TABLE 9 TO SUBPART U OF PART 63—ROUTINE REPORTS REQUIRED BY THIS SUBPART—Continued

Reference	Description of report	Due date
§63.506(e)(6)(xii)	Quarterly reports upon request of the Administrator.	No later than 60 days after the end of each quarter.
§63.506(e)(7)(i)	Storage Vessels Notification of In- spection.	At least 30 days prior to the refilling of each storage vessel or the in- spection of each storage vessel.
§63.506(e)(7)(ii)	Requests for Approval of a Nomi- nal Control Efficiency for Use in Emissions Averaging.	Initial submittal is due with the Emissions Averaging Plan; later sub- mittals are made at the discretion of the owner or operator as specified in § 63.506(e)(7)(ii)(B).
§63.506(e)(7)(iii)	Notification of Change in the Pri- mary Product.	 For notification under §63.480(f)(3)(ii) —notification submittal date at the discretion of the owner or operator.^c For notification under §63.480(f)(4)(ii) —within 6 months of making the determination.

a There may be two versions of this report due at different times; one for equipment subject to § 63.502 and one for other emission points subject to this subpart.

^b There will be two versions of this report due at different times; one for equipment subject to § 63.502 and one for other emission points subject to this subpart.

° Note that the EPPU remains subject to this subpart until the notification under §63.480(f)(3)(i) is made.

Subpart JJJ—National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins

29. Section 63.1310 is amended by:

- a. Revising paragraph (a);
- b. Revising paragraph (b);
- c. Revising paragraph (c);
- d. Revising paragraph (e);
- e. Revising paragraph (f);

f. Revising paragraph (g) introductory text;

g. Revising paragraphs (g)(1) through (g)(4);

h. Revising paragraphs (g)(6) through (g)(8);

i. Revising paragraph (h);

j. Revising paragraph (i) introductory text;

k. Revising paragraph (i)(1)

introductory text; l. Revising paragraphs (i)(1)(i) and

(i)(1)(ii);

m. Revising paragraph (i)(2)(i)

introductory text;

n. Revising paragraph (i)(2)(i)(A);
o. Revising paragraphs (i)(2)(ii) and (i)(2)(iii);

p. Revising paragraphs (i)(3) through (i)(5);

q. Revising paragraph (j);

r. Adding paragraph (i)(2)(iv); and

s. Adding paragraph (i)(6).

The revisions and additions read as follows:

§63.1310 Applicability and designation of affected sources.

(a) *Definition of affected source.* The provisions of this subpart apply to each affected source. Affected sources are described in paragraphs (a)(1) through (a)(4) of this section.

(1) An affected source is either an existing affected source or a new affected source. Existing affected source is defined in paragraph (a)(2) of this section, and new affected source is defined in paragraph (a)(3) of this section.

(2) An existing affected source is defined as each group of one or more thermoplastic product process units (TPPU) and associated equipment, as listed in paragraph (a)(4) of this section that is not part of a new affected source, as defined in paragraph (a)(3) of this section, that is manufacturing the same primary product, and that is located at a plant site that is a major source.

(3) A new affected source is defined by the criteria in paragraph (a)(3)(i), (a)(3)(ii), or (a)(3)(iii) of this section. The situation described in paragraph (a)(3)(i) of this section is distinct from those situations described in paragraphs (a)(3)(ii) and (a)(3)(iii) of this section and from any situation described in paragraph (i) of this section.

(i) At a site without HAP emission points before March 29, 1995 (*i.e.*, a "greenfield" site), each group of one or more TPPU and associated equipment, as listed in paragraph (a)(4) of this section, that is manufacturing the same primary product and that is part of a major source on which construction commenced after March 29, 1995;

(ii) A group of one or more TPPU meeting the criteria in paragraph (i)(1)(i) of this section: or

(iii) A reconstructed affected source meeting the criteria in paragraph (i)(2)(i) of this section.

(4) Emission points and equipment. The affected source also includes the emission points and equipment specified in paragraphs (a)(4)(i) through (a)(4)(vi) of this section that are associated with each applicable group of one or more TPPU constituting an affected source.

(i) Each waste management unit.(ii) Maintenance wastewater.(iii) Each heat exchange system.

(iv) Each process contact cooling tower used in the manufacture of PET that is associated with a new affected source.

(v) Each process contact cooling tower used in the manufacture of PET using a continuous terephthalic acid high viscosity multiple end finisher process that is associated with an existing affected source.

(vi) Equipment required by, or utilized as a method of compliance with, this subpart which may include control devices and recovery devices.

(5) TPPUs and associated equipment, as listed in paragraph (a)(4) of this section, that are located at plant sites that are not major sources are neither affected sources nor part of an affected source.

(b) *TPPUs without organic HAP.* The owner or operator of a TPPU that is part of an affected source, as defined in paragraph (a) of this section, but that does not use or manufacture any organic HAP shall comply with the requirements of either paragraph (b)(1) or (b)(2) of this section. Such a TPPU is not subject to any other provisions of this subpart and is not required to comply with the provisions of subpart A of this part.

(1) Retain information, data, and analyses used to document the basis for the determination that the TPPU does not use or manufacture any organic HAP. Types of information that could document this determination include, but are not limited to, records of chemicals purchased for the process, analyses of process stream composition, engineering calculations, or process knowledge.

(2) When requested by the Administrator, demonstrate that the TPPU does not use or manufacture any organic HAP. (c) Emission points not subject to the provisions of this subpart. The affected source includes the emission points listed in paragraphs (c)(1) through (c)(9) of this section, but these emission points are not subject to the requirements of this subpart or to the provisions of subpart A of this part.

(1) Equipment that does not contain organic HAP and is located within a TPPU that is part of an affected source;

(2) Stormwater from segregated sewers:

(3) Water from fire-fighting and deluge systems in segregated sewers;

(4) Spills;

(5) Water from safety showers;

(6) Water from testing of deluge systems;

(7) Water from testing of firefighting systems;

(8) Vessels and equipment storing and/or handling material that contain no organic HAP and/or organic HAP as impurities only; and

(9) Equipment that is intended to operate in organic HAP service for less than 300 hours during the calendar year.

(e) Applicability determination of nonthermoplastic equipment included within the boundaries of a TPPU. If a polymer that is not a thermoplastic product is produced within the equipment (*i.e.*, collocated) making up a TPPU and at least 50 percent of that polymer is used in the production of a thermoplastic product manufactured by the same TPPU, then the unit operations involved in the production of that polymer are considered part of the TPPU and are subject to this subpart, with the following exception. Any emission points from such unit operations that are subject to another subpart of this part with an effective date prior to September 5, 1996 shall remain subject to that other subpart of this part and are not subject to this subpart.

(f) Primary product determination and applicability. An owner or operator of a process unit that produces or plans to produce a thermoplastic product shall determine if the process unit is subject to this subpart in accordance with this paragraph. The owner or operator shall initially determine whether a process unit is designated as a TPPU and subject to the provisions of this subpart in accordance with either paragraph (f)(1) or (f)(2) of this section. The owner or operator of a flexible operation unit that was not initially designated as a TPPU, but in which a thermoplastic product is produced, shall conduct an annual redetermination of the applicability of this subpart in accordance with paragraph

(f)(3) of this section. Owners or operators that anticipate the production of a thermoplastic product in a process unit that was not initially designated as a TPPU, and in which no thermoplastic products are currently produced, shall determine if the process unit is subject to this subpart in accordance with paragraph (f)(4) of this section. Paragraphs (f)(3) and (f)(5) through (f)(7)of this section discuss compliance only for flexible operation units. Other paragraphs apply to all process units, including flexible operation units, unless otherwise noted. Paragraph (f)(8) of this section contains reporting requirements associated with the applicability determinations. Paragraphs (f)(9) and (f)(10) of this section describe criteria for removing the TPPU designation from a process unit.

(1) *Initial determination*. The owner or operator shall initially determine if a process unit is subject to the provisions of this subpart based on the primary product of the process unit in accordance with paragraphs (f)(1)(i)through (iii) of this section. If the process unit never uses or manufactures any organic HAP, regardless of the outcome of the primary product determination, the only requirements of this subpart that might apply to the process unit are contained in paragraph (b) of this section. If a flexible operation unit does not use or manufacture any organic HAP during the manufacture of one or more products, paragraph (f)(5)(i) of this section applies to that flexible operation unit.

(i) If a process unit only manufactures one product, then that product shall represent the primary product of the process unit.

(ii) If a process unit produces more than one intended product at the same time, the primary product shall be determined in accordance with paragraph (f)(1)(ii)(A) or (B) of this section.

(A) The product for which the process unit has the greatest annual design capacity on a mass basis shall represent the primary product of the process unit, or

(B) If a process unit has the same maximum annual design capacity on a mass basis for two or more products, and if one of those products is a thermoplastic product, then the thermoplastic product shall represent the primary product of the process unit.

(iii) If a process unit is designed and operated as a flexible operation unit, the primary product shall be determined as specified in paragraphs (f)(1)(iii)(A) or (B) of this section based on the anticipated operations for the 5 years following September 12, 1996 at existing process units, or for the first year after the process unit begins production of any product for new process units. If operations cannot be anticipated sufficiently to allow the determination of the primary product for the specified period, applicability shall be determined (in accordance with paragraph (f)(2) of this section.

(A) If the flexible operation unit will manufacture one product for the greatest operating time over the specified 5 year period for existing process units, or the specified 1 year period for new process units, then that product shall represent the primary product of the flexible operation unit.

(B) If the flexible operation unit will manufacture multiple products equally based on operating time, then the product with the greatest expected production on a mass basis over the specified 5 year period for existing process units, or the specified 1 year period for new process units shall represent the primary product of the flexible operation unit.

(iv) If, according to paragraph (f)(1)(i), (ii), or (iii) of this section, the primary product of a process unit is a thermoplastic product, then that process unit shall be designated as a TPPU. That TPPU and associated equipment, as listed in paragraph (a)(4) of this section is either an affected source or part of an affected source comprised of other TPPU and associated equipment, as listed in paragraph (a)(4) of this section, subject to this subpart with the same primary product at the same plant site that is a major source. If the primary product of a process unit is determined to be a product that is not a thermoplastic product, then that process unit is not a TPPU.

(2) If the primary product cannot be determined for a flexible operation unit in accordance with paragraph (f)(1)(iii) of this section, applicability shall be determined in accordance with this paragraph.

(i) If the owner or operator cannot determine the primary product in accordance with paragraph (f)(1)(iii) of this section, but can determine that a thermoplastic product is not the primary product, then that flexible operation unit is not a TPPU.

(ii) If the owner or operator cannot determine the primary product in accordance with paragraph (f)(1)(iii) of this section, and cannot determine that a thermoplastic product is not the primary product as specified in paragraph (f)(2)(i) of this section, applicability shall be determined in accordance with paragraph (f)(2)(ii)(A) or (f)(2)(ii)(B) of this section.

