circumstances to interpolate compound concentrations for one or more zones when using this new procedure. The commenter noted that if a basin is considered as several zones and one of the interior zones is not readily accessible for sampling, the concentration could be estimated by interpolation of the concentration data for the remaining zones. The commenter noted that this approach is consistent with the instructions provided in the “Technical Support Document for the Evaluation of Aerobic Biological Treatment Units with Multiple Mixing Zones.”

We agree that under some circumstances it can be acceptable to allow interpolation of compound concentrations in some zones. Specifically, in units with well-characterized concentration measurements obtained in an initial evaluation of the unit, it may be possible to demonstrate that there is a good correlation of the component concentrations with the locations in the multiple-zone unit. With a good correlation, it may be possible to accurately predict the concentrations in selected zones without actually testing each selected zone. This correlation method may be used for units that have

many zones (greater than five) or where one of the interior zones is not readily accessible for sampling. In the final amendments to section III.E for appendix C to 40 CFR part 63, we have added a paragraph to explain those situations where it is acceptable to determine the concentration in the zone by interpolation.

#### C. Miscellaneous Corrections and Clarifications to the Rule

Two commenters suggested changes to the proposed amendments to correct citations, minor drafting errors, and some minor clarifications of the text. We considered these suggestions and, where appropriate, have made changes to the rule. The sections and the associated changes are:

- Section 63.113(e)—We are revising the sentence to refer to TRE index value in all cases. The proposed language referred to “TRE index” instead of “TRE index value” in the reference to § 63.115.

- Section 63.113(i)(2)—We are correcting the cross reference to § 63.103(c) from § 63.10(b) in the last sentence of this paragraph.

- Section 63.115(f)(1)—We are clarifying that the owner or operator may determine the characteristics of a HON stream, or combination of HON streams, at a representative point as near as practical to, but before, the point at which it is combined with one or more non-HON streams. The change from the proposed amendments is to clarify that the combination may be for one or more non-HON streams.

- Section 63.115(f)(2)—We are correcting a punctuation error in the proposed language.

- Section 63.138(i)(2)(iii)—We are correcting a grammatical error in the last sentence of this paragraph.

- Section 63.147(b)(8) introductory text—We are removing the phrase “in the Notice of Compliance Status Report” which was inadvertently included in the proposed amendment to this paragraph.

- Table 12 to subpart G, item 3—We are revising this item to clarify that it applies to treatment processes other than those listed in items 1 and 2 of table 12 in addition to alternative monitoring parameters listed in item 2.

- Table 20 to subpart G—We are clarifying that the control devices subject to § 63.139 are being used to comply with the requirements in §§ 63.133–63.138. This is a more precise statement of the applicability of table 20 to subpart G than the proposed language.

#### IV. Technical Corrections

The following amendments are minor technical corrections that were not part of the January 20, 2000 **Federal Register** proposed amendments. These changes are being made as part of today's action as a matter of efficiency in rulemaking. Furthermore, these changes are noncontroversial and do not substantively change the requirements of the rule. By promulgating these technical corrections directly as a final rule, EPA is foregoing an opportunity for public comment on a notice of proposed rulemaking. Section 553(b) of title 5 U.S.C. and section 307(b) of the CAA permit an agency to forego notice and comment when "the agency for good cause finds (and incorporates the finding and a brief statement of reasons therefore in the rules issued) that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest." The EPA finds that notice and comment regarding these minor technical corrections are unnecessary due to their noncontroversial nature, and because they do not substantively change the requirements of the HON. The EPA finds that this constitutes good cause under 5 U.S.C. 553(b) for a determination that the issuance of a notice of proposed rulemaking is unnecessary.

The corrections are:

- Section 63.118(f)(5)—We are correcting the reference to § 63.118(a)(2)(v) to read § 63.118(a)(2). The need to correct this reference was overlooked when we redrafted § 63.118(a) in the January 17, 1997 **Federal Register** amendments.
- Section 63.128(h)(1)(ii)—The citation should say "minimum residence time" instead of "maximum residence time" to be consistent with related combustion device provisions in §§ 63.120(d)(1)(i)(B), 63.139(c)(1)(iii), and 63.172(c) which all use "minimum" residence time. We are correcting this text to be consistent with the other combustion device provisions in subpart G of 40 CFR part 63.
- Section 63.130(d)(5)—We are correcting the reference to § 63.130(a)(2)(v) to read § 63.130(a)(2)(i). The need to correct this reference was overlooked when we redrafted § 63.130 in the January 17, 1997 **Federal Register** amendments.
- Section 63.140(c)—We are correcting the reference to § 63.147(c)(7) to § 63.147(b)(7).
- Section 63.146(b)(9) introductory text and paragraph (b)(9)(iii)—Removing references to § 63.138(d) and (h)(3) in § 63.146(b)(9) introductory text because

these treatment options do not require a design evaluation or performance test to demonstrate compliance with the removal requirements. We are deleting § 63.146(b)(9)(iii), and the reference to it in § 63.146(b)(9) introductory text, since it is no longer needed with the above correction to § 63.146(b)(9) introductory text.

- Section 63.146(d)—In order for § 63.146(d) to be consistent with the April 26, 1999 **Federal Register** corrections, we are correcting § 63.146(d) introductory text to add references to paragraph (d), (f), or (g) of § 63.138 and to add references to the monitoring requirements specified in § 63.143(c) and (d).
- Table 12 to subpart G—We are adding the option of monitoring column operating temperature as an alternative to monitoring wastewater feed temperature. Either parameter provides information necessary to evaluate column operating conditions. This change is consistent with parameters specified in § 63.138(d). Without this change, owners or operators using steam strippers who wish to monitor column operating temperature would have to request approval of the alternative monitoring parameters. This was not our intent.
- Table 17 to subpart G, note (f)—As published on January 17, 1997, this footnote should read: "Parameter(s) to be monitored or measured in accordance with Table 12 and § 63.143 of this subpart." Presently, the note (f) reads "Parameter(s) to be monitored or measured in accordance with Table 12 in § 63.143 of this subpart."

#### V. Administrative Requirements

##### A. Executive Order 12866, Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), EPA must determine whether a regulatory action is "significant" and, therefore, subject to review by the 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 entitlements, 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.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is not a "significant regulatory action" within the meaning of the Executive Order because none of the listed criteria apply to this action. These changes to the HON are primarily technical and administrative and do not raise novel legal or policy issues. These changes are not expected to impose significant new costs. This action will not have an annual effect on the economy of \$100 million or other adverse economic impacts, will not create any inconsistencies with other actions by other agencies, will not alter any budgetary impacts, or raise any novel legal or policy issues. Therefore, this action is considered "not significant" and OMB review is not required.

##### B. Executive Order 13132, Federalism

Executive Order 13132, entitled "Federalism" (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."

Under section 6 of Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. The EPA also may not issue a regulation that has federalism implications and that preempts State law, unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

If EPA complies by consulting, Executive Order 13132 requires EPA to provide to OMB, in a separately identified section of the preamble to the

rule, a federalism summary impact statement (FSIS). The FSIS must include a description of the extent of EPA's prior consultation with State and local officials, a summary of the nature of their concerns, and the Agency's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of State and local officials have been met. Also, when EPA transmits a draft final rule with federalism implications to OMB for review pursuant to Executive Order 12866, EPA must include a certification from the Agency's Federalism Official stating that EPA has met the requirements of Executive Order 13132 in a meaningful and timely manner.

These amendments to the final rule 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. Today's amendments would not impose any enforceable duties on these entities. This action amends the definition of "process vent" and makes other technical and administrative changes to the rule. Thus, the requirements of section 6 of the Executive Order do not apply to these amendments to the final rule.

#### *C. Executive Order 13084, Consultation and Coordination with Indian Tribal Governments*

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the tribal governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to OMB, in a separately identified section of the preamble to the rule, a description of the extent of EPA's prior consultation with representatives of affected tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian tribal governments "to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities."

Today's amendments to the rule would not significantly or uniquely affect the communities of Indian tribal governments. The action amends the definition of "process vent" and makes other technical and administrative changes to the rule. No tribal governments own or operate chemical manufacturing process units that are subject to this rule. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this final amendment to the rule.

#### *D. Executive Order 13045, Protection of Children from Environmental Health Risks 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 the 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.

The 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. This action is not subject to Executive Order 13045 because it is based on technology performance and not on health or safety risks.

#### *E. Unfunded Mandates Reform Act of 1995*

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 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 by State, local, or tribal governments, in aggregate, or by 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 today's action does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, or tribal governments in the aggregate, or to the private sector in any 1 year. Thus, today's action is not subject to the requirements of sections 202 and 205 of the UMRA. In addition, EPA has determined that today's action contains no regulatory requirements that might significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's action is not subject to the requirements of section 203 of the UMRA.

#### *F. Regulatory Flexibility Act (RFA), as Amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601, et seq.*

The RFA generally requires the EPA to give special consideration to the effect of Federal regulations on small entities and to consider regulatory options that might mitigate any such impacts. The EPA is required to prepare a regulatory flexibility analysis and coordinate with small entity stakeholders if the Agency determines that a rule will have a significant economic impact on a substantial number of small entities.

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with these amendments to the rule. The EPA has also determined that these amendments will not have a significant economic impact on a substantial

number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small government jurisdictions. Today's amendments are primarily technical and administrative and are not expected to impose significant new costs. The EPA does not anticipate that the changes to the rule will create any significant additional burden for any of the regulated entities.

#### G. Paperwork Reduction Act

The OMB has approved the information collection requirements contained in the rule under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501, *et seq.*, and has assigned OMB control number 2060-0282. An Information Collection Request (ICR) document has been prepared by EPA (ICR No. 1414.03) and a copy may be obtained from Sandy Farmer by mail at the Collection Strategies Division (2822), U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW., Washington, DC 20460, by email at farmer.sandy@epa.gov, or by calling (202) 260-2740.

Today's amendments to the rule should have a very minor effect on the information collection burden estimates made previously. Based on discussions with industry representatives, EPA believes that this action would result an insignificant increase in the estimated information collection burden. Any increase would be the burden associated with identification of and submittal of compliance documentation for previously unreported process vents subject to this rule. The EPA considers these changes to the rule to represent a clarification of the definition of process vent and the reporting requirements for process vents. Thus, EPA considers that if there is any increase in the burden associated with the rule, this increase would be small and well within the uncertainty of the analysis. Consequently, the ICR has not been revised for these amendments to the rule.

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 and 48 CFR chapter 15.

#### H. National Technology Transfer and Advancement Act

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

This action includes amendments to appendix C to add another procedure for determining fraction biodegraded. Therefore, we conducted a search to identify potentially applicable VCS for this case. However, we identified no such standards, and none were brought to our attention in comments. Therefore, EPA has decided to add the proposed additional procedure to appendix C of 40 CFR part 63.

#### I. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801, *et seq.*, as added by the SBREFA, 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. The EPA will submit a report containing this rule 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 rule 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). This rule will be effective January 22, 2001.

#### List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Dated: December 22, 2000.

Carol M. Browner,  
Administrator.

For the reasons set out in the preamble, title 40, chapter I, part 63 of the Code of 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 F—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry

2. Section 63.100 is amended by revising paragraph (e) introductory text, by revising paragraph (j)(4), and by adding paragraph (q) to read as follows:

#### § 63.100 Applicability and designation of source.

\* \* \* \* \*

(e) The source to which this subpart applies is the collection of all chemical manufacturing process units and the associated equipment at a major source that meet the criteria specified in paragraphs (b)(1) through (3) of this section. The source includes the process vents; storage vessels; transfer racks; waste management units; maintenance wastewater; heat exchange systems; equipment identified in § 63.149; and pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, instrumentation systems, surge control vessels, and bottoms receivers that are associated with that collection of chemical manufacturing process units. The source also includes equipment required by, or utilized as a method of compliance with, subparts F, G, or H of this part which may include control devices and recovery devices.

\* \* \* \* \*

(j) \* \* \*  
(4) Batch process vents within a chemical manufacturing process unit.

\* \* \* \* \*

(q) If the owner or operator of a process vent, or of a gas stream transferred subject to § 63.113(i), is unable to comply with the provisions of §§ 63.113 through 63.118 by the applicable compliance date specified in paragraph (k), (l), or (m) of this section

for the reasons stated in paragraph (q)(1),(3), or (5) of this section, the owner or operator shall comply with the applicable provisions in §§ 63.113 through 63.118 as expeditiously as practicable, but in no event later than the date approved by the Administrator pursuant to paragraph (q)(2), (4), or (6) of this section, respectively. For requests under paragraph (q)(1) or (3) of this section, the date approved by the Administrator may be earlier than, and shall not be later than, the later of January 22, 2004 or 3 years after the transferee's refusal to accept the stream for disposal. For requests submitted under paragraph (q)(5) of this section, the date approved by the Administrator may be earlier than, and shall not be later than, 3 years after the date of publication of the amendments to this subpart or to subpart G of this part which created the need for an extension of the compliance.

(1) If the owner or operator has been sending a gas stream for disposal as described in § 63.113(i) prior to January 22, 2001, and the transferee does not submit a written certification as described in § 63.113(i)(2) and ceases to accept the gas stream for disposal, the owner or operator shall comply with paragraph (q)(2) of this section.

(2)(i) An owner or operator directed to comply with paragraph (q)(2) of this section shall submit to the Administrator for approval a compliance schedule, along with a justification for the schedule.

(ii) The compliance schedule and justification shall be submitted no later than 90 days after the transferee ceases to accept the gas stream for disposal.

(iii) The Administrator shall approve the compliance schedule or request changes within 120 days of receipt of the compliance schedule and justification.

(3) If the owner or operator has been sending the gas stream for disposal as described in § 63.113(i) to a transferee who had submitted a written certification as described in § 63.113(i)(2), and the transferee revokes its written certification, the owner or operator shall comply with paragraph (q)(4) of this section. During the period between the date when the owner or operator receives notice of revocation of the transferee's written certification and the compliance date established under paragraph (q)(4) of this section, the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical. For purposes of this paragraph (q)(3), the term "excess emissions" means emissions in excess of those that would

have occurred if the transferee had continued managing the gas stream in compliance with the requirements in §§ 63.113 through 63.118. The measures to be taken shall be identified in the applicable startup, shutdown, and malfunction plan. If the measures that can be reasonably taken will change over time, so that a more effective measure which could not reasonably be taken initially would be reasonable at a later date, the Administrator may require the more effective measure by a specified date (in addition to or instead of any other measures taken sooner or later than that date) as a condition of approval of the compliance schedule.

(4)(i) An owner or operator directed to comply with this paragraph (q)(4) shall submit to the Administrator for approval the documents specified in paragraphs (q)(4)(i)(A) through (E) of this section no later than 90 days after the owner or operator receives notice of revocation of the transferee's written certification.

(A) A request for determination of a compliance date.

(B) A justification for the request for determination of a compliance date.

(C) A compliance schedule.

(D) A justification for the compliance schedule.

(E) A description of the measures that will be taken to minimize excess emissions until the new compliance date, and the date when each measure will first be implemented. The owner or operator shall describe how, and to what extent, each measure will minimize excess emissions, and shall justify any period of time when measures are not in place.

(ii) The Administrator shall approve or disapprove the request for determination of a compliance date and the compliance schedule, or request changes, within 120 days after receipt of the documents specified in paragraphs (q)(4)(i)(A) through (E) of this section. Upon approving the request for determination and compliance schedule, the Administrator shall specify a reasonable compliance date consistent with the introductory text in paragraph (q) of this section.

(5) If the owner's or operator's inability to meet otherwise applicable compliance deadlines is due to amendments of this subpart or of subpart G of this part published on or after January 22, 2001 and neither condition specified in paragraph (q)(1) or (3) of this section is applicable, the owner or operator shall comply with paragraph (q)(6) of this section.

(6)(i) An owner or operator directed to comply with this paragraph (6)(i) shall submit to the Administrator for

approval, a request for determination of a compliance date, a compliance schedule, a justification for the determination of a compliance date, and a justification for the compliance schedule.

(ii) The documents required to be submitted under paragraph (q)(6)(i) of this section shall be submitted no later than 120 days after publication of the amendments of this subpart or of subpart G of this part which necessitate the request for an extension.

(iii) The Administrator shall approve or disapprove the request for a determination of a compliance date, or request changes, within 120 days after receipt of the request for determination of a compliance date, the compliance schedule, and the two justifications. If the request for determination of a compliance date is disapproved, the compliance schedule is disapproved and the owner or operator shall comply by the applicable date specified in paragraph (k),(l), or (m) of this section. If the request for the determination of a compliance date is approved, the Administrator shall specify, at the time of approval, a reasonable compliance date consistent with the introductory text in paragraph (q) of this section.

3. Section 63.101 is amended by adding in alphabetical order the definition of "Batch process vent" and by revising the definition of "Process vent" to read as follows:

**§ 63.101 Definitions.**

\* \* \* \* \*

*Batch process vent* means gaseous venting to the atmosphere from a batch operation.

\* \* \* \* \*

*Process vent* means the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream if the gas stream has the characteristics specified in § 63.107(b) through (h), or meets the criteria specified in § 63.107(i). For purposes of §§ 63.113 through 63.118, all references to the characteristics of a process vent (e.g., flow rate, total HAP concentration, or TRE index value) shall mean the characteristics of the gas stream.

\* \* \* \* \*

4. Subpart F is amended by adding a new § 63.107 to read as follows:

**§ 63.107 Identification of process vents subject to this subpart.**

(a) The owner or operator shall use the criteria specified in this § 63.107 to determine whether there are any process vents associated with an air oxidation reactor, distillation unit, or reactor that

is in a source subject to this subpart. A process vent is the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream if the gas stream has the characteristics specified in paragraphs (b) through (h) of this section, or meets the criteria specified in paragraph (i) of this section.

(b) Some, or all, of the gas stream originates as a continuous flow from an air oxidation reactor, distillation unit, or reactor during operation of the chemical manufacturing process unit.

(c) The discharge to the atmosphere (with or without passing through a control device) meets at least one of the conditions specified in paragraphs (c)(1) through (3) of this section.