(A) If the flexible operation unit is an existing process unit, the flexible operation unit shall be designated as a TPPU if a thermoplastic product was produced for 5 percent or greater of the total operating time of the flexible operating unit since March 9, 1999. That TPPU and associated equipment, as listed in paragraph (a)(4) of this section, is either an affected source, or part of an affected source comprised of other TPPU and associated equipment, as listed in paragraph (a)(4) of this section, subject to this subpart with the same primary product at the same plant site that is a major source. For a flexible operation unit that is designated as an TPPU in accordance with this paragraph, the thermoplastic product produced for the greatest amount of time since March 9, 1999 shall be designated as the primary product of the TPPU.

(B) If the flexible operation unit is a new process unit, the flexible operation unit shall be designated as a TPPU if the owner or operator anticipates that a thermoplastic product will be manufactured in the flexible operation unit at any time in the first year after the date the unit begins production of any product. That TPPU and associated equipment, as listed in paragraph (a)(4) of this section, is either an affected source, or part of an affected source comprised of other TPPU and associated equipment, as listed in paragraph (a)(4) of this section, subject to this subpart with the same primary product at the same plant site that is a major source. For a process unit that is designated as a TPPU in accordance with this paragraph, the thermoplastic product that will be produced shall be designated as the primary product of the TPPU. If more than one thermoplastic product will be produced, the owner or operator may select which thermoplastic product is designated as the primary product.

(3) Annual applicability determination for non-TPPUs that have produced a thermoplastic product. Once per year beginning September 12, 2001, the owner or operator of each flexible operation unit that is not designated as a TPPU, but that has produced a thermoplastic product at any time in the preceding 5-year period or since the date that the unit began production of any product, whichever is shorter, shall perform the evaluation described in paragraphs (f)(3)(i) through (f)(3)(iii) of this section. However, an owner or operator that does not intend to produce any thermoplastic product in the future, in accordance with paragraph (f)(9) of this section, is not required to perform

the evaluation described in paragraphs (f)(3)(i) through (f)(3)(iii) of this section.

(i) For each product produced in the flexible operation unit, the owner or operator shall calculate the percentage of total operating time over which the product was produced during the preceding 5-year period.

(ii) The owner or operator shall identify the primary product as the product with the highest percentage of total operating time for the preceding 5year period.

(iii) If the primary product identified in paragraph (f)(3)(ii) is a thermoplastic product, the flexible operation unit shall be designated as a TPPU. The owner or operator shall notify the Administrator no later than 45 days after determining that the flexible operation unit is a TPPU, and shall comply with the requirements of this subpart in accordance with paragraph (i)(1) of this section for the flexible operation unit.

(4) Applicability determination for non-TPPUs that have not produced a thermoplastic product. The owner or operator that anticipates the production of a thermoplastic product in a process unit that is not designated as a TPPU, and in which no thermoplastic products have been produced in the previous 5year period or since the date that the process unit began production of any product, whichever is shorter, shall determine if the process unit is subject to this subpart in accordance with paragraphs (f)(4)(i) and (ii) of this section. Also, owners or operators who have notified the Administrator that a process unit is not a TPPU in accordance with paragraph (f)(9) of this section, that now anticipate the production of a thermoplastic product in the process unit, shall determine if the process unit is subject to this subpart in accordance with paragraphs (f)(4)(i) and (ii) of this section.

(i) The owner or operator shall use the procedures in paragraph (f)(1) or (f)(2) of this section to determine if the process unit is designated as a TPPU, with the following exception: For existing process units that are determining the primary product in accordance with paragraph (f)(1)(iii) of this section, production shall be projected for the five years following the date that the owner or operator anticipates initiating the production of a thermoplastic product.

(ii) If the unit is designated as a TPPU in accordance with paragraph (f)(4)(i) of this section, the owner or operator shall comply in accordance with paragraph (i)(1) of this section.

(5) Compliance for flexible operation units. Owners or operators of TPPUs that are flexible operation units shall comply with the standards specified for the primary product, with the exceptions provided in paragraphs (f)(5)(i) and (f)(5)(ii) of this section.

(i) Whenever a flexible operation unit manufactures a product in which no organic HAP is used or manufactured, the owner or operator is only required to comply with either paragraph (b)(1) or (b)(2) of this section to demonstrate compliance for activities associated with the manufacture of that product. This subpart does not require compliance with the provisions of subpart A of this part for activities associated with the manufacture of a product that meets the criteria of paragraph (b) of this section.

(ii) Whenever a flexible operation unit manufactures a product that makes it subject to subpart GGG of this part, the owner or operator is not required to comply with the provisions of this subpart during the production of that product.

(6) Owners or operators of TPPUs that are flexible operation units have the option of determining the group status of each emission point associated with the flexible operation unit, in accordance with either paragraph (f)(6)(i) or (f)(6)(ii) of this section, with the exception of batch process vents. For batch process vents, the owner or operator shall determine the group status in accordance with § 63.1323.

(i) The owner or operator may determine the group status of each emission point based on emission point characteristics when the primary product is being manufactured. The criteria that shall be used for this group determination are the Group 1 criteria specified for the primary product.

(ii) The owner or operator may determine the group status of each emission point separately for each product produced by the flexible operation unit. For each product, the group status shall be determined using the emission point characteristics when that product is being manufactured and using the Group 1 criteria specified for the primary product. (Note: Under this scenario, it is possible that the group status, and therefore the requirement to achieve emission reductions, for an emission point may change depending on the product being manufactured.)

(7) Owners or operators determining the group status of emission points in flexible operation units based solely on the primary product in accordance with paragraph (f)(6)(i) of this section shall establish parameter monitoring levels, as required, in accordance with either paragraph (f)(7)(i) or (f)(7)(ii) of this section. Owners or operators determining the group status of emission points in flexible operation units based on each product in accordance with paragraph (f)(6)(ii) of this section shall establish parameter monitoring levels, as required, in accordance with paragraph (f)(7)(i) of this section.

(i) Establish separate parameter monitoring levels in accordance with § 63.1334(a) for each individual product.

(ii) Establish a single parameter monitoring level (for each parameter required to be monitored at each device subject to monitoring requirements) in accordance with § 63.1334(a) that would apply for all products.

[8] *Reporting requirements.* When it is determined that a process unit is a TPPU and subject to the requirements of this subpart, the Notification of Compliance Status required by § 63.1335(e)(5) shall include the information specified in paragraphs (f)(8)(i) and (f)(8)(ii) of this section, as applicable. If it is determined that the process unit is not subject to this subpart, the owner or operator shall either retain all information, data, and analysis used to document the basis for the determination that the primary product is not a thermoplastic product, or, when requested by the Administrator, demonstrate that the process unit is not subject to this subpart.

(i) If the TPPU manufactures only one thermoplastic product, identification of that thermoplastic product.

(ii) If the TPPU is designed and operated as a flexible operation unit, the information specified in paragraphs (f)(8)(ii)(A) through (f)(8)(ii)(D) of this section, as appropriate, shall be submitted.

(A) If a primary product could be determined, identification of the primary product.

(B) Identification of which compliance option, either paragraph (f)(6)(i) or (f)(6)(ii) of this section, has been selected by the owner or operator.

(C) If the option to establish separate parameter monitoring levels for each product in paragraph (f)(7)(i) of this section is selected, the identification of each product and the corresponding parameter monitoring level.

(D) If the option to establish a single parameter monitor level in paragraph (f)(7)(ii) of this section is selected, the parameter monitoring level for each parameter.

(9) *TPPUs terminating production of all thermoplastic products.* If a TPPU terminates the production of all thermoplastic products and does not anticipate the production of any thermoplastic products in the future, the process unit is no longer a TPPU and is not subject to this subpart after notification is made to the Administrator. This notification shall be accompanied by a rationale for why it is anticipated that no thermoplastic products will be produced in the process unit in the future.

(10) Redetermination of applicability to TPPUs that are flexible operation units. Whenever changes in production occur that could reasonably be expected to change the primary product of a TPPU that is operating as a flexible operation unit from a thermoplastic product to a product that would make the process unit subject to another subpart of this part, the owner or operator shall re-evaluate the status of the process unit as a TPPU in accordance with paragraphs (f)(10)(i) through (iii) of this section.

(i) For each product produced in the flexible operation unit, the owner or operator shall calculate the percentage of total operating time in which the product was produced for the preceding five-year period, or since the date that the process unit began production of any product, whichever is shorter.

(ii) The owner or operator shall identify the primary product as the product with the highest percentage of total operating time for the period.

(iii) If the conditions in (f)(10)(iii)(A) through (C) of this section are met, the flexible operation unit shall no longer be designated as a TPPU and shall no longer be subject to the provisions of this subpart after the date that the process unit is required to be in compliance with the provisions of the other subpart of this part to which it is subject. If the conditions in paragraphs (f)(10)(iii)(A) through (C) of this section are not met, the flexible operation unit shall continue to be considered a TPPU and subject to the requirements of this subpart.

(Å) The product identified in (f)(10)(ii) of this section is not a thermoplastic product; and

(B) The production of the product identified in (f)(10)(ii) of this section is subject to another subpart of this part; and

(C) The owner or operator submits a notification to the Administrator of the pending change in applicability.

(g) Storage vessel ownership determination. The owner or operator shall follow the procedures specified in paragraphs (g)(1) through (g)(7) of this section to determine to which process unit a storage vessel shall be assigned. Paragraph (g)(8) of this section specifies when an owner or operator is required to redetermine to which process unit a storage vessel is assigned. (1) If a storage vessel is already subject to another subpart of 40 CFR part 63 on September 12, 1996, said storage vessel shall be assigned to the process unit subject to the other subpart.

(2) If a storage vessel is dedicated to a single process unit, the storage vessel shall be assigned to that process unit.

(3) If a storage vessel is shared among process units, then the storage vessel shall be assigned to that process unit located on the same plant site as the storage vessel that has the greatest input into or output from the storage vessel (*i.e.*, said process unit has the predominant use of the storage vessel).

(4) If predominant use cannot be determined for a storage vessel that is shared among process units and if only one of those process units is a TPPU subject to this subpart, the storage vessel shall be assigned to said TPPU.

(6) If the predominant use of a storage vessel varies from year to year, then predominant use shall be determined based on the utilization that occurred during the year preceding September 12, 1996 or based on the expected utilization for the 5 years following September 12, 1996 for existing affected sources, whichever is more representative of the expected operations for said storage vessel, and based on the expected utilization for the first 5 years after initial start-up for new affected sources. The determination of predominant use shall be reported in the Notification of Compliance Status, as required by §63.1335(e)(5)(vi).

(7) Where a storage vessel is located at a major source that includes one or more process units which place material into, or receive materials from the storage vessel, but the storage vessel is located in a tank farm (including a marine tank farm), the applicability of this subpart shall be determined according to the provisions in paragraphs (g)(7)(i) through (g)(7)(iv) of this section.

(i) The storage vessel may only be assigned to a process unit that utilizes the storage vessel and does not have an intervening storage vessel for that product (or raw material, as appropriate). With respect to any process unit, an intervening storage vessel means a storage vessel connected by hard-piping both to the process unit and to the storage vessel in the tank farm so that product or raw material entering or leaving the process unit flows into (or from) the intervening storage vessel and does not flow directly into (or from) the storage vessel in the tank farm.