(1) Is directly from an air oxidation reactor, distillation unit, or reactor; or

(2) Is from an air oxidation reactor, distillation unit, or reactor after passing solely (*i.e.*, without passing through any other unit operation for a process purpose) through one or more recovery devices within the chemical manufacturing process unit; or

(3) Is from a device recovering only mechanical energy from a gas stream that comes either directly from an air oxidation reactor, distillation unit, or reactor, or from an air oxidation reactor, distillation unit, or reactor after passing solely (*i.e.*, without passing through any other unit operation for a process purpose) through one or more recovery devices within the chemical manufacturing process unit.

(d) The gas stream contains greater than 0.005 weight percent total organic HAP at the point of discharge to the atmosphere (or at the point of entry into a control device, if any).

(e) The air oxidation reactor, distillation unit, or reactor is part of a chemical manufacturing process unit that meets the criteria of § 63.100(b).

(f) The gas stream is in the gas phase from the point of origin at the air oxidation reactor, distillation unit, or reactor to the point of discharge to the atmosphere (or to the point of entry into a control device, if any).

(g) The gas stream is discharged to the atmosphere either on-site, off-site, or both.

(h) The gas stream is not any of the items identified in paragraphs (h)(1) through (9) of this section.

(1) A relief valve discharge.

(2) A leak from equipment subject to subpart H of this part.

(3) A gas stream going to a fuel gas system as defined in § 63.101.

(4) A gas stream exiting a control device used to comply with § 63.113.

(5) A gas stream transferred to other processes (on-site or off-site) for reaction

or other use in another process (*i.e.*, for chemical value as a product, isolated intermediate, byproduct, or coproduct, or for heat value).

(6) A gas stream transferred for fuel value (*i.e.*, net positive heating value), use, reuse, or for sale for fuel value, use, or reuse.

(7) A storage vessel vent or transfer operation vent subject to § 63.119 or § 63.126.

(8) A vent from a waste management unit subject to §§ 63.132 through 63.137.

(9) A gas stream exiting an analyzer.

(i) The gas stream would meet the characteristics specified in paragraphs (b) through (g) of this section, but, for purposes of avoiding applicability, has been deliberately interrupted, temporarily liquefied, routed through any item of equipment for no process purpose, or disposed of in a flare that does not meet the criteria in § 63.11(b), or an incinerator that does not reduce emissions of organic HAP by 98 percent or to a concentration of 20 parts per million by volume, whichever is less stringent.

**Subpart G—National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater**

5. Section 63.110 is amended by revising paragraph (a) to read as follows:

**§ 63.110 Applicability.**

(a) This subpart applies to all process vents, storage vessels, transfer racks, wastewater streams, and in-process equipment subject to § 63.149 within a source subject to subpart F of this part.

\* \* \* \* \*

6. Section 63.111 is amended by:

- a. Adding in alphabetical order the definition of “Point of transfer”;
- b. Revising the definition of “Group 1 process vent”;
- c. Revising the definition of “Group 2 process vent”;
- d. Revising the definition of “Vent stream.”

The additions and revisions read as follows:

**§ 63.111 Definitions.**

\* \* \* \* \*

*Group 1 process vent* means a process vent for which the vent stream flow rate is greater than or equal to 0.005 standard cubic meter per minute, the total organic HAP concentration is greater than or equal to 50 parts per million by volume, and the total resource effectiveness index value, calculated according to § 63.115, is less than or equal to 1.0.

*Group 2 process vent* means a process vent for which the vent stream flow rate is less than 0.005 standard cubic meter per minute, the total organic HAP concentration is less than 50 parts per million by volume or the total resource effectiveness index value, calculated according to § 63.115, is greater than 1.0.

\* \* \* \* \*

*Point of transfer* means:

(1) If the transfer is to an off-site location for control, the point where the conveyance crosses the property line; or

(2) If the transfer is to an on-site location not owned or operated by the owner or operator of the source, the point where the conveyance enters the operation or equipment of the transferee.

\* \* \* \* \*

*Vent stream*, as used in the process vent provisions, means the gas stream flowing through the process vent.

\* \* \* \* \*

7. Section 63.113 is amended by:  
a. Revising paragraph (a) introductory text and revising the second sentence in paragraph (a)(3);

b. Revising paragraph (c) introductory text and paragraph (c)(1) introductory text;

- c. Revising paragraph (e);
- d. Revising paragraph (g); and
- e. Adding paragraph (i).

The revisions and additions read as follows:

**§ 63.113 Process vent provisions—reference control technology.**

(a) The owner or operator of a Group 1 process vent as defined in this subpart shall comply with the requirements of paragraph (a)(1), (2), or (3) of this section. The owner or operator who transfers a gas stream that has the characteristics specified in § 63.107 (b) through (h) or meets the criteria specified in § 63.107(i) to an off-site location or an on-site location not owned or operated by the owner or operator of the source for disposal shall comply with the requirements of paragraph (i) of this section.

\* \* \* \* \*

(3) \* \* \* If the TRE index value is greater than 1.0, the process vent shall comply with the provisions for a Group 2 process vent specified in either paragraph (d) or (e) of this section, whichever is applicable.

\* \* \* \* \*

(c) Halogenated vent streams from Group 1 process vents that are combusted shall be controlled according to paragraph (c)(1) or (2) of this section.

(1) If a combustion device is used to comply with paragraph (a)(2) of this

section for a halogenated vent stream, then the gas stream exiting the combustion device shall be conveyed to a halogen reduction device, such as a scrubber, before it is discharged to the atmosphere.

\* \* \* \* \*

(e) The owner or operator of a Group 2 process vent with a TRE index value greater than 4.0 shall maintain a TRE index value greater than 4.0, comply with the provisions for calculation of a TRE index value in § 63.115 and the reporting and recordkeeping provisions in §§ 63.117(b) and 63.118(c) and (h), and is not subject to monitoring or any other provisions of §§ 63.114 through 63.118.

\* \* \* \* \*

(g) The owner or operator of a Group 2 process vent with a total organic HAP concentration less than 50 parts per million by volume shall maintain a total organic HAP concentration less than 50 parts per million by volume; comply with the Group determination procedures in § 63.115(a), (c), and (e); the reporting and recordkeeping requirements in §§ 63.117(d) and 63.118(e) and (j); and is not subject to monitoring or any other provisions of §§ 63.114 through 63.118.

\* \* \* \* \*

(i) *Off-site control or on-site control not owned or operated by the source.* This paragraph (i) applies to gas streams that have the characteristics specified in § 63.107(b) through (h) or meet the criteria specified in § 63.107(i); that are transferred for disposal to an on-site control device (or other compliance equipment) not owned or operated by the owner or operator of the source generating the gas stream, or to an off-site control device or other compliance equipment; and that have the characteristics (e.g., flow rate, total organic HAP concentration, or TRE index value) of a Group 1 process vent, determined at the point of transfer.

(1) The owner or operator transferring the gas stream shall:

(i) Comply with the provisions specified in § 63.114(d) for each gas stream prior to transfer.

(ii) Notify the transferee that the gas stream contains organic hazardous air pollutants that are to be treated in accordance with the provisions of this subpart. The notice shall be submitted to the transferee initially and whenever there is a change in the required control.

(2) The owner or operator may not transfer the gas stream unless the transferee has submitted to the EPA a written certification that the transferee will manage and treat any gas stream transferred under this paragraph (i) and

received from a source subject to the requirements of this subpart in accordance with the requirements of either §§ 63.113 through 63.118, or § 63.102(b), or subpart D of this part if alternative emission limitations have been granted the transferor in accordance with those provisions. The certifying entity may revoke the written certification by sending a written statement to EPA and the owner or operator giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph (i). Upon expiration of the notice period, the owner or operator may not transfer the gas stream to the transferee. Records retained by the transferee shall be retained in accordance with § 63.103(c).

(3) By providing this written certification to EPA, the certifying entity accepts responsibility for compliance with the regulatory provisions listed in paragraph (i)(2) of this section with respect to any transfer covered by the written certification. Failure to abide by any of those provisions with respect to such transfers may result in enforcement action by EPA against the certifying entity in accordance with the enforcement provisions applicable to violations of these provisions by owners or operators of sources.

(4) Written certifications and revocation statements to EPA from the transferees of such gas streams shall be signed by a responsible official of the certifying entity, provide the name and address of the certifying entity, and be sent to the appropriate EPA Regional Office at the addresses listed in § 63.13. Such written certifications are not transferable by the transferee.

8. Section 63.114 is amended by revising paragraph (a)(3), revising paragraph (a)(4)(ii), and revising paragraph (d) to read as follows:

**§ 63.114 Process vent provisions—monitoring requirements.**

(a) \* \* \*

(3) Where a boiler or process heater of less than 44 megawatts design heat input capacity is used, the following monitoring equipment is required: a temperature monitoring device in the firebox equipped with a continuous recorder. This requirement does not apply to gas streams that are introduced with primary fuel or are used as the primary fuel.

(4) \* \* \*

(ii) A flow meter equipped with a continuous recorder shall be located at the scrubber influent for liquid flow. Gas flow rate shall be determined using one of the procedures specified in

paragraphs (a)(4)(ii)(A) through (C) of this section.