(ii) If there is no process unit at the major source that meets the criteria of paragraph (g)(7)(i) of this section with respect to a storage vessel, this subpart does not apply to the storage vessel.

(iii) If there is only one process unit at the major source that meets the criteria of paragraph (g)(7)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to that process unit.

(iv) If there are two or more process units at the major source that meet the criteria of paragraph (g)(7)(i) of this section with respect to a storage vessel, the storage vessel shall be assigned to one of those process units according to the provisions of paragraphs (g)(3) through (g)(6) of this section. The predominant use shall be determined among only those process units that meet the criteria of paragraph (g)(7)(i) of this section.

(8) If the storage vessel begins receiving material from (or sending material to) a process unit that was not included in the initial determination, or ceases to receive material from (or send material to) a process unit, the owner or operator shall re-evaluate the applicability of this subpart to the storage vessel.

(h) Recovery operations equipment ownership determination. The owner or operator shall follow the procedures specified in paragraphs (h)(1) through (h)(6) of this section to determine to which process unit recovery operations equipment shall be assigned. Paragraph (h)(7) of this section specifies when an owner or operator is required to redetermine to which process unit the recovery operations equipment is assigned.

(1) If recovery operations equipment is already subject to another subpart of 40 CFR part 63 on September 12, 1996, said recovery operations equipment shall be assigned to the process unit subject to the other subpart.

(2) If recovery operations equipment is dedicated to a single process unit, the recovery operations equipment shall be assigned to that process unit.

(3) If recovery operations equipment is shared among process units, then the recovery operations equipment shall be assigned to that process unit located on the same plant site as the recovery operations equipment that has the greatest input into or output from the recovery operations equipment (*i.e.*, said process unit has the predominant use of the recovery operations equipment).

(4) If predominant use cannot be determined for recovery operations equipment that is shared among process units and if one of those process units is a TPPU subject to this subpart, the recovery operations equipment shall be assigned to said TPPU.

(5) If predominant use cannot be determined for recovery operations equipment that is shared among process units and if more than one of the process units are TPPUs that have different primary products and that are subject to this subpart, then the owner or operator shall assign the recovery operations equipment to any one of said TPPUs.

(6) If the predominant use of recovery operations equipment varies from year to year, then predominant use shall be determined based on the utilization that occurred during the year preceding September 12, 1996 or based on the expected utilization for the 5 years following September 12, 1996 for existing affected sources, whichever is the more representative of the expected operations for said recovery operations equipment, and based on the first 5 years after initial start-up for new affected sources. The determination of predominant use shall be reported in the Notification of Compliance Status, as required by §63.1335(e)(5)(vii).

(7) If a piece of recovery operations equipment begins receiving material from a process unit that was not included in the initial determination, or ceases to receive material from a process unit that was included in the initial determination, the owner or operator shall reevaluate the applicability of this subpart to that recovery operations equipment.

(i) Changes or additions to plant sites. The provisions of paragraphs (i)(1) through (i)(4) of this section apply to owners or operators that change or add to their plant site or affected source. Paragraph (i)(5) of this section provides examples of what are and are not considered process changes for purposes of this paragraph (i) of this section. Paragraph (i)(6) of this section discusses reporting requirements.

(1) Adding a TPPU to a plant site. The provisions of paragraphs (i)(1)(i) and (i)(1)(ii) of this section apply to owners or operators that add one or more TPPUs to a plant site.

(i) If a group of one or more TPPUs that produce the same primary product is added to a plant site, the added group of one or more TPPUs and associated equipment, as listed in paragraph (a)(4) of this section, shall be a new affected source and shall comply with the requirements for a new affected source in this subpart upon initial start-up or by June 19, 2000, whichever is later, as provided in § 63.6(b), except that new affected sources whose primary product, as determined using the procedures specified in paragraph (f) of this section, is poly(ethylene terephthalate) (PET) shall be in compliance with § 63.1331 upon initial start-up or February 27, 2001, whichever is later, if the added group of one or more TPPUs meets the criteria in either paragraph (i)(1)(i)(A) or (i)(1)(i)(B) of this section, and the criteria in either paragraph (i)(1)(i)(C) or (i)(1)(i)(D) of this section are met.

(A) The construction of the group of one or more TPPUs commenced after March 29, 1995.

(B) The construction or reconstruction, for process units that have become TPPUs, commenced after March 29, 1995.

(C) The group of one or more TPPUs and associated equipment, as listed in paragraph (a)(4) of this section, has the potential to emit 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAP, and the primary product of the group of one or more TPPUs is currently produced at the plant site as the primary product of an affected source; or

(D) The primary product of the group of one or more TPPUs is not currently produced at the plant site as the primary product of an affected source and the plant site meets, or after the addition of the group of one or more TPPUs and associated equipment, as listed in paragraph (a)(4) of this section, will meet the definition of a major source.

(ii) If a group of one or more TPPUs that produce the same primary product is added to a plant site, and the group of one or more TPPUs does not meet the criteria specified in paragraph (i)(1)(i) of this section, and the plant site meets, or after the addition will meet, the definition of a major source, the group of one or more TPPUs and associated equipment, as listed in paragraph (a)(4) of this section, shall comply with the requirements for an existing affected source in this subpart upon initial startup; by June 19, 2001; or by 6 months after notifying the Administrator that a process unit has been designated as a TPPU (in accordance with paragraph (f)(3)(iii) of this section), whichever is later.

(2) * * *

(i) If any components are replaced at an existing affected source such that the criteria specified in paragraphs (i)(2)(i)(A) through (i)(2)(i)(B) of this section are met, the entire affected source shall be a new affected source and shall comply with the requirements for a new affected source upon initial start-up or by June 19, 2000, whichever is later, as provided in § 63.6(b), except that new affected sources whose primary product is poly(ethylene terephthalate) (PET) shall be in compliance with § 63.1331 upon initial

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start-up or by February 27, 2001, whichever is later.

(A) The replacement of components meets the definition of reconstruction in § 63.1312(b); and

(ii) If any components are replaced at an existing affected source such that the criteria specified in paragraphs (i)(2)(i)(A) through (i)(2)(i)(B) of this section are not met, and that replacement of components creates one or more Group 1 emission points (i.e., either newly created Group 1 emission points or emission points that change group status from Group 2 to Group 1) or causes any other emission point to be added (i.e., Group 2 emission points, equipment leak components subject to § 63.1331, continuous process vents subject to §§ 63.1316 through 63.1320, heat exchange systems subject to §63.1328, and process contact cooling towers subject to §63.1329), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission points shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in §63.1311 (i.e., February 27, 1998 for most equipment leak components subject to §63.1331, June 19, 2001 for most emission points other than equipment leaks, and February 27, 2001 for process contact cooling towers at sources that produce PET as the primary product), whichever is later.

(iii) If an addition or process change (not including a process change that solely replaces components) is made to an existing affected source that creates one or more Group 1 emission points (i.e., either newly created Group 1 emission points or emission points that change group status from Group 2 to Group 1) or causes any other emission point to be added (*i.e.*, Group 2 emission points, equipment leak components subject to §63.1331, continuous process vents subject to §§ 63.1316 through 63.1320, heat exchange systems subject to §63.1328, and process contact cooling towers subject to §63.1329), the resulting emission point(s) shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by the appropriate compliance date specified in §63.1311 (i.e., February 27, 1998 for most equipment leak components subject to §63.1331, June 19, 2001 for most emission points other than equipment leaks, and February 27, 2001 for process contact cooling towers at sources that

produce PET as their primary product), whichever is later.

(iv) If any process change (not including a process change that solely replaces components) is made to an existing affected source that results in baseline emissions (*i.e.*, emissions prior to applying controls for purposes of complying with this subpart) from continuous process vents in the collection of material recovery sections within the affected source at an existing affected source producing PET using a continuous dimethyl terephthalate process changing from less than or equal to 0.12 kg organic HAP per Mg of product to greater than 0.12 kg organic HAP per Mg of product, the continuous process vents shall be subject to the applicable requirements for an existing affected source. The resulting emission point(s) shall be in compliance by 120 days after the date of initial start-up or by June 19, 2001, whichever is later.

(3) Existing affected source requirements for surge control vessels and bottoms receivers that become subject to subpart H requirements. If a process change or addition of an emission point causes a surge control vessel or bottoms receiver to become subject to § 63.170 under this paragraph (i), the owner or operator shall be in compliance upon initial start-up or by June 19, 2001, whichever is later.

(4) Existing affected source requirements for compressors that become subject to the requirements of subpart H of this part. If a process change or the addition of an emission point causes a compressor to become subject to § 63.164 under this paragraph (i), the owner or operator shall be in compliance upon initial start-up or by the compliance date for that compressor as specified in § 63.1311(d)(1) through (d)(4), whichever is later.

(5) Determining what are and are not process changes. For purposes of paragraph (i) of this section, examples of process changes include, but are not limited to, changes in feedstock type, or process catalyst type, or the replacement, removal, or addition of recovery equipment, or equipment changes that increase production capacity. For purposes of paragraph (i) of this section, process changes do not include: Process upsets, unintentional temporary process changes, and changes that do not alter the equipment configuration and operating conditions.

(6) Reporting requirements for owners or operators that change or add to their plant site or affected source. Owners or operators that change or add to their plant site or affected source, as discussed in paragraphs (i)(1) and (i)(2) of this section, shall submit a report as specified in §63.1335(e)(7)(iv).

(j) Applicability of this subpart during periods of start-up, shutdown, malfunction, or non-operation. Paragraphs (j)(1) through (j)(4) of this section shall be followed during periods of start-up, shutdown, malfunction, or non-operation of the affected source or any part thereof.

(1) The emission limitations set forth in this subpart and the emission limitations referred to in this subpart shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) resulting in cessation of the emissions to which this subpart applies. The emission limitations of this subpart and the emission limitations referred to in this subpart shall not apply during periods of start-up, shutdown, or malfunction, except as provided in paragraphs (j)(3) and (j)(4) of this section. During periods of start-up, shutdown, or malfunction, the owner or operator shall follow the applicable provisions of the start-up, shutdown, and malfunction plan required by §63.1335(b)(1). However, if a start-up, shutdown, malfunction, or period of non-operation of one portion of an affected source does not affect the ability of a particular emission point to comply with the emission limitations to which it is subject, then that emission point shall still be required to comply with the applicable emission limitations of this subpart during the start-up, shutdown, malfunction, or period of non-operation. For example, if there is an overpressure in the reactor area, a storage vessel that is part of the affected source would still be required to be controlled in accordance with the emission limitations in §63.1314.

Similarly, the degassing of a storage vessel would not affect the ability of a batch process vent to meet the emission limitations of §§ 63.1321 through 63.1327.

(2) The emission limitations set forth in subpart H of this part, as referred to in § 63.1331, shall apply at all times except during periods of non-operation of the affected source (or specific portion thereof) in which the lines are drained and depressurized resulting in cessation of the emissions to which § 63.1331 applies, or during periods of start-up, shutdown, malfunction, or process unit shutdown (as defined in § 63.161).