(A) The owner or operator may determine gas flow rate using the design blower capacity, with appropriate adjustments for pressure drop.

(B) If the scrubber is subject to rules in 40 CFR parts 264 through 266 that have required a determination of the liquid to gas (L/G) ratio prior to the applicable compliance date for this subpart specified in § 63.100(k), the owner or operator may determine gas flow rate by the method that had been utilized to comply with those rules. A determination that was conducted prior to the compliance date for this subpart may be utilized to comply with this subpart if it is still representative.

(C) The owner or operator may prepare and implement a gas flow rate determination plan that documents an appropriate method which will be used to determine the gas flow rate. The plan shall require determination of gas flow rate by a method which will at least provide a value for either a representative or the highest gas flow rate anticipated in the scrubber during representative operating conditions other than startups, shutdowns, or malfunctions. The plan shall include a description of the methodology to be followed and an explanation of how the selected methodology will reliably determine the gas flow rate, and a description of the records that will be maintained to document the determination of gas flow rate. The owner or operator shall maintain the plan as specified in § 63.103(c).

\* \* \* \* \*

(d) The owner or operator of a process vent shall comply with paragraph (d)(1) or (2) of this section for any bypass line between the origin of the gas stream (i.e., at an air oxidation reactor, distillation unit, or reactor as identified in § 63.107(b)) and the point where the gas stream reaches the process vent, as described in § 63.107, that could divert the gas stream directly to the atmosphere. Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to this paragraph (d).

(1) Properly install, maintain, and operate a flow indicator that takes a reading at least once every 15 minutes. Records shall be generated as specified in § 63.118(a)(3). The flow indicator shall be installed at the entrance to any bypass line that could divert the gas stream to the atmosphere; or

(2) Secure the bypass line valve in the non-diverting position with a car-seal or

a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the non-diverting position and the gas stream is not diverted through the bypass line.

\* \* \* \* \*

9. Section 63.115 is amended by:

a. Revising paragraph (a) introductory text;

b. Revising paragraph (b) introductory text;

c. Revising paragraph (c) introductory text and paragraphs (c)(4)(i) and (ii);

d. Revising paragraph (d)(1) introductory text and paragraph (d)(1)(iii)(D)(4);

e. Revising paragraph (d)(2) introductory text, paragraphs (d)(2)(i) and (ii) introductory text, and paragraph (d)(2)(ii)(C); and

f. Adding paragraph (f).

The revisions and additions read as follows:

**§ 63.115 Process vent provisions—methods and procedures for process vent group determination.**

(a) For purposes of determining vent stream flow rate, total organic HAP or total organic carbon concentration or TRE index value, as specified under paragraph (b), (c), or (d) of this section, the sampling site shall be after the last recovery device (if any recovery devices are present) but prior to the inlet of any control device that is present and prior to release to the atmosphere.

\* \* \* \* \*

(b) To demonstrate that a vent stream flow rate is less than 0.005 standard cubic meter per minute in accordance with the Group 2 process vent definition of this subpart, the owner or operator shall measure flow rate by the following procedures:

\* \* \* \* \*

(c) Each owner or operator seeking to demonstrate that a vent stream has an organic HAP concentration below 50 parts per million by volume in accordance with the Group 2 process vent definition of this subpart shall measure either total organic HAP or TOC concentration using the following procedures:

\* \* \* \* \*

(4) \* \* \*

(i) Method 25A of 40 CFR part 60, appendix A, shall be used only if a single organic HAP compound is greater than 50 percent of total organic HAP, by volume, in the vent stream.

(ii) The vent stream composition may be determined by either process knowledge, test data collected using an appropriate EPA method, or a method or

data validated according to the protocol in Method 301 of appendix A of this part. Examples of information that could constitute process knowledge include calculations based on material balances, process stoichiometry, or previous test results provided the results are still relevant to the current vent stream conditions.

\* \* \* \* \*

(d) \* \* \*

(1) Engineering assessment may be used to determine vent stream flow rate, net heating value, TOC emission rate, and total organic HAP emission rate for the representative operating condition expected to yield the lowest TRE index value.

\* \* \* \* \*

(iii) \* \* \*

(D) \* \* \*

(4) Estimation of maximum expected net heating value based on the vent stream concentration of each organic compound or, alternatively, as if all TOC in the vent stream were the compound with the highest heating value.

\* \* \* \* \*

(2) Except as provided in paragraph (d)(1) of this section, vent stream flow rate, net heating value, TOC emission rate, and total organic HAP emission rate shall be measured and calculated according to the procedures in paragraphs (d)(2)(i) through (v) of this section and used as input to the TRE index value calculation in paragraph (d)(3) of this section.

(i) The vent stream volumetric flow rate ( $Q_s$ ), in standard cubic meters per minute at 20 degrees Celcius, shall be determined using Method 2, 2A, 2C, or 2D of 40 CFR part 60, appendix A, as appropriate. If the vent stream tested passes through a final steam jet ejector and is not condensed, the vent stream volumetric flow shall be corrected to 2.3 percent moisture.

(ii) The molar composition of the vent stream, which is used to calculate net heating value, shall be determined using the following methods:

\* \* \* \* \*

(C) Method 4 of 40 CFR part 60, appendix A, to measure the moisture content of the vent stream.

\* \* \* \* \*

(f) Notwithstanding any other provisions of this subpart, in any case where a process vent includes one or more gas streams that are not from a source subject to this subpart (hereafter called "non-HON streams" for purposes of this paragraph), and one or more gas streams that meet the criteria in § 63.107(b) through (h) or the criteria in § 63.107(i) (hereafter called "HON

streams" for purposes of this paragraph), the owner or operator may elect to comply with paragraphs (f)(1) through (3) of this section.

(1) The owner or operator may determine the characteristics (flow rate, total organic HAP concentration, and TRE index value) for each HON stream, or combination of HON streams, at a representative point as near as practical to, but before, the point at which it is combined with one or more non-HON streams.

(2) If one or more of the HON streams, or combinations of HON streams, has the characteristics (determined at the location specified in paragraph (f)(1) of this section) associated with a Group 1 process vent, the combined vent stream is a Group 1 process vent. Except as specified in paragraph (f)(3) of this section, if none of the HON streams, or combinations of HON streams, when determined at the location specified in paragraph (f)(1) of this section, has the characteristics associated with a Group 1 process vent, the combined vent stream is a Group 2 process vent regardless of the TRE index value determined at the location specified in § 63.115(a). If the combined vent stream is a Group 2 process vent as determined by the previous sentence, but one or more of the HON streams, or combinations of HON streams, has a TRE index value greater than 1 but less than or equal to 4, the combined vent stream is a process vent with a TRE index value greater than 1 but less than or equal to 4. In this case, the owner or operator shall monitor the combined vent stream as required by § 63.114(b).

(3) Paragraphs (f)(1) and (2) of this section are not intended to apply instead of any other subpart of this part. If another subpart of this part applies to one or more of the non-HON streams contributing to the combined vent stream, that subpart may impose emission control requirements such as, but not limited to, requiring the combined vent stream to be classified and controlled as a Group 1 process vent.

10. Section 63.116 is amended by:

a. Revising paragraph (a);  
b. Revising paragraph (b)(2);  
c. Revising paragraph (c)(1)(i)(B) and paragraph (c)(4)(iv); and  
d. Revising paragraph (d) introductory text.

The revisions read as follows:

**§ 63.116 Process vent provisions—performance test methods and procedures to determine compliance.**

(a) When a flare is used to comply with § 63.113(a)(1), the owner or operator shall comply with paragraphs

(a)(1) through (3) of this section. The owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration.

(1) Conduct a visible emission test using the techniques specified in § 63.11(b)(4).

(2) Determine the net heating value of the gas being combusted using the techniques specified in § 63.11(b)(6).

(3) Determine the exit velocity using the techniques specified in either § 63.11(b)(7)(i) (and § 63.11(b)(7)(iii), where applicable) or § 63.11(b)(8), as appropriate.

(b) \* \* \*

(2) A boiler or process heater into which the gas stream is introduced with the primary fuel or is used as the primary fuel.

\* \* \* \* \*

(c) \* \* \*

(1) \* \* \*

(i) \* \* \*

(B) If a vent stream is introduced with the combustion air or as a secondary fuel into a boiler or process heater with a design capacity less than 44 megawatts, selection of the location of the inlet sampling sites shall ensure the measurement of total organic HAP or TOC (minus methane and ethane) concentrations in all vent streams and primary and secondary fuels introduced into the boiler or process heater.

\* \* \* \* \*

(4) \* \* \*

(iv) If the vent stream entering a boiler or process heater with a design capacity less than 44 megawatts is introduced with the combustion air or as a secondary fuel, the weight-percent reduction of total organic HAP or TOC (minus methane and ethane) across the device shall be determined by comparing the TOC (minus methane and ethane) or total organic HAP in all combusted vent streams and primary and secondary fuels with the TOC (minus methane and ethane) or total organic HAP exiting the combustion device, respectively.

(d) An owner or operator using a combustion device followed by a scrubber or other halogen reduction device to control halogenated vent streams in compliance with § 63.113(c)(1) shall conduct a performance test to determine compliance with the control efficiency or emission limits for hydrogen halides and halogens.

\* \* \* \* \*

11. Section 63.117 is amended by:

a. Revising paragraph (a) introductory text;

b. Revising paragraph (a)(4)(iv);

c. Revising paragraph (a)(6) introductory text; and

d. Revising paragraph (a)(8).

The revisions read as follows:

**§ 63.117 Process vents provisions—reporting and recordkeeping requirements for group and TRE determinations and performance tests.**

(a) Each owner or operator subject to the control provisions for Group 1 process vents in § 63.113(a) or the provisions for Group 2 process vents with a TRE index value greater than 1.0 but less than or equal to 4.0 in § 63.113(d) shall:

\* \* \* \* \*

(4) \* \* \*

(iv) For a boiler or process heater with a design heat input capacity of less than 44 megawatts and where the vent stream is introduced with combustion air or used as a secondary fuel and is not mixed with the primary fuel, the percent reduction of organic HAP or TOC, or the concentration of organic HAP or TOC (parts per million by volume, by compound) determined as specified in § 63.116(c) at the outlet of the combustion device on a dry basis corrected to 3 percent oxygen.

\* \* \* \* \*

(6) Record and report the following when using a scrubber following a combustion device to control a halogenated vent stream:

\* \* \* \* \*

(8) Record and report the halogen concentration in the vent stream determined according to the procedures specified in § 63.115(d)(2)(v).

\* \* \* \* \*

12. Section 63.118 is amended by:

a. Revising paragraph (a)(3);

b. Revising paragraph (e)(1);

c. Revising paragraph (f)(3); and

d. In paragraph (f)(5), revising the reference to “paragraph (a)(2)(v) of this section” to read “paragraph (a)(2) of this section.”

The revisions read as follows:

**§ 63.118 Process vent provisions—periodic reporting and recordkeeping requirements.**

(a) \* \* \*

(3) Hourly records of whether the flow indicator specified under § 63.114(d)(1) was operating and whether a diversion was detected at any time during the hour, as well as records of the times and durations of all periods when the gas stream is diverted to the atmosphere or the monitor is not operating.

\* \* \* \* \*

(e) \* \* \*

(1) Any process changes as defined in § 63.115(e) that increase the organic HAP concentration of the vent stream,

\* \* \* \* \*

(f) \* \* \*

(3) Reports of the times and durations of all periods recorded under paragraph (a)(3) of this section when the gas stream is diverted to the atmosphere through a bypass line.

\* \* \* \* \*

13. Section 63.128 is amended by revising paragraph (b) and paragraph (h)(1)(ii) to read as follows:

**§ 63.128 Transfer operations provisions—test methods and procedures.**

\* \* \* \* \*

(b) When a flare is used to comply with § 63.126(b)(2), the owner or operator shall comply with paragraphs (b)(1) through (3) of this section. The owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration.

(1) Conduct a visible emission test using the techniques specified in § 63.11(b)(4). The observation period shall be as specified in paragraph (b)(1)(i) or (ii) of this section instead of the 2-hour period specified in § 63.11(b)(4).

(i) If the loading cycle is less than 2 hours, then the observation period for that run shall be for the entire loading cycle.

(ii) If additional loading cycles are initiated within the 2-hour period, then visible emission observations shall be conducted for the additional cycles.

(2) Determine the net heating value of the gas being combusted, using the techniques specified in § 63.11(b)(6).

(3) Determine the exit velocity using the techniques specified in either § 63.11(b)(7)(i) (and § 63.11(b)(7)(iii), where applicable) or § 63.11(b)(8), as appropriate.

\* \* \* \* \*

(h) \* \* \*

(1) \* \* \*

(ii) If an enclosed combustion device with a minimum residence time of 0.5 seconds and a minimum temperature of 760 degrees Celsius is used to meet the 98-percent emission reduction requirement, documentation that those conditions exist is sufficient to meet the requirements of paragraph (h)(1) of this section.

\* \* \* \* \*

**§ 63.130 [Amended]**

14. Section 63.130 is amended by revising the reference in paragraph (d)(5) from “paragraph (a)(2)(v) of this section” to read “paragraph (a)(2)(i) of this section.”

15. Section 63.132 is amended by revising paragraphs (a)(3) and (b)(4) to read as follows:

**§ 63.132 Process wastewater provisions—general.**

(a) \* \* \*  
 (3) *Requirements for Group 2 wastewater streams.* For wastewater streams that are Group 2 for table 9 compounds, comply with the applicable recordkeeping and reporting requirements specified in §§ 63.146(b)(1) and 63.147(b)(8).

(b) \* \* \*  
 (4) *Requirements for Group 2 wastewater streams.* For wastewater streams that are Group 2 for both table 8 and table 9 compounds, comply with the applicable recordkeeping and reporting requirements specified in §§ 63.146(b)(1) and 63.147(b)(8).

\* \* \* \* \*

16. Section 63.138 is amended by:  
 a. Revising paragraph (i) introductory text;  
 b. Adding a sentence to the end of paragraph (i)(1) introductory text;  
 c. Amending the last sentence in paragraph (i)(2) introductory text by revising the reference to “(i)(2)(iv) of this section” to read “(i)(3) of this section”;  
 d. Adding a sentence to the end of paragraph (i)(2)(i) introductory text;  
 e. Revising paragraph (i)(2)(iii); and  
 f. Redesignating paragraph (i)(2)(iv) as paragraph (i)(3).

The revisions and additions read as follows:

**§ 63.138 Process wastewater provisions—performance standards for treatment processes managing Group 1 wastewater streams and/or residuals removed from Group 1 wastewater streams.**

\* \* \* \* \*

(i) *One megagram total source mass flow rate option.* A wastewater stream is exempt from the requirements of paragraphs (b) and (c) of this section if the owner or operator elects to comply with either paragraph (i)(1) or (2) of this section, and complies with paragraph (i)(3) of this section.

(1) \* \* \* The owner or operator who meets the requirements of this paragraph (i)(1) is exempt from the requirements of §§ 63.133 through 63.137.

\* \* \* \* \*

(2) \* \* \*  
 (i) \* \* \* When determining the total source mass flow rate for the purposes of paragraph (i)(2)(i)(B) of this section, the concentration and flow rate shall be determined at the location specified in paragraph (i)(2)(i)(B) of this section and

not at the location specified in § 63.144(b) and (c).

\* \* \* \* \*

(iii) The owner or operator of each waste management unit that receives, manages, or treats a partially treated wastewater stream prior to or during treatment shall comply with the requirements of §§ 63.133 through 63.137, as applicable. For a partially treated wastewater stream that is stored, conveyed, treated, or managed in a waste management unit meeting the requirements of §§ 63.133 through 63.137, the owner or operator shall follow the procedures in paragraph (i)(2)(i)(B) of this section to calculate mass flow rate. A wastewater stream, either untreated or partially treated, where the mass flow rate has been calculated following the procedures in paragraph (i)(2)(i)(A) of this section, is exempt from the requirements of §§ 63.133 through 63.137.

\* \* \* \* \*

**§ 63.140 [Amended]**

17. Section 63.140 is amended by revising the reference to “§ 63.147(c)(7)” in the last sentence of paragraph (c) to read “§ 63.147(b)(7).”

18. Section 63.145 is amended by revising paragraph (j) to read as follows:

**§ 63.145 Process wastewater provisions—test methods and procedures to determine compliance.**

\* \* \* \* \*

(j) When a flare is used to comply with § 63.139(c), the owner or operator shall comply with paragraphs (j)(1) through (3) of this section. The owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration.

(1) Conduct a visible emission test using the techniques specified in § 63.11(b)(4).

(2) Determine the net heating value of the gas being combusted using the techniques specified in § 63.11(b)(6).

(3) Determine the exit velocity using the techniques specified in either § 63.11(b)(7)(i) (and § 63.11(b)(7)(iii), where applicable) or § 63.11(b)(8), as appropriate.

\* \* \* \* \*

19. Section 63.146 is amended by:

- a. Adding paragraph (b)(1);
- b. Revising paragraph (b)(9) introductory text;
- c. Removing paragraph (b)(9)(iii); and
- d. Revising paragraph (d) introductory text.

The additions and revisions read as follows:

**§ 63.146 Process wastewater provisions—reporting.**

\* \* \* \* \*

(b) \* \* \*  
 (1) *Requirements for Group 2 wastewater streams.* This paragraph does not apply to Group 2 wastewater streams that are used to comply with § 63.138(g). For Group 2 wastewater streams, the owner or operator shall include the information specified in paragraphs (b)(1)(i) through (iv) of this section in the Notification of Compliance Status Report. This information may be submitted in any form. Table 15 of this subpart is an example.

(i) Process unit identification and description of the process unit.

(ii) Stream identification code.

(iii) For existing sources, concentration of table 9 compound(s) in parts per million, by weight. For new sources, concentration of table 8 and/or table 9 compound(s) in parts per million, by weight. Include documentation of the methodology used to determine concentration.

(iv) Flow rate in liter per minute.