(3) The owner or operator shall not shut down items of equipment that are required or utilized for compliance with this subpart during periods of start-up, shutdown, or malfunction during times when emissions (or, where applicable, wastewater streams or residuals) are being routed to such items of equipment, if the shutdown would contravene requirements of this subpart applicable to such items of equipment. This paragraph (j)(3) does not apply if the item of equipment is malfunctioning. This paragraph also does not apply if the owner or operator shuts down the compliance equipment (other than monitoring systems) to avoid damage due to a contemporaneous startup, shutdown, or malfunction of the affected source or portion thereof. If the owner or operator has reason to believe that monitoring equipment would be damaged due to a contemporaneous start-up, shutdown, or malfunction of the affected source or portion thereof, the owner or operator shall provide documentation supporting such a claim in the Precompliance Report or in a supplement to the Precompliance Report, as provided in §63.1335(e)(3). Once approved by the Administrator in accordance with §63.1335(e)(3)(viii), the provision for ceasing to collect, during a start-up, shutdown, or malfunction, monitoring data that would otherwise be required by the provisions of this subpart must be incorporated into the start-up, shutdown, malfunction plan for that affected source, as stated in §63.1335(b)(1).

(4) During start-ups, shutdowns, and malfunctions when the emission limitations of this subpart do not apply pursuant to paragraphs (j)(1) through (j)(3) 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, the term "excess emissions" means emissions greater than those allowed by the emissions limitation which would apply during operational periods other than start-up, shutdown, and malfunction. The measures to be taken shall be identified in the applicable start-up, shutdown, and malfunction plan, and may include, but are not limited to, air pollution control technologies, recovery technologies, work practices, pollution prevention, monitoring, and/or changes in the manner of operation of the affected source. Back-up control devices are not required, but may be used if available.

- 30. Section 63.1311 is amended by:
- a. Revising the section title;
- b. Revising paragraph (a);
- c. Revising paragraph (b);
- d. Revising paragraph (c);

e. Revising paragraph (d) introductory text;

f. Revising paragraph (d)(1) introductory text;

g. Revising paragraphs (d)(2) and (d)(3);

h. Revising paragraphs (d)(5) and (d)(6);

i. Revising paragraph (e) introductory text;

j. Revising paragraph (h);

k. Revising paragraph (i)(1);

l. Revising paragraph (j);

- m. Revising paragraph (l);
- n. Revising paragraph (m);
- o. Adding paragraph (e)(3);

p. Adding paragraph (i)(3);

q. Adding paragraph (n); and

r. Adding paragraph (o).

The revisions and additions read as follows:

§63.1311 Compliance dates and relationship of this subpart to existing applicable rules.

(a) Affected sources are required to achieve compliance on or before the dates specified in paragraphs (b) through (d) of this section. Paragraph (e) of this section provides information on requesting compliance extensions. Paragraphs (f) through (n) of this section discuss the relationship of this subpart to subpart A of this part and to other applicable rules. Where an override of another authority of the Act is indicated in this subpart, only compliance with the provisions of this subpart is required. Paragraph (o) of this section specifies the meaning of time periods.

(b) New affected sources that commence construction or reconstruction after March 29, 1995 shall be in compliance with this subpart upon initial start-up or by June 19, 2000, whichever is later, except that new affected sources whose primary product, as determined using the procedures specified in § 63.1310(f), is poly(ethylene terephthalate) (PET) shall be in compliance with § 63.1331 upon initial start-up or February 27, 2001, whichever is later.

(c) Existing affected sources shall be in compliance with this subpart (except for §63.1331 for which compliance is covered by paragraph (d) of this section) no later than June 19, 2001, as provided in §63.6(c), unless an extension has been granted as specified in paragraph (e) of this section, except that the compliance date for the provisions contained in §63.1329 is temporarily extended to February 27, 2001, for existing affected sources whose primary product, as determined using the procedures specified in 63.1310(f), is PET using a continuous terephthalic acid high viscosity multiple end finisher process.

(d) Except as provided for in paragraphs (d)(1) through (d)(6) of this section, existing affected sources shall be in compliance with § 63.1331 no later than June 19, 2001, unless an extension has been granted pursuant to paragraph (e) of this section.

(1) Compliance with the compressor provisions of § 63.164 shall occur no later than February 27, 1998, for any compressor meeting one or more of the criteria in paragraphs (d)(1)(i) through (d)(1)(iv) of this section, if the work can be accomplished without a process unit shutdown:

*

(2) Compliance with the compressor provisions of \S 63.164 shall occur no later than March 12, 1998 for any compressor meeting all the criteria in paragraphs (d)(2)(i) through (d)(2)(iv) of this section:

(i) The compressor meets one or more of the criteria specified in paragraphs
(d)(1)(i) through (d)(1)(iv) of this section;

(ii) The work can be accomplished without a process unit shutdown ;

(iii) The additional time is actually necessary due to the unavailability of parts beyond the control of the owner or operator; and

(iv) The owner or operator submits the request for a compliance extension to the appropriate Environmental Protection Agency (EPA) Regional Office at the address listed in § 63.13 no later than June 16, 1997. The request for a compliance extension shall contain the information specified in § 63.6(i)(6)(i)(A), (B), and (D). Unless the EPA Regional Office objects to the request for a compliance extension within 30 days after receipt of the request, the request shall be deemed approved.

(3) If compliance with the compressor provisions of § 63.164 cannot reasonably be achieved without a process unit shutdown, the owner or operator shall achieve compliance no later than September 12, 1998. The owner or operator who elects to use this provision shall submit a request for a compliance extension in accordance with the requirements of paragraph (d)(2)(iv) of this section.

* * *

(5) Compliance with the provisions of § 63.170 shall occur no later than June 19, 2001.

(6) Notwithstanding paragraphs (d)(1) through (d)(4) of this section, existing affected sources whose primary product, as determined using the procedures specified in § 63.1310(f), is PET shall be in compliance with § 63.1331 no later than February 27, 2001.

(e) Pursuant to Section 112(i)(3)(B) of the Act, an owner or operator may request an extension allowing the existing affected source up to 1 additional year to comply with Section 112(d) standards. For purposes of this subpart, a request for an extension shall be submitted to the permitting authority as part of the operating permit application or to the Administrator as a separate submittal or as part of the Precompliance Report. Requests for extensions shall be submitted no later than 120 days prior to the compliance dates specified in paragraphs (b) through (d) of this section, or as specified elsewhere in this subpart, except as provided in paragraph (e)(3) of this section. The dates specified in §63.6(i) for submittal of requests for extensions shall not apply to this subpart.

* * * *

(3) An owner or operator may submit a compliance extension request after the date specified in paragraph (e) of this section, provided that the need for the compliance extension arose after that date, and the need arose due to circumstances beyond reasonable control of the owner or operator. This request shall include, in addition to the information specified in paragraph (e)(1) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the circumstances necessitating a request for compliance extension under this paragraph (e)(3). * *

(h) After the compliance dates specified in this section, a storage vessel that is assigned to an affected source subject to this subpart and that is also subject to the provisions of 40 CFR part 60, subpart Kb, is required to comply only with the provisions of this subpart. After the compliance dates specified in this section, said storage vessel shall no longer be subject to 40 CFR part 60, subpart Kb.

(i)(1) Except as provided in paragraphs (i)(2) and (i)(3) of this section, after the compliance dates specified in this section, affected sources producing PET using a continuous terephthalic acid process, producing PET using a continuous dimethyl terephthalate process, or producing polystyrene resin using a continuous process subject to this subpart that are also subject to the provisions of 40 CFR part 60, subpart DDD, are required to comply only with the provisions of this subpart. After the compliance dates specified in this section, said sources shall no longer be subject to 40 CFR part 60, subpart DDD. * *

(3) Existing affected sources producing PET using a continuous

terephthalic acid process, but not using a continuous terephthalic acid high viscosity multiple end finisher process, that are subject to and complying with 40 CFR 60.562–1(c)(2)(ii)(B) shall continue to comply with said section. Existing affected sources producing PET using a continuous dimethyl terephthalic process that are subject to and complying with 40 CFR 60.562– 1(c)(1)(ii)(B) shall continue to comply with said section.

(j) Owners or operators of affected sources subject to this subpart that are also subject to the provisions of subpart Q of this part shall comply with both subparts.

* * *

(l) After the compliance dates specified in this section, a distillation operation that is assigned to an affected source subject to this subpart that is also subject to the provisions of 40 CFR part 60, subpart NNN, is required to comply only with the provisions of this subpart. After the compliance dates specified in this section, the distillation operation shall no longer be subject to 40 CFR part 60, subpart NNN.

(m) Applicability of other regulations for monitoring, recordkeeping or reporting with respect to combustion devices, recovery devices, or recapture *devices.* After the compliance dates specified in this subpart, if any combustion device, recovery device or recapture device subject to this subpart is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264 subpart AA or CC, or is subject to monitoring and recordkeeping requirements in 40 CFR part 265 subpart AA or CC and the owner or operator complies with the periodic reporting requirements under 40 CFR part 264 subpart AA or CC that would apply to the device if the facility had final-permitted status, the owner or operator may elect to comply either with the monitoring, recordkeeping and reporting requirements of this subpart, or with the monitoring, recordkeeping and reporting requirements in 40 CFR parts 264 and/or 265, as described in this paragraph, which shall constitute compliance with the monitoring, recordkeeping and reporting requirements of this subpart. The owner or operator shall identify which option has been selected in the Notification of Compliance Status required by §63.1335(e)(5).

(n) Applicability of other requirements for heat exchange systems or waste management units. Paragraphs (n)(1) and (n)(2) of this section address instances in which certain requirements from other regulations also apply for the same heat exchange system(s) or waste management unit(s) that are subject to this subpart.

(1) After the applicable compliance date specified in this subpart, if a heat exchange system subject to this subpart is also subject to a standard identified in paragraphs (n)(1)(i) or (ii) of this section, compliance with the applicable provisions of the standard identified in paragraphs (n)(1)(i) or (ii) of this section shall constitute compliance with the applicable provisions of this subpart with respect to that heat exchange system.

(i) Subpart F of this part.

(ii) A subpart of this part which requires compliance with § 63.104 (*e.g.*, subpart U of this part).

(2) After the applicable compliance date specified in this subpart, if any waste management unit subject to this subpart is also subject to a standard identified in paragraph (n)(2)(i) or (ii) of this section, compliance with the applicable provisions of the standard identified in paragraph (n)(2)(i) or (ii) of this section shall constitute compliance with the applicable provisions of this subpart with respect to that waste management unit.

(i) Subpart G of this part.

(ii) A subpart of this part which requires compliance with §§ 63.132 through 63.147.

(o) All terms in this subpart that define a period of time for completion of required tasks (*e.g.*, weekly, monthly, quarterly, annual), unless specified otherwise in the section or paragraph that imposes the requirement, refer to the standard calendar periods.

(1) Notwithstanding time periods specified in this subpart for completion of required tasks, such time periods may be changed by mutual agreement between the owner or operator and the Administrator, as specified in subpart A of this part (*e.g.*, a period could begin on the compliance date or another date, rather than on the first day of the standard calendar period). For each time period that is changed by agreement, the revised period shall remain in effect until it is changed. A new request is not necessary for each recurring period.