\* \* \* \* \*

(9) For each waste management unit or treatment process used to comply with § 63.138(b)(1), (c)(1), (e), (f), or (g), the owner or operator shall submit the information specified in either paragraph (b)(9)(i) or (ii) of this section.

\* \* \* \* \*

(d) Except as provided in paragraph (f) of this section, for each treatment process used to comply with § 63.138(b)(1), (c)(1), (d), (e), (f), or (g), the owner or operator shall submit as part of the next Periodic Report required by § 63.152(c) the information specified in paragraphs (d)(1), (2), and (3) of this section for the monitoring required by § 63.143(b), (c), and (d).

\* \* \* \* \*

20. Section 63.147 is amended by:

- a. Revising paragraph (b) introductory text;
  - b. Adding paragraph (b)(8);
  - c. Revising paragraph (d) introductory text and paragraph (d)(2); and
  - d. Adding paragraph (d)(3).
- The revisions and additions read as follows:

**§ 63.147 Process wastewater provisions—recordkeeping.**

\* \* \* \* \*

(b) The owner or operator shall keep in a readily accessible location the records specified in paragraphs (b)(1) through (8) of the section.

\* \* \* \* \*

(8) *Requirements for Group 2 wastewater streams.* This paragraph

(b)(8) does not apply to Group 2 wastewater streams that are used to comply with § 63.138(g). For all other Group 2 wastewater streams, the owner or operator shall keep in a readily accessible location the records specified in paragraphs (b)(8)(i) through (iv) of this section.

- (i) Process unit identification and description of the process unit.
- (ii) Stream identification code.
- (iii) For existing sources, concentration of table 9 compound(s) in parts per million, by weight. For new sources, concentration of table 8 and/or table 9 compound(s) in parts per million, by weight. Include documentation of the methodology used to determine concentration.

(d) The owner or operator shall keep records of the daily average value of each continuously monitored parameter for each operating day as specified in § 63.152(f), except as provided in paragraphs (d)(1) through (3) of this section.

(2) *Regenerative carbon adsorbers.* For regenerative carbon adsorbers, the owner or operator shall keep the records specified in paragraphs (d)(2)(i) and (ii) of this section instead of daily averages.

(i) Records of the total regeneration stream mass flow for each carbon bed regeneration cycle.

(ii) Records of the temperature of the carbon bed after each regeneration cycle.

(3) *Non-regenerative carbon adsorbers.* For non-regenerative carbon adsorbers using organic monitoring equipment, the owner or operator shall keep the records specified in paragraph (d)(3)(i) of this section instead of daily averages. For non-regenerative carbon adsorbers replacing the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system, the owner or operator shall keep the records specified in paragraph (d)(3)(ii) of this section instead of daily averages.

(i)(A) Record of how the monitoring frequency, as specified in table 13 of this subpart, was determined.

(B) Records of when organic compound concentration of adsorber exhaust was monitored.

(C) Records of when the carbon was replaced.

(ii)(A) Record of how the carbon replacement interval, as specified in table 13 of this subpart, was determined.

(B) Records of when the carbon was replaced.

- 21. Section 63.150 is amended by:
    - a. Amending paragraph (a) by adding a sentence to the end of the paragraph;
    - b. Revising paragraph (g)(2) introductory text and paragraph (g)(2)(i);
    - c. Revising paragraph (g)(2)(iii)(B)(2);
    - d. Revising paragraph (m)(1)(i); and
    - e. Revising paragraph (m)(2)(i).
- The revisions and additions read as follows:

**§ 63.150 Emissions averaging provisions.**

(a) Notwithstanding the definition of process vent in § 63.101 and the sampling site designation in § 63.115(a), for purposes of this section the location of a process vent shall be defined, and the characteristics of its gas stream shall be determined, consistent with paragraph (g)(2)(i) of this section.

(2) Emissions from process vents shall be calculated according to paragraphs (g)(2)(i) through (iii) of this section.

(i) The location of a process vent shall be defined, and the characteristics of its gas stream shall be determined at a point that meets the conditions in either paragraph (g)(2)(i)(A) or (B) of this section and the conditions in paragraphs (g)(2)(i)(C) through (E) of this section.

(A) The point is after the final recovery device (if any recovery devices are present).

(B) If a gas stream included in an emissions average is combined with one or more other gas streams after a final recovery device (if any recovery devices are present), then for each gas stream, the point is at a representative point after any final recovery device and as near as feasible to, but before, the point of combination of the gas streams.

(C) The point is before any control device (for process vents, recovery devices shall not be considered control devices).

(D) The point is before discharge to the atmosphere.

(E) The measurement site for determination of the characteristics of the gas stream was selected using Method 1 or 1A of 40 CFR part 60, appendix A.

- (iii) \* \* \*
- (B) \* \* \*

(2) For determining debits from Group 1 process vents, recovery devices shall not be considered control devices and cannot be assigned a percent reduction in calculating  $EPV_{iACTUAL}$ . The

sampling site for measurement of uncontrolled emissions is after the final recovery device. However, as provided in § 63.113(a)(3), a Group 1 process vent may add sufficient recovery to raise the TRE index value above 1.0, thereby becoming a Group 2 process vent.

(i) Determine, consistent with paragraph (g)(2)(i) of this section, whether the process vent is Group 1 or Group 2 according to the procedures in § 63.115.

(i) Determine, consistent with paragraph (g)(2)(i) of this section, the flow rate, organic HAP concentration, and TRE index value using the methods specified in § 63.115;

22. Section 63.151 is amended by revising paragraph (b)(1)(iii) and by revising paragraph (e)(1) to read as follows:

**§ 63.151 Initial notification.**

(iii) An identification of the kinds of emission points within the source that are subject to this subpart;

(1) A list designating each emission point complying with §§ 63.113 through 63.149 and whether each emission point is Group 1 or Group 2, as defined in § 63.111. For each process vent within the source, provide the information listed in paragraphs (e)(1)(i) through (iv) of this section.

(i) The chemical manufacturing process unit(s) that is the origin of all or part of the vent stream that exits the process vent.

(ii) The type(s) of unit operations (*i.e.*, an air oxidation reactor, distillation unit, or reactor) that creates the vent stream that exits the process vent.

(iii) For a Group 2 process vent, the last recovery device, if any.

(iv) For a Group 1 process vent, the control device, or other equipment used for compliance.

23. Section 63.152 is amended by adding a new paragraph (b)(6), revising paragraph (c)(4)(iv), and adding a new paragraph (d)(4) to read as follows:

**§ 63.152 General reporting and continuous records.**

(b) \* \* \*

(6) An owner or operator complying with § 63.113(i) shall include in the Notification of Compliance Status, or where applicable, a supplement to the Notification of Compliance Status, the name and location of the transferee, and the identification of the Group 1 process vent.

\* \* \* \* \*

(c) \* \* \*

(4) \* \* \*

(iv) For gas streams sent for disposal pursuant to § 63.113(i) or for process wastewater streams sent for treatment pursuant to § 63.132(g), reports of changes in the identity of the transferee.

\* \* \* \* \*

(d) \* \* \*

(4) If an owner or operator transfers for disposal a gas stream that has the characteristics specified in § 63.107(b)

through (h) or meets the criteria specified in § 63.107(i) to an off-site location or an on-site location not owned or operated by the owner or operator of the source and the vent stream was not included in the information submitted with the Notification of Compliance Status or a previous periodic report, the owner or operator shall submit a supplemental report. The supplemental report shall be submitted no later than July 23, 2001 or with the next periodic report, whichever is later. The report shall provide the information listed in paragraphs (d)(4)(i) through (iv) of this section.

(i) The chemical manufacturing process unit(s) that is the origin of all or part of the vent stream that exits the process vent.

(ii) The type(s) of unit operations (*i.e.*, an air oxidation reactor, distillation unit, or reactor) that creates the vent stream that exits the process vent.

(iii) For a Group 2 process vent, the last recovery device, if any.

(iv) For a Group 1 process vent, the identity of the transferee.

\* \* \* \* \*

*Appendix to Subpart G—[Amended]*

24. The appendix to subpart G is amended by:

- a. Revising table 12;
- b. Revising footnote f to table 17; and
- c. Revising table 20.

The revisions read as follows:

**Appendix to Subpart G—Tables and Figures**

\* \* \* \* \*

TABLE 12.—MONITORING REQUIREMENTS FOR TREATMENT PROCESSES

To comply with	Parameters to be monitored	Frequency	Methods
1. Required mass removal of Table 8 and/or Table 9 compound(s) from wastewater treated in a properly operated biological treatment unit, § 63.138(f), and § 63.138(g).	Appropriate parameters as specified in § 63.143(c) and approved by permitting authority.	Appropriate frequency as specified in § 63.143 and approved by permitting authority.	Appropriate methods as specified in § 63.143 and as approved by permitting authority.
2. Steam stripper .....	(i) Steam flow rate; and .....	Continuously .....	Integrating steam flow monitoring device equipped with a continuous recorder.
	(ii) Wastewater feed mass flow rate; and	Continuously .....	Liquid flow meter installed at stripper influent and equipped with a continuous recorder.
	(iii) Wastewater feed temperature; or	Continuously .....	(A) Liquid temperature monitoring device installed at stripper influent and equipped with a continuous or recorder; or
	(iv) Column operating temperature.		(B) Liquid temperature monitoring device installed in the column top tray liquid phase ( <i>i.e.</i> , at the downcomer) and equipped with a continuous recorder.
3. Other treatment processes or alternative monitoring parameters to those listed in item 2 of this table.	Other parameters may be monitored upon approval from the Administrator with the requirements specified in § 63.151(f).		

TABLE 17.—INFORMATION FOR TREATMENT PROCESSES TO BE SUBMITTED WITH NOTIFICATION OF COMPLIANCE STATUS <sup>a, b</sup>

*	*	*	*	*	*	*

<sup>f</sup> Parameter(s) to be monitored or measured in accordance with Table 12 and § 63.143.

\* \* \* \* \*

TABLE 20.—WASTEWATER—PERIODIC REPORTING REQUIREMENTS FOR CONTROL DEVICES SUBJECT TO § 63.139 USED TO COMPLY WITH §§ 63.13 THROUGH 63.139

Control device	Reporting requirements
(1) Thermal Incinerator .....	Report all daily average <sup>a</sup> temperatures that are outside the range established in the NCS <sup>b</sup> or operating permit and all operating days when insufficient monitoring data are collected <sup>c</sup> .

TABLE 20.—WASTEWATER—PERIODIC REPORTING REQUIREMENTS FOR CONTROL DEVICES SUBJECT TO § 63.139 USED TO COMPLY WITH §§ 63.13 THROUGH 63.139—Continued

Control device	Reporting requirements
(2) Catalytic Incinerator .....	(i) Report all daily average <sup>a</sup> upstream temperatures that are outside the range established in the NCS <sup>b</sup> or operating permit. (ii) Report all daily average <sup>a</sup> temperature differences across the catalyst bed that are outside the range established in the NCS <sup>b</sup> or operating permit. (iii) Report all operating days when insufficient monitoring data are collected <sup>c</sup> .
(3) Boiler or Process Heater with a design heat input capacity less than 44 megawatts and vent stream is not mixed with the primary fuel.	Report all daily average <sup>a</sup> firebox temperatures that are outside the range established in the NCS <sup>b</sup> or operating permit and all operating days when insufficient monitoring data are collected <sup>c</sup> .
(4) Flare .....	Report the duration of all periods when all pilot flames are absent.
(5) Condenser .....	Report all daily average <sup>a</sup> exit temperatures that are outside the range established in the NCS <sup>b</sup> or operating permit and all operating days when insufficient monitoring data are collected <sup>c</sup> .
(6) Carbon Adsorber (Regenerative) .....	(i) Report all carbon bed regeneration cycles when the total regeneration stream mass or volumetric flow is outside the range established in the NCS <sup>b</sup> or operating permit. (ii) Report all carbon bed regeneration cycles during which the temperature of the carbon bed after regeneration is outside the range established in the NCS <sup>b</sup> or operating permit. (iii) Report all operating days when insufficient monitoring data are collected <sup>c</sup> .
(7) Carbon Adsorber (Non-Regenerative) .....	(i) Report all operating days when inspections not done according to the schedule developed as specified in table 13 of this subpart. (ii) Report all operating days when carbon has not been replaced at the frequency specified in table 13 of this subpart.
(8) All Control Devices .....	(i) Report the times and durations of all periods when the vent stream is diverted through a bypass line or the monitor is not operating, or (ii) Report all monthly inspections that show the valves are moved to the diverting position or the seal has been changed.

<sup>a</sup> The daily average is the average of all values recorded during the operating day, as specified in § 63.147(d).

<sup>b</sup> NCS = Notification of Compliance Status described in § 63.152.

<sup>c</sup> The periodic reports shall include the duration of periods when monitoring data are not collected for each excursion as defined in § 63.152(c)(2)(ii)(A).

\* \* \* \* \*

**Subpart H—National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks**

25. Section 63.180 is amended by revising paragraph (e) to read as follows:

**§ 63.180 Test methods and procedures.**

\* \* \* \* \*

(e) When a flare is used to comply with § 63.172(d), the owner or operator shall comply with paragraphs (e)(1) through (3) of this section. The owner or operator is not required to conduct a performance test to determine percent emission reduction or outlet organic HAP or TOC concentration.

(1) Conduct a visible emission test using the techniques specified in § 63.11(b)(4).

(2) Determine the net heating value of the gas being combusted using the techniques specified in § 63.11(b)(6).

(3) Determine the exit velocity using the techniques specified in either § 63.11(b)(7)(i) (and § 63.11(b)(7)(iii), where applicable) or § 63.11(b)(8), as appropriate.

\* \* \* \* \*

*Appendix C—[Amended]*

26. Appendix C to part 63 is amended by:

a. Revising the third paragraph in section I;

b. Revising the introductory text in section III;

c. Revising Eqn App. C-4 in section III.D.1 and the paragraph preceding it;

d. Revising Eqn App. C-6 in section III.D.2 and the paragraph preceding it;

e. Adding section III.E;

f. Adding references 7 and 8 to the References section;

g. Revising Figure 1; and

h. Adding Form XIII.

The additions and revisions read as follows:

**Appendix C to Part 63**

Determination of the Fraction Biodegraded ( $f_{bio}$ ) in a Biological Treatment Unit

**I. Purpose**

\* \* \* \* \*

Unless otherwise specified, the procedures presented in this appendix are designed to be applied to thoroughly mixed treatment units. A thoroughly mixed treatment unit is a unit that is designed and operated to approach or achieve uniform biomass distribution and organic compound concentration throughout the aeration unit by quickly dispersing the recycled biomass and the wastewater entering the unit. Detailed discussion on how to determine if a biological treatment unit is thoroughly mixed can be found in reference 7. Systems that are not thoroughly mixed treatment units should be subdivided into a series of zones that have uniform characteristics within each zone. The number of zones required to characterize a biological treatment system will depend on the design and operation of the treatment system.

Detailed discussion on how to determine the number of zones in a biological treatment unit and examples of determination of  $f_{bio}$  can be found in reference 8. Each zone should then be modeled as a separate unit. The amount of air emissions and biodegradation from the modeling of these separate zones can then be added to reflect the entire system.

\* \* \* \* \*

**III. Procedures for Determination of  $f_{bio}$**

The first step in the analysis to determine if a biological treatment unit may be used without being covered and vented through a closed-vent system to an air pollution control device is to determine the compound-specific  $f_{bio}$ . The following procedures may be used to determine  $f_{bio}$ :

(1) The EPA Test Method 304A or 304B (appendix A, part 63)—Method for the Determination of Biodegradation Rates of Organic Compounds,

(2) Performance data with and without biodegradation,

(3) Inlet and outlet concentration measurements,

(4) Batch tests,

(5) Multiple zone concentration measurements.

All procedures must be executed so that the resulting  $f_{bio}$  is based on the collection system and waste management units being in compliance with the rule. If the collection system and waste management units meet the suppression requirements at the time of the test, any of the procedures may be chosen. If the collection system and waste management units are not in compliance at the time of the performance test, then only Method 304A, B,

or the batch test shall be chosen. If Method 304A, B, or the batch test is used, any anticipated changes to the influent of the full-scale biological treatment unit that will occur after the facility has enclosed the collection system must be represented in the influent feed to the benchtop bioreactor unit, or test unit.

Select one or more appropriate procedures from the five listed above based on the availability of site specific data and the type of mixing that occurs in the unit (thoroughly mixed or multiple mixing zone). If the facility does not have site-specific data on the removal efficiency of its biological treatment unit, then Procedure 1 or Procedure 4 may be used. Procedure 1 allows the use of a benchtop bioreactor to determine the first-order biodegradation rate constant. An owner

or operator may elect to assume the first order biodegradation rate constant is zero for any regulated compound(s) present in the wastewater. Procedure 4 explains two types of batch tests which may be used to estimate the first order biodegradation rate constant. An owner or operator may elect to assume the first order biodegradation rate constant is zero for any regulated compound(s) present in the wastewater. Procedure 3 would be used if the facility has, or measures to determine, data on the inlet and outlet individual organic compound concentration for the biological treatment unit. Procedure 3 may only be used on a thoroughly mixed treatment unit. Procedure 5 is the concentration measurement test that can be used for units with multiple mixing zones. Procedure 2 is used if a facility has or obtains

performance data on a biotreatment unit prior to and after addition of the microbial mass. An example where Procedure 2 could be used is an activated sludge unit where measurements have been taken on inlet and exit concentration of organic compounds in the wastewater prior to seeding with the microbial mass and startup of the unit. The flow chart in figure 1 outlines the steps to use for each of the procedures.