(2) Where the period specified for compliance is a standard calendar period, if the initial compliance date occurs after the beginning of the period, compliance shall be required according to the schedule specified in paragraphs (o)(2)(i) or (o)(2)(ii) of this section, as appropriate.

(i) Compliance shall be required before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or

(ii) In all other cases, compliance shall be required before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.

(3) In all instances where a provision of this subpart requires completion of a task during each of multiple successive periods, an owner or operator may perform the required task at any time during the specified period, provided that the task is conducted at a reasonable interval after completion of the task during the previous period.

31. Section 63.1312 is amended by:

a. Revising paragraph (a); b. Amending paragraph (b) by revising the definitions for "Acrylonitrile butadiene styrene latex resin (ABS latex)," "Aggregate batch vent stream," "Batch cycle," "Batch process," "Batch process vent," "Batch unit operation," "Continuous process," "Continuous process vent," "Continuous unit operation," "Control device," "Emission point," "Emulsion process," "Group 1 batch process vent," "Heat exchange system," "Maintenance wastewater," "Mass process," "Material recovery section," "Organic hazardous air pollutant(s) (organic HAP)," "Polymerization reaction section," "Process unit," "Process vent," "Product," "Raw materials preparation section," "Recovery operations equipment," "Steady-state conditions," "Storage vessel," "Supplemental combustion air," "Suspension process," and "Thermoplastic product process unit (TPPU),";

c. Amending paragraph (b) by removing the definitions of "Average flow rate," "Solid state polymerization unit," and "Year,"; and

d. Amending paragraph (b) by adding definitions for the terms "Annual average batch vent concentration,' "Annual average batch vent flow rate," "Annual average concentration," "Annual average flow rate," "Average batch vent concentration," "Average batch vent flow rate," "Batch mass input limitation," "Batch mode," ''Combined vent stream,' "Construction," "Continuous mode," "Continuous record," "Continuous recorder," "Equipment," "Existing affected source,""""Existing process unit," "Flexible operation unit," "Group 1 wastewater stream" "Group 2 wastewater stream," "Highest- HAP recipe," "Initial start-up," "Maximum

true vapor pressure," "Multicomponent system," "New affected source," "New process unit," "On-site or On site," "Operating day," "Recipe," "Reconstruction," "Recovery device," "Residual," "Shutdown," "Solid state polymerization process," "Start-up," "Total resource effectiveness index value or TRE index value," "Vent stream," "Waste management unit," "Wastewater," and "Wastewater stream."

The revisions and additions read as follows:

§63.1312 Definitions.

(a) The following terms used in this subpart shall have the meaning given them in §63.2, §63.101, §63.111, §63.161, or the Act, as specified after each term: Act (§63.2) Administrator (§ 63.2) Automated monitoring and recording system (§63.111) Boiler (§ 63.111) Bottoms receiver (§63.161) By compound (§ 63.111) By-product (§ 63.101) Car-seal (§63.111) Closed-vent system (§63.111) Combustion device (§ 63.111) Commenced (§63.2) Compliance date (§ 63.2) Connector (§ 63.161) Continuous monitoring system (§ 63.2) Distillation unit (§ 63.111) Duct work (§ 63.161) Emission limitation (Section 302(k) of the Act) Emission standard (§63.2) Emissions averaging (§ 63.2) EPA (§63.2) Equipment leak (§ 63.101) External floating roof (§ 63.111) Fill or filling (§ 63.111) First attempt at repair (§63.161) Fixed capital cost (§63.2) Flame zone (§ 63.111) Floating roof (§ 63.111) Flow indicator (§ 63.111) Fuel gas system (§63.101) Halogens and hydrogen halides $(\S 63.111)$ Hard-piping (§ 63.111) Hazardous air pollutant (§63.2) Impurity (§ 63.101) In organic hazardous air pollutant service or in organic HAP service (\$ 63.161)Incinerator (§63.111) Instrumentation system (§63.161) Internal floating roof (§63.111) Lesser quantity (§ 63.2) Major source (§ 63.2) Malfunction (§ 63.2) Oil-water separator or organic-water separator (§ 63.111) Open-ended valve or line (§63.161)

Operating permit (§63.101) Organic monitoring device (§63.111) Owner or operator (§63.2) Performance evaluation (§ 63.2) Performance test (§ 63.2) Permitting authority (§63.2) Plant site (§ 63.101) Potential to emit (§63.2) Pressure release (§63.161) Primary fuel (§63.111) Process heater (§ 63.111) Process unit shutdown (§ 63.161) Process wastewater (§ 63.101) Process wastewater stream (§ 63.111) Reactor (§ 63.111) Recapture device (§63.101) Repaired (§ 63.161) Research and development facility $(\S 63.101)$ Routed to a process or route to a process (§63.161) Run (§63.2) Secondary fuel (§63.111) Sensor (§63.161) Specific gravity monitoring device $(\S 63.111)$ Start-up, shutdown, and malfunction plan (§63.101) State (§ 63.2) Stationary Source (§63.2) Surge control vessel (§63.161) Temperature monitoring device (\$63.111)Test method (§63.2) Treatment process (§ 63.111) Unit operation (§63.101) Visible emission (§63.2) (b) * * Acrylonitrile butadiene styrene latex resin (ABS latex) means ABS produced through an emulsion process; however, the product is not coagulated or dried as typically occurs in an emulsion process. Aggregate batch vent stream means a gaseous emission stream containing only the exhausts from two or more batch process vents that are ducted, hardpiped, or otherwise connected together for a continuous flow. Annual average batch vent concentration is determined using Equation 1, as described in §63.1323(h)(2) for halogenated compounds. Annual average batch vent flow rate is determined by the procedures in §63.1323(e)(3). Annual average concentration, as used in the wastewater provisions, means the flow-weighted annual average concentration, as determined according to the procedures specified in

§ 63.144(b), with the exceptions noted in § 63.1330, for the purposes of this subpart.

Annual average flow rate, as used in the wastewater provisions, means the

annual average flow rate, as determined according to the procedures specified in \S 63.144(c), with the exceptions noted in \S 63.1330, for the purposes of this subpart.

Average batch vent concentration is determined by the procedures in § 63.1323(b)(5)(iii) for HAP concentrations and is determined by the procedures in § 63.1323(h)(1)(iii) for organic compounds containing halogens and hydrogen halides.

Average batch vent flow rate is determined by the procedures in § 63.1323(e)(1) and (e)(2).

* * *

Batch cycle means the operational step or steps, from start to finish, that occur as part of a batch unit operation.

Batch mass input limitation means an enforceable restriction on the total mass of HAP or material that can be input to a batch unit operation in one year.

Batch mode means the discontinuous bulk movement of material through a unit operation. Mass, temperature, concentration, and other properties may vary with time. For a unit operation operated in a batch mode (*i.e.*, batch unit operation), the addition of material and withdrawal of material do not typically occur simultaneously.

Batch process means, for the purposes of this subpart, a process where the reactor(s) is operated in a batch mode.

Batch process vent means a process vent with annual organic HAP emissions greater than 225 kilograms per year from a batch unit operation within an affected source. Annual organic HAP emissions are determined as specified in § 63.1323(b) at the location specified in § 63.1323(a)(2).

Batch unit operation means a unit operation operated in a batch mode.

Combined vent stream, as used in reference to batch process vents, continuous process vents, and aggregate batch vent streams, means the emissions from a combination of two or more of the aforementioned types of process vents. The primary occurrence of a combined vent stream is the combined emissions from a continuous process vent and a batch process vent.

* * * *

Construction means the on-site fabrication, erection, or installation of an affected source. Construction also means the on-site fabrication, erection, or installation of a process unit or combination of process units which subsequently becomes an affected source or part of an affected source, due to a change in primary product.

Continuous mode means the continuous movement of material

through a unit operation. Mass, temperature, concentration, and other properties typically approach steadystate conditions. For a unit operation operated in a continuous mode (*i.e.*, continuous unit operation), the simultaneous addition of raw material and withdrawal of product is typical.

Continuous process means, for the purposes of this subpart, a process where the reactor(s) is operated in a continuous mode.

Continuous process vent means a process vent containing greater than 0.005 weight percent total organic HAP from a continuous unit operation within an affected source. The total organic HAP weight percent is determined after the last recovery device, as described in § 63.115(a), and is determined as specified in § 63.115(c).

Continuous record means documentation, either in hard copy or computer readable form, of data values measured at least once every 15 minutes and recorded at the frequency specified in § 63.1335(d) or § 63.1335(h).

Continuous recorder means a data recording device that either records an instantaneous data value at least once every 15 minutes or records 1-hour or more frequent block average values.

Continuous unit operation means a unit operation operated in a continuous mode.

Control device is defined in § 63.111, except that the term "continuous process vents subject to § 63.1315" shall apply instead of the term "process vents," for the purpose of this subpart.

Emission point means an individual continuous process vent, batch process vent, storage vessel, waste management unit, equipment leak, heat exchange system, or process contact cooling tower, or equipment subject to § 63.149.

Emulsion process means a process where the monomer(s) is dispersed in droplets throughout the water phase with the aid of an emulsifying agent such as soap or a synthetic emulsifier. The polymerization occurs either within the emulsion droplet or in the aqueous phase.

Equipment means, for the purposes of the provisions in § 63.1331 and the requirements in subpart H that are referred to in § 63.1331, each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, surge control vessel, bottoms receiver, and instrumentation system in organic hazardous air pollutant service; and any control devices or systems required by subpart H of this part.

Existing affected source is defined in § 63.1310(a)(3).

Existing process unit means any process unit that is not a new process unit.

Flexible operation unit means a process unit that manufactures different chemical products, polymers, or resins periodically by alternating raw materials or operating conditions. These units are also referred to as campaign plants or blocked operations.

Group 1 batch process vent means a batch process vent releasing annual organic HAP emissions greater than the level specified in §63.1323(d) and with a cutoff flow rate, calculated in accordance with §63.1323(f), greater than or equal to the annual average batch vent flow rate. Annual organic HAP emissions and annual average batch vent flow rate are determined at the exit of the batch unit operation, as described in §63.1323(a)(2). Annual organic HAP emissions are determined as specified in §63.1323(b), and annual average batch vent flow rate is determined as specified in §63.1323(e). * *

Group 1 wastewater stream means a wastewater stream consisting of process wastewater from an existing or new affected source that meets the criteria for Group 1 status in § 63.132(c) and/or that meets the criteria for Group 1 status in § 63.132(d), with the exceptions listed in § 63.1330(b)(8) for the purposes of this subpart (*i.e.*, for organic HAP listed on Table 6 of this subpart only).

Group 2 wastewater stream means any process wastewater stream that does not meet the definition of a Group 1 wastewater stream.

* * * *

Heat exchange system means any cooling tower system or once-through cooling water system (e.g., river or pond water) designed and intended to operate to not allow contact between the cooling medium and process fluid or gases (*i.e.*, a noncontact system). A heat exchange system can include more than one heat exchanger and can include recirculating or once-through cooling systems.

Highest-HAP recipe for a product means the recipe of the product with the highest total mass of HAP charged to the reactor during the production of a single batch of product.

Initial start-up means the first time a new or reconstructed affected source begins production of a thermoplastic product, or, for equipment added or changed as described in § 63.1310(i), the first time the equipment is put into operation to produce a thermoplastic product. Initial start-up does not include operation solely for testing equipment. Initial start-up does not include subsequent start-ups of an affected source or portion thereof following malfunctions or shutdowns or following changes in product for flexible operation units or following recharging of equipment in batch operation. Further, for purposes of § 63.1311 and § 63.1331, initial start-up does not include subsequent start-ups of affected sources or portions thereof following malfunctions or process unit shutdowns.

Maintenance wastewater is defined in § 63.101, except that the term "thermoplastic product process unit" shall apply wherever the term "chemical manufacturing process unit" is used. Further, the generation of wastewater from the routine rinsing or washing of equipment in batch operation between batches is not maintenance wastewater, but is considered to be process wastewater, for the purposes of this subpart.

Mass process means a polymerization process carried out through the use of thermal energy. Mass processes do not utilize emulsifying or suspending agents, but may utilize catalysts or other additives.

Material recovery section means, for PET plants, the equipment that recovers by-product methanol from any process section for use, reuse, or sale, or the equipment that separates materials containing by-product methanol from any process section for off-site purification or treatment with the intent to recover methanol for reuse. For polystyrene plants, material recovery section means the equipment that recovers unreacted styrene from any process section for use, reuse, or sale, or the equipment that separates materials containing unreacted styrene from any process section for off-site purification or treatment with the intent to recover styrene for reuse. Equipment used to store recovered materials (i.e., ethylene glycol, methanol, or styrene) is not included. Equipment designed to recover or separate materials from the polymer product is to be included in this process section, provided that at the time of initial compliance some of the unreacted or by-product material is recovered for return to the TPPU, or sale, or provided that some of the separated material is sent for off-site purification or treatment with the intent to recover the unreacted or by-product material for reuse. Otherwise, such equipment is to be assigned to one of the other process sections, as appropriate. If equipment is used to recover unreacted or by-product material and return it directly to the same piece of process equipment from which it was emitted, then that recovery

equipment is considered part of the process section that contains the process equipment. On the other hand, if equipment is used to recover unreacted or by-product material and return it to a different piece of process equipment in the same process section, that recovery equipment is considered part of a material recovery section. Equipment used for the on-site recovery of ethylene glycol from PET plants, however, is not included in the material recovery section; such equipment is to be included in the polymerization reaction section. Equipment used for the on-site recovery of both ethylene glycol and any other materials from PET plants is not included in the material recovery section; this equipment is to be included in the polymerization reaction section. Such equipment includes both contact and non-contact condensers removing ethylene glycol from vapor streams coming out of polymerization vessels.

Maximum true vapor pressure is defined in § 63.111, except that the terms "transfer" or "transferred" shall not apply for purposes of this subpart.

Multicomponent system means, as used in conjunction with batch process vents, a stream whose liquid and/or vapor contains more than one compound.

New process unit means a process unit for which the construction or reconstruction commenced after March 29, 1995.

On-site or *On site* means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source or TPPU to which the records pertain, or storage in central files elsewhere at the major source.

Operating day means the period defined by the owner or operator in the Notification of Compliance Status required by § 63.1335(e)(5). The operating day is the period for which daily average monitoring values and batch cycle daily average monitoring values are determined.

Organic hazardous air pollutant(s) (organic HAP) means one or more of the chemicals listed in Table 6 of this subpart or any other chemical which is:

(1) Knowingly produced or introduced into the manufacturing process other than as an impurity; and (2) Listed in Table 2 of subpart F of this part.

Polymerization reaction section means the equipment designed to cause monomer(s) to react to form polymers, including equipment designed primarily to cause the formation of short polymer chains (e.g., oligomers or low molecular weight polymers), but not including equipment designed to prepare raw materials for polymerization (e.g., esterification vessels). For the purposes of these standards, the polymerization reaction section begins with the equipment used to transfer the materials from the raw materials preparation section and ends with the last vessel in which polymerization occurs. Equipment used for the on-site recovery of ethylene glycol from PET plants is included in this process section, rather than in the material recovery process section.

Process unit means a collection of equipment assembled and connected by hardpiping or duct work, used to process raw materials and to manufacture a product.

Process vent means a gaseous emission stream from a unit operation that is discharged to the atmosphere either directly or after passing through one or more control, recovery, or recapture devices. Unit operations that may have process vents are condensers, distillation units, reactors, or other unit operations within the TPPU. Process vents exclude pressure releases, gaseous streams routed to a fuel gas system(s), and leaks from equipment regulated under §63.1331. A gaseous emission stream is no longer considered to be a process vent after the stream has been controlled and monitored in accordance with the applicable provisions of this subpart.

Product means a polymer produced using the same monomers and varying in additives (e.g., initiators, terminators, etc.); catalysts; or in the relative proportions of monomers, that is manufactured by a process unit. With respect to polymers, more than one recipe may be used to produce the same product. Ås an example, styrene acrylonitrile resin and methyl methacrylate butadiene styrene resin each represent a different product. Product also means a chemical that is not a polymer, that is manufactured by a process unit. By-products, isolated intermediates, impurities, wastes, and trace contaminants are not considered products.

Raw materials preparation section means the equipment at a polymer manufacturing plant designed to prepare raw materials, such as monomers and solvents, for polymerization. For the purposes of the standards in this subpart, this process section includes the equipment used to transfer raw materials from storage and/ or the equipment used to transfer recovered material from the material recovery process sections to the raw material preparation section, and ends with the last piece of equipment that prepares the material for polymerization. The raw materials preparation section may include equipment that is used to purify, dry, or otherwise treat raw materials or raw and recovered materials together; to activate catalysts; or to promote esterification including the formation of some short polymer chains (oligomers). The raw materials preparation section does not include equipment that is designed primarily to accomplish the formation of oligomers, the treatment of recovered materials alone, or the storage of raw or recovered materials.

Recipe means a specific composition, from among the range of possible compositions that may occur within a product, as defined in this section. A recipe is determined by the proportions of monomers and, if present, other reactants and additives that are used to make the recipe. For example, acrylonitrile butadiene styrene latex resin (ABS latex) without additives; ABS latex with an additive; and ABS latex with different proportions of acrylonitrile to butadiene are all different recipes of the same product, ABS latex.

Reconstruction means the addition of new components or the replacement of existing components at an affected source or at a previously unaffected stationary source that becomes an affected source as a result of the change, to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable affected new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the provisions of this subpart.

Recovery device means:

(1) An individual unit of equipment capable of and normally used for the purpose of recovering chemicals for:

(i) Use;

(ii) Reuse;

(iii) Fuel value (*i.e.,* net heating value); or

(iv) For sale for use, reuse, or fuel value (*i.e.*, net heating value).

(2) Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. For the purposes of the monitoring, recordkeeping, or reporting requirements of this subpart, recapture devices are considered recovery devices.

Recovery operations equipment means the equipment used to separate the components of process streams. Recovery operations equipment includes distillation units, condensers, etc. Equipment used for wastewater treatment and recovery or recapture devices used as control devices shall not be considered recovery operations equipment.

Residual is defined in § 63.111, except that when the definition in § 63.111 uses the term "Table 9 compounds," the term "organic HAP listed in Table 6 of subpart JJJ" shall apply for purposes of this subpart.

Shutdown means for purposes including, but not limited to, periodic maintenance, replacement of equipment, or repair, the cessation of operation of an affected source, a TPPU(s) within an affected source, a waste management unit or unit operation within an affected source, or equipment required or used to comply with this subpart, or the emptying or degassing of a storage vessel. For purposes of the wastewater provisions of § 63.1330, shutdown does not include the routine rinsing or washing of equipment in batch operation between batches. For purposes of the batch process vent provisions in §§ 63.1321 through 63.1327, the cessation of equipment in batch operation is not a shutdown, unless the equipment undergoes maintenance, is replaced, or is repaired.

Solid state polymerization process means a unit operation which, through the application of heat, furthers the polymerization (*i.e.*, increases the intrinsic viscosity) of polymer chips.

Start-up means the setting into operation of an affected source, a TPPU(s) within an affected source, a waste management unit or unit operation within an affected source, or equipment required or used to comply with this subpart, or a storage vessel after emptying and degassing. For both continuous and batch processes, startup includes initial start-up and operation solely for testing equipment. For both continuous and batch processes, start-up does not include the recharging of equipment in batch operation. For continuous processes, start-up includes transitional conditions due to changes in product for flexible operation units. For batch processes, start-up does not include transitional conditions due to changes in product for flexible operation units.

Steady-state conditions means that all variables (temperatures, pressures, volumes, flow rates, *etc.*) in a process do not vary significantly with time; minor fluctuations about constant mean values may occur.

Storage vessel means a tank or other vessel that is used to store liquids that contain one or more organic HAP. Storage vessels do not include:

(1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;

(2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;

(3) Vessels with capacities smaller than 38 cubic meters;

(4) Vessels and equipment storing and/or handling material that contains no organic HAP and/or organic HAP as impurities only;

(5) Wastewater storage tanks; and(6) Surge control vessels and bottoms receivers.

* * Supplomor

Supplemental combustion air means the air that is added to a vent stream after the vent stream leaves the unit operation. Air that is part of the vent stream as a result of the nature of the unit operation is not considered supplemental combustion air. Air required to operate combustion device burner(s) is not considered supplemental combustion air. Air required to ensure the proper operation of catalytic oxidizers, to include the intermittent addition of air upstream of the catalyst bed to maintain a minimum threshold flow rate through the catalyst bed or to avoid excessive temperatures in the catalyst bed, is not considered to be supplemental combustion air.

Suspension process means a polymerization process where the monomer(s) is in a state of suspension, with the help of suspending agents, in a medium other than water (typically an organic solvent). The resulting polymers are not soluble in the reactor medium.

* * * *

Thermoplastic product process unit (TPPU) means a collection of equipment assembled and connected by hardpiping or ductwork, used to process raw materials and to manufacture a thermoplastic product as its primary product. This collection of equipment includes unit operations; recovery 38106

operations equipment, process vents; equipment identified in § 63.149; storage vessels, as determined in § 63.1310(g); and the equipment that is subject to the equipment leak provisions as specified in § 63.1331. Utilities, lines and equipment not containing process fluids, and other non-process lines, such as heating and cooling systems which do not combine their materials with those in the processes they serve, are not part of the thermoplastic product process unit. A thermoplastic product process unit consists of more than one unit operation.

Total resource effectiveness index value or TRE index value means a measure of the supplemental total resource requirement per unit reduction organic HAP associated with a continuous process vent stream, based on vent stream flow rate, emission rate of organic HAP, net heating value, and corrosion properties (whether or not the continuous process vent stream contains halogenated compounds), as quantified by the equations given under § 63.115.

Vent stream, as used in reference to batch process vents, continuous process vents, and aggregate batch vent streams, means the emissions from one or more process vents.

Waste management unit is defined in § 63.111, except that where the definition in § 63.111 uses the term "chemical manufacturing process unit," the term "TPPU" shall apply for purposes of this subpart.

Wastewater means water that:

(1) Contains either:

(i) An annual average concentration of organic HAP listed on Table 6 of this subpart, except for ethylene glycol, of at least 5 parts per million by weight and has an annual average flow rate of 0.02 liter per minute or greater; or

(ii) An annual average concentration of organic HAP listed on Table 6 of this subpart, except for ethylene glycol, of at least 10,000 parts per million by weight at any flow rate; and

(2) Is discarded from a TPPU that is part of an affected source. Wastewater is process wastewater or maintenance wastewater.

Wastewater stream means a stream that contains wastewater as defined in this section.

32. Section 63.1313 is amended by: a. Revising paragraph (a) introductory text;

b. Revising paragraph (a)(2);

c. Revising paragraph (b);

d. Revising paragraph (c); and

e. Adding paragraph (d).

The revisions and additions read as follows:

§63.1313 Emission standards.

(a) Except as allowed under paragraphs (b) through (d) of this section, the owner or operator of an existing or new affected source shall comply with the provisions in:

(2) Section 63.1315, or §§ 63.1316 through 63.1320, as appropriate, for continuous process vents;

(b) When emissions of different kinds (i.e., emissions from continuous process vents subject to either § 63.1315 or §§ 63.1316 through 63.1320, batch process vents, aggregate batch vent streams, storage vessels, process wastewater, and/or in-process equipment subject to §63.149) are combined, and at least one of the emission streams would be classified as Group 1 in the absence of combination with other emission streams, the owner or operator shall comply with the requirements of either paragraph (b)(1) or (b)(2) of this section, as appropriate. For purposes of this paragraph (b), combined emission streams containing one or more batch process vents and containing one or more continuous process vents subject to §63.1315, §63.1316(b)(1)(i)(A), §63.1316(b)(1)(ii), §63.1316(b)(2)(i), §63.1316(b)(2)(ii), or §63.1316(c)(1), excluding §63.1316(c)(1)(ii), may comply with either paragraph (b)(1) or (b)(2) of this section, as appropriate. For purposes of this paragraph (b), the owner or operator of an affected source with combined emission streams containing one or more batch process vents but not containing one or more continuous process vents subject to §63.1315, §63.1316(b)(1)(i)(A), §63.1316(b)(1)(ii), §63.1316(b)(2)(i), §63.1316(b)(2)(ii), or §63.1316(c)(1), excluding §63.1316(c)(1)(ii), shall comply with paragraph (b)(3) of this section.

(1) Comply with the applicable requirements of this subpart for each kind of emission in the stream as specified in paragraphs (a)(1) through (a)(7) of this section.

(2) Comply with the first set of requirements, identified in paragraphs (b)(2)(i) through (b)(2)(vi) of this section, which applies to any individual emission stream that is included in the combined stream, where either that emission stream would be classified as Group 1 in the absence of combination with other emission streams, or the owner or operator chooses to consider that emission stream to be Group 1 for purposes of this paragraph. Compliance with the first applicable set of requirements identified in paragraphs (b)(2)(i) through (b)(2)(vi) of this section constitutes compliance with all other requirements in paragraphs (b)(2)(i) through (b)(2)(vi) of this section applicable to other types of emissions in the combined stream.

(i) The requirements of this subpart for Group 1 continuous process vents subject to § 63.1315, including applicable monitoring, recordkeeping, and reporting;

(ii) The requirements of § 63.1316(b)(1)(i)(A), § 63.1316(b)(1)(ii), § 63.1316(b)(2)(i), § 63.1316(b)(2)(ii), or § 63.1316(c)(1), excluding § 63.1316(c)(1)(ii), as appropriate, for control of emissions from continuous process vents subject to the control requirements of § 63.1316, including applicable monitoring, recordkeeping, and reporting requirements;

(iii) The requirements of § 63.119(e), as specified in § 63.1314, for control of emissions from Group 1 storage vessels, including applicable monitoring, recordkeeping, and reporting;

(iv) The requirements of §63.139, as specified in §63.1330, for control devices used to control emissions from waste management units, including applicable monitoring, recordkeeping, and reporting;

(v) The requirements of § 63.139, as specified in § 63.1330, for closed vent systems for control of emissions from in-process equipment subject to § 63.149, as specified in § 63.1330, including applicable monitoring, recordkeeping, and reporting; or

(vi) The requirements of this subpart for aggregate batch vent streams subject to § 63.1321(c), including applicable monitoring, recordkeeping, and reporting.

(3) The owner or operator of an affected source with combined emission streams containing one or more batch process vents but not containing one or more continuous process vents subject to (3,1315, 3,31316, 3

(i) The owner or operator of the affected source shall comply with § 63.1321 for the batch process vent(s).

(ii) The owner or operator of the affected source shall comply with either paragraph (b)(1) or (b)(2) of this section, as appropriate, for the remaining emission streams.

(c) Instead of complying with §§ 63.1314, 63.1315, 63.1316 through 63.1320, 63.1321, and 63.1330, the owner or operator of an existing affected source may elect to control any or all of the storage vessels, batch process vents, aggregate batch vent streams, continuous process vents, and wastewater streams and associated waste management units within the affected source to different levels using an emissions averaging compliance approach that uses the procedures specified in §63.1332. The restrictions concerning which emission points may be included in an emissions average, including how many emission points may be included, are specified in §63.1332(a)(1). An owner or operator electing to use emissions averaging shall still comply with the provisions of §§ 63.1314, 63.1315, 63.1316 through 63.1320, 63.1321, and 63.1330 for affected source emission points not included in the emissions average.

(d) A State may decide not to allow the use of the emissions averaging compliance approach specified in paragraph (c) of this section.

33. Section 63.1314 is amended by: a. Revising paragraph (a) introductory text:

b. Revising paragraph (a)(1) through (a)(3);

c. Revising paragraph (a)(5) through (a)(16);

d. Revising paragraph (b) introductory text;

e. Revising paragraph (c); and

f. Adding paragraph (a)(17).

The revisions and additions read as follows:

§63.1314 Storage vessel provisions.

(a) This section applies to each storage vessel that is assigned to an affected source, as determined by § 63.1310(g). Except as provided in paragraphs (b) through (d) of this section, the owner or operator of an affected source shall comply with the requirements of §§ 63.119 through 63.123 and 63.148 for those storage vessels, with the differences noted in paragraphs (a)(1) through (a)(17) of this section for the purposes of this subpart.

(1) When the term "storage vessel" is used in §§ 63.119 through 63.123, the definition of this term in § 63.1312 shall apply for the purposes of this subpart.

(2) When the term "Group 1 storage vessel" is used in §§ 63.119 through 63.123, the definition of this term in § 63.1312 shall apply for the purposes of this subpart.

(3) When the term "Group 2 storage vessel" is used in §§ 63.119 through 63.123, the definition of this term in § 63.1312 shall apply for the purposes of this subpart.

* * * *

(5) When December 31, 1992, is referred to in § 63.119, March 29, 1995 shall apply instead, for the purposes of this subpart. (6) When April 22, 1994, is referred to in § 63.119, June 19, 2000 shall apply instead, for the purposes of this subpart.

(7) Each owner or operator of an affected source shall comply with this paragraph (a)(7) instead of §63.120(d)(1)(ii) for the purposes of this subpart. If the control device used to comply with § 63.119(e) is also used to comply with any of the requirements found in §63.1315, §63.1316, §63.1322, or §63.1330, the performance test required in or accepted by the applicable requirements of §§ 63.1315, 63.1316, 63.1322, and 63.1330 is acceptable for demonstrating compliance with § 63.119(e) for the purposes of this subpart. The owner or operator is not required to prepare a design evaluation for the control device as described in \S 63.120(d)(1)(i), if the performance test meets the criteria specified in paragraphs (a)(7)(i) and (a)(7)(ii) of this section.

(i) The performance test demonstrates that the control device achieves greater than or equal to the required control efficiency specified in § 63.119(e)(1) or § 63.119(e)(2), as applicable; and

(ii) The performance test is submitted as part of the Notification of Compliance Status required by § 63.1335(e)(5).

(8) When the term "range" is used in §§ 63.120(d)(3), 63.120(d)(5), and 63.122(g)(2), the term "level" shall apply instead, for the purposes of this subpart.

(9) For purposes of this subpart, the monitoring plan required by §63.120(d)(2) shall specify for which control devices the owner or operator has selected to follow the procedures for continuous monitoring specified in §63.1334. For those control devices for which the owner or operator has selected to not follow the procedures for continuous monitoring specified in §63.1334, the monitoring plan shall include a description of the parameter or parameters to be monitored to ensure that the control device is being properly operated and maintained, an explanation of the criteria used for selection of that parameter (or parameters), and the frequency with which monitoring will be performed (e.g., when the liquid level in the storage vessel is being raised), as specified in §63.120(d)(2)(i).

(10) For purposes of this subpart, the monitoring plan required by \S 63.122(b) shall be included in the Notification of Compliance Status required by \S 63.1335(e)(5).

(11) When the Notification of Compliance Status requirements contained in \S 63.152(b) are referred to in \S 63.120, 63.122, and 63.123, the Notification of Compliance Status requirements contained in § 63.1335(e)(5) shall apply for the purposes of this subpart.

(12) When the Periodic Report requirements contained in § 63.152(c) are referred to in §§ 63.120 and 63.122, the Periodic Report requirements contained in § 63.1335(e)(6) shall apply for the purposes of this subpart.

(13) When other reports as required in \S 63.152(d) are referred to in \S 63.122, the reporting requirements contained in \S 63.1335(e)(7) shall apply for the purposes of this subpart.

(14) When the Initial Notification requirements contained in \S 63.151(b) are referred to in \S 63.122, the owner or operator of an affected source subject to this subpart need not comply for the purposes of this subpart.

(15) When the determination of equivalence criteria in \S 63.102(b) is referred to in \S 63.121(a), the provisions in \S 63.6(g) shall apply for the purposes of this subpart.

(16) When § 63.119(a) requires compliance according to the schedule provisions in § 63.100, owners and operators of affected sources shall instead comply with the requirements in §§ 63.119(a)(1) through 63.119(a)(4)by the compliance date for storage vessels, which is specified in § 63.1311.

(17) In § 63.120(e)(1), instead of the reference to § 63.11(b), the requirements of § 63.1333(e) shall apply.

(b) Owners or operators of Group 1 storage vessels that are assigned to a new affected source producing SAN using a continuous process shall control emissions to the levels indicated in paragraphs (b)(1) and (b)(2) of this section.

(c) Owners or operators of Group 1 storage vessels that are assigned to a new or existing affected source producing ASA/AMSAN shall control emissions by at least 98 percent relative to uncontrolled emissions.

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34. Section 63.1315 is amended by: a. Revising paragraphs (a)(1) through (a)(4);

b. Revising paragraphs (a)(9) through (a)(17);

c. Revising paragraph (b) introductory text;

d. Revising paragraph (b)(1)(ii);

e. Revising paragraph (c); and

f. Revising paragraph (d).

The revisions read as follows:

§63.1315 Continuous process vents provisions.

(a) * * *

(1) When the term "process vent" is used in §§ 63.113 through 63.118, the

term "continuous process vent," and the definition of this term in § 63.1312 shall apply for the purposes of this subpart.

(2) When the term "Group 1 process vent" is used in §§ 63.113 through 63.118, the term "Group 1 continuous process vent," and the definition of this term in § 63.1312 shall apply for the purposes of this subpart.

(3) When the term "Group 2 process vent" is used in §§ 63.113 through 63.118, the term "Group 2 continuous process vent," and the definition of this term in § 63.1312 shall apply for the purposes of this subpart.

(4) When December 31, 1992 is referred to in § 63.113, apply the date March 29, 1995, for the purposes of this subpart.

* * * *

(9) When §63.114(e) specifies that an owner or operator shall submit the information required in §63.152(b) in order to establish the parameter monitoring range, the owner or operator of an affected source shall comply with the provisions of §63.1334 for establishing the parameter monitoring level and shall comply with §63.1335(e)(5) for purposes of reporting information related to establishment of the parameter monitoring level for purposes of this subpart. Further, the term "level" shall apply when the term "range" is used in §§ 63.114, 63.117, and 63.118.

(10) When reports of process changes are required under § 63.118(g), (h), (i), or (j), paragraphs (a)(10)(i) through (a)(10)(iv) of this section shall apply for the purposes of this subpart. In addition, for the purposes of this subpart, paragraph (a)(10)(v) of this section applies, and § 63.118(k) does not apply to owners or operators of affected sources.

(i) For the purposes of this subpart, whenever a process change, as defined in §63.115(e), is made that causes a Group 2 continuous process vent to become a Group 1 continuous process vent, the owner or operator shall submit a report within 180 days after the process change is made or with the next Periodic Report, whichever is later. A description of the process change shall be submitted with the report of the process change, and the owner or operator of the affected source shall comply with the Group 1 provisions in §§ 63.113 through 63.118 in accordance with §63.1310(i)(2)(ii) or (i)(2)(iii), as applicable.

(ii) Whenever a process change, as defined in § 63.115(e), is made that causes a Group 2 continuous process vent with a TRE greater than 4.0 to become a Group 2 continuous process vent with a TRE less than 4.0, the owner or operator shall submit a report within 180 days after the process change is made or with the next Periodic Report, whichever is later. A description of the process change shall be submitted with the report of the process change, and the owner or operator shall comply with the provisions in § 63.113(d) by the dates specified in § 63.1311.

(iii) Whenever a process change, as defined in § 63.115(e), is made that causes a Group 2 continuous process vent with a flow rate less than 0.005 standard cubic meter per minute to become a Group 2 continuous process vent with a flow rate of 0.005 standard cubic meter per minute or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180 days after the process change is made or with the next Periodic Report, whichever is later. A description of the process change shall be submitted with the report of the process change, and the owner or operator shall comply with the provisions in §63.113(d) by the dates specified in §63.1311.

(iv) Whenever a process change, as defined in § 63.115(e), is made that causes a Group 2 continuous process vent with an organic HAP concentration less than 50 parts per million by volume to become a Group 2 continuous process vent with an organic HAP concentration of 50 parts per million by volume or greater and a TRE index value less than or equal to 4.0, the owner or operator shall submit a report within 180 days after the process change is made or with the next Periodic Report, whichever is later. A description of the process change shall be submitted with the report of the process change, and the owner or operator shall comply with the provisions in §63.113(d) by the dates specified in §63.1311.

(v) The owner or operator is not required to submit a report of a process change if one of the conditions listed in paragraphs (a)(10)(v)(A), (a)(10)(v)(B), (a)(10)(v)(C), or (a)(10)(v)(D) of this section is met.

(A) The process change does not meet the definition of a process change in § 63.115(e);

(B) The vent stream flow rate is recalculated according to § 63.115(e) and the recalculated value is less than 0.005 standard cubic meter per minute;

(C) The organic HAP concentration of the vent stream is recalculated according to § 63.115(e) and the recalculated value is less than 50 parts per million by volume; or (D) The TRE index value is recalculated according to § 63.115(e) and the recalculated value is greater than 4.0, or for the affected sources producing methyl methacrylate butadiene styrene resin the recalculated value is greater than 6.7.

(11) When the provisions of \S 63.116(c)(3) and (c)(4) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A shall conform with the requirements in paragraphs (a)(11)(i) and (a)(11)(i) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(12) When § 63.118, periodic reporting and recordkeeping requirements, refers to § 63.152(f), the recordkeeping requirements in § 63.1335(d) shall apply for purposes of this subpart.

(13) If a batch process vent or aggregate batch vent stream is combined with a continuous process vent, the owner or operator of the affected source containing the combined vent stream shall comply with paragraph (a)(13)(i); with paragraph (a)(13)(ii) and with paragraph (a)(13)(iii) or (iv); or with paragraph (a)(13)(v) of this section, as appropriate.

(i) If a batch process vent or aggregate batch vent stream is combined with a Group 1 continuous process vent prior to the combined vent stream being routed to a control device, the owner or operator of the affected source containing the combined vent stream shall comply with the requirements in paragraph (a)(13)(i)(A) or (B) of this section.

(A) All requirements for a Group 1 process vent stream in §§ 63.113 through 63.118, except as otherwise provided in this section. As specified in §63.1333(a)(1), performance tests shall be conducted at maximum representative operating conditions. For the purpose of conducting a performance test on a combined vent stream, maximum representative operating conditions shall be when batch emission episodes are occurring that result in the highest organic HAP emission rate (for the combined vent stream) that is achievable during one of the periods listed in §63.1333(a)(1)(i) or §63.1333(a)(1)(ii), without causing any

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of the situations described in paragraphs (a)(13)(i)(A)(1) through (3) to occur.

(1) Causing damage to equipment.

(2) Necessitating that the owner or operator make product that does not meet an existing specification for sale to a customer; or

(3) Necessitating that the owner or operator make product in excess of demand.

(B) Comply with the provisions in §63.1313(b)(1), as allowed under §63.1313(b).

(ii) If a batch process vent or aggregate batch vent stream is combined with a continuous process vent prior to the combined vent stream being routed to a recovery device, the TRE index value for the combined vent stream shall be calculated at the exit of the last recovery device. The TRE shall be calculated during periods when one or more batch emission episodes are occurring that result in the highest organic HAP emission rate (in the combined vent stream that is being routed to the recovery device) that is achievable during the 6-month period that begins 3 months before and ends 3 months after the TRE calculation, without causing any of the situations described in paragraphs (a)(13)(ii)(A) through (C) to occur.

(A) Causing damage to equipment.

(B) Necessitating that the owner or operator make product that does not meet an existing specification for sale to a customer; or

(C) Necessitating that the owner or operator make product in excess of demand.

(iii) If the combined vent stream described in paragraph (a)(10)(ii) of this section meets the requirements in paragraphs (a)(13)(iii)(A), (B), and (C) of this section, the combined vent stream shall be subject to the requirements for Group 1 process vents in §§ 63.113 through 63.118, except as otherwise provided in this section, as applicable. Performance tests for the combined vent stream shall be conducted at maximum operating conditions, as described in paragraph (a)(13)(i) of this section.

(A) The TRE index value of the combined stream is less than or equal to 1.0;

(B) The flow rate of the combined vent stream is greater than or equal to 0.005 standard cubic meter per minute; and

(C) The total organic HAP concentration is greater than or equal to 50 parts per million by volume for the combined vent stream.

(iv) If the combined vent stream described in paragraph (a)(10)(ii) of this section meets the requirements in paragraph (a)(13)(iv)(A), (B), or (C) of

this section, the combined vent stream shall be subject to the requirements for Group 2 process vents in §§ 63.113 through 63.118, except as otherwise provided in this section, as applicable.

(A) The TRE index value of the combined vent stream is greater than 1.0

(B) The flow rate of the combined vent stream is less than 0.005 standard cubic meter per minute; or

(C) The total organic HAP concentration is less than 50 parts per million by volume for the combined vent stream.

(v) If a batch process vent or aggregate batch vent stream is combined with a Group 2 continuous process vent, the owner or operator shall comply with the requirements in either paragraph (a)(13)(v)(A) or (a)(13)(v)(B) of this section.

(A) The owner or operator shall comply with the requirements in §§ 63.113 through 63.118 for Group 1 process vents; or

(B) The owner or operator shall comply with § 63.1322(e)(2) for batch process vents and aggregate batch vent streams.

(14) If any gas stream that originates outside of an affected source that is subject to this subpart is normally conducted through the same final recovery device as any continuous process vent stream subject to this subpart, the owner or operator of the affected source with the combined vent stream shall comply with all requirements in §§ 63.113 through 63.118 of subpart G of this part, except as otherwise noted in this section, as applicable.

(i) Instead of measuring the vent stream flow rate at the sampling site specified in §63.115(b)(1), the sampling site for vent stream flow rate shall be prior to the final recovery device and prior to the point at which the gas stream that is not controlled under this subpart is introduced into the combined vent stream.

(ii) Instead of measuring total organic HAP or TOC concentrations at the sampling site specified in §63.115(c)(1), the sampling site for total organic HAP or TOC concentration shall be prior to the final recovery device and prior to the point at which the gas stream that is not controlled under this subpart is introduced into the combined vent stream.

(iii) The efficiency of the final recovery device (determined according to paragraph (a)(14)(iv) of this section) shall be applied to the total organic HAP or TOC concentration measured at the sampling site described in paragraph (a)(14)(ii) of this section to determine

the exit concentration. This exit concentration of total organic HAP or TOC shall then be used to perform the calculations outlined in §63.115(d)(2)(iii) and §63.115(d)(2)(iv), for the combined vent stream exiting the final recovery device.

(iv) The efficiency of the final recovery device is determined by measuring the total organic HAP or TOC concentration using Method 18 or 25A, 40 CFR part 60, appendix A, at the inlet to the final recovery device after the introduction of any gas stream that is not controlled under this subpart, and at the outlet of the final recovery device.

(15) When § 63.115(c)(3)(ii)(B) and (d)(2)(iv) and §63.116(c)(3)(ii)(B) and (c)(4)(ii)(C) refer to Table 2 of subpart F of this part, the owner or operator is only required to consider organic HAP listed on Table 6 of this subpart for purposes of this subpart.

(16) The compliance date for continuous process vents subject to the provisions of this section is specified in §63.1311.

(17) In §63.116(a), instead of the reference to $\S63.11(b)$, the requirements in § 63.1333(e) shall apply. * * *

(b) Owners or operators of existing affected sources producing MBS shall comply with either paragraph (b)(1) or (b)(2) of this section.

(1) * * *

*

(ii) When complying with this paragraph (b) and the term "TRE of 4.0" is used, or related terms indicating a TRE index value of 4.0, referred to in §§ 63.113 through 63.118, are used, the term "TRE of 6.7," shall apply instead, for the purposes of this subpart. The TRE range of 3.7 to 6.7 for continuous