\* \* \* \* \*

*D. Batch Tests (Procedure 4)*

\* \* \* \* \*

1. \* \* \*

Equation App. C-3 can be integrated to obtain the following equation:

$$-t = \frac{VK_s}{A} \ln\left(\frac{s}{s_0}\right) + \frac{Q_m XV^2}{AB} \ln\left(\frac{A + Bs}{A + Bs_0}\right) \quad (\text{Eqn App. C-4})$$

Where:

$$A = GK_{cq}K_s + Q_m VX$$

$$B = GK_{cq}$$

$S_0$  = test compound concentration at t=0

\* \* \* \* \*

2. \* \* \*

Equation App. C-5 can be solved analytically to give:

$$t = \frac{-(V_g K_{cq} + V_l)}{V_l Q_m X} \left[ (s - s_0) + K_s \ln\left(\frac{s}{s_0}\right) \right] \quad (\text{Eqn App. C-6})$$

\* \* \* \* \*

*E. Multiple Zone Concentration Measurements (Procedure 5)*

Procedure 5 is the concentration measurement method that can be used to determine the  $f_{bio}$  for units that are not thoroughly mixed and thus have multiple zones of mixing. As with the other procedures, proper determination of  $f_{bio}$  must be made on a system as it would exist under the rule. For purposes of this calculation, the biological unit must be divided<sup>1</sup> into zones with uniform characteristics within each zone. The number of zones that is used depends on the complexity of the unit. Reference 8, "Technical Support Document for the Evaluation of Aerobic Biological Treatment Units with Multiple Mixing Zones," is a source for further information concerning how to determine the number of zones that should be used for evaluating your unit. The following information on the biological unit must be available to use this procedure: basic unit variables such as inlet and recycle wastewater flow rates, type of agitation, and operating conditions; measured representative organic compound concentrations in each zone and the inlet and

outlet; and estimated mass transfer coefficients for each zone.

Reference 8 "Technical Support Document for the Evaluation of Aerobic Biological Treatment Units with Multiple Mixing Zones," is a source for further information concerning how to interpolate the biorates for multiple zones. In units with well-characterized concentration measurements obtained in an initial evaluation of the unit, it may be possible to demonstrate that there is a good correlation of the component concentrations with the locations in the multiple-zone unit. With this good correlation, it may be possible to accurately predict the concentrations in selected zones without actually testing each selected zone. This correlation method may be used for units that have many zones (greater than 5) or where one of the interior zones is not readily accessible for sampling. To use this correlation method of estimating zone concentrations, it is necessary to measure the concentrations in the inlet unit, the exit unit, and sufficient interior units to obtain a correlation of component concentrations with the locations. You cannot use this correlation method of estimating selected zone concentrations if monitoring of each zone is required, or if the accuracy and precision of the correlation is inferior to actual individual sampling error. The accuracy and precision of the correlation may

be improved by increasing the number of locations tested. Because the correlation is based on many samples, it should provide an accurate representation of a stable operating system.

The estimated mass transfer coefficient for each compound in each zone is obtained from Form II using the characteristics of each zone. A computer model may be used. If the Water7 model or the most recent update to this model is used, then use Form II-A to calculate KL. The TOXCHEM or BASTE model may also be used to calculate KL for the biological treatment unit, with the stipulations listed in Procedure 304B. Compound concentration measurements for each zone are used in Form XIII to calculate the  $f_{bio}$ . A copy of Form XIII is completed for each of the compounds of concern treated in the biological unit.

\* \* \* \* \*

*References*

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7. Technical Support Document for Evaluation of Thoroughly Mixed Biological Treatment Units. November 1998.

8. Technical Support Document for the Evaluation of Aerobic Biological Treatment Units with Multiple Mixing Zones. July 1999.

\* \* \* \* \*

<sup>1</sup> This is a mathematical division of the actual unit; not addition of physical barriers.

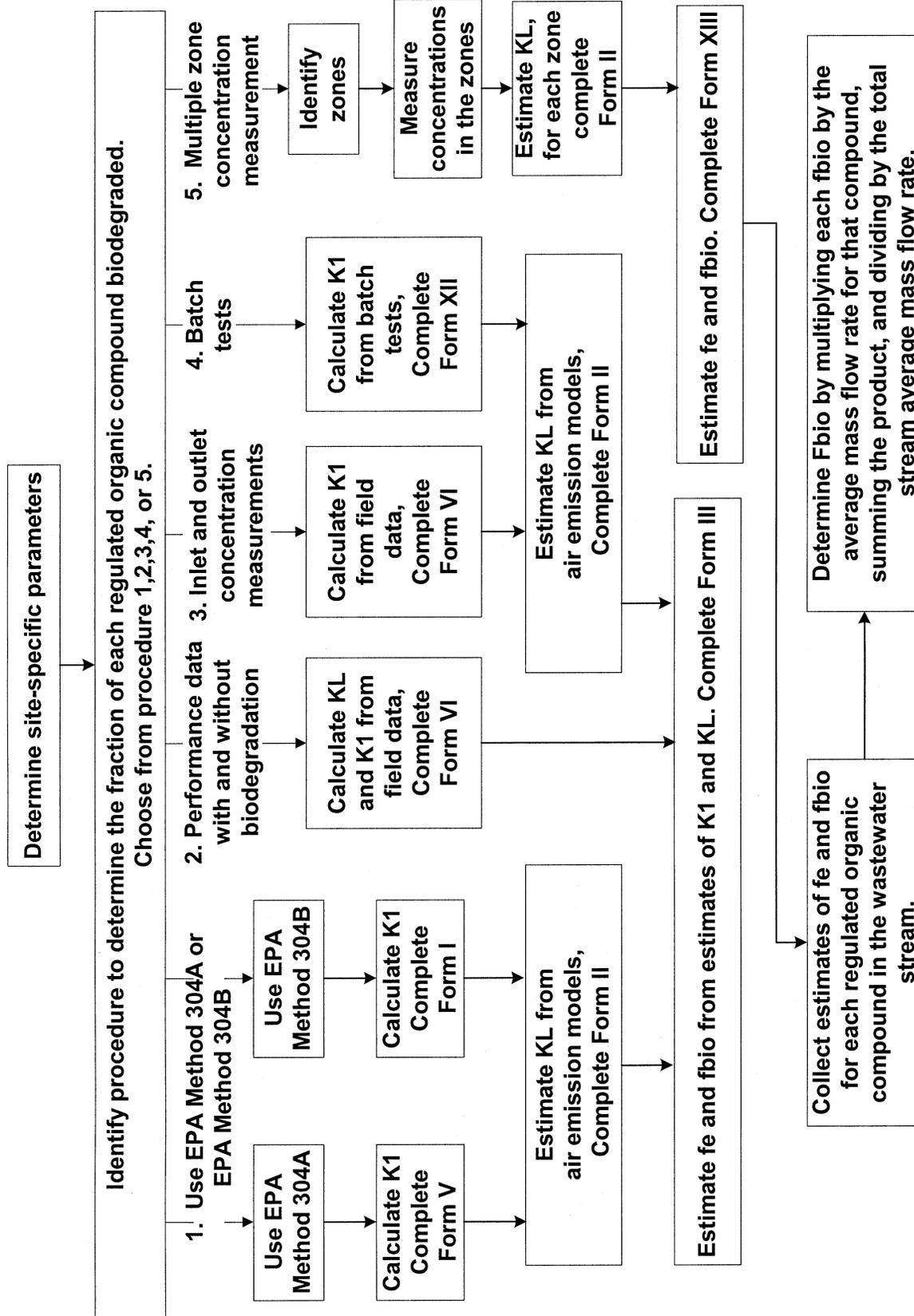


Figure 1. ALTERNATIVE EXPERIMENTAL METHODS FOR DETERMINING THE FRACTION OF ORGANIC COMPOUND BIODEGRADED (Fbio) IN A BIOLOGICAL TREATMENT UNIT

**FORM XIII. DATA FORM FOR THE ESTIMATION OF MULTIPLE ZONE BIODEGRADATION FROM UNIT CONCENTRATIONS**

NAME OF THE FACILITY for site specific biorate determination	
COMPOUND for site specific biorate determination	
Number of zones in the biological treatment unit	1
VOLUME of full-scale system (cubic meters)	2
Average DEPTH of the full-scale system (meters)	3
FLOW RATE of wastewater treated in the unit (m3/s)	4
Recycle flow of wastewater added to the unit, if any (m3/s)	5
Concentration in the wastewater treated in the unit (mg/L)	6
Concentration in the recycle flow, if any (mg/L)	7
Concentration in the effluent (mg/L).	8

TOTAL INLET FLOW (m3/s) line 4 plus the number on line 5	9
TOTAL RESIDENCE TIME (s) line 2 divided by line 9.	10
TOTAL AREA OF IMPOUNDMENT (m2) line 2 divided by line 3	11

Zone number	Concentration for zone, Ci (mg/L)	Area of the zone, A (m2)	Estimate of KL in the zone (m/s) from Form II	AIR STRIPPING KL A Ci (g/s)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
TOTALS sum for each zone.	12		13	

Removal by air stripping (g/s). Line 13.	14
Loading in effluent (g/s). Line 8 times line 9.	15
Total loading (g/s). (Line 5 * line 7) + (line 4* line 6).	16
Removal by biodegradation (g/s) Line 16 minus (line 14 + line 15).	17
<b>Fraction biodegraded: Divide line 17 by line 16..</b>	18
Fraction air emissions: Divide line 14 by line 16.	19
Fraction remaining in unit effluent: Divide line 15 by line 16.	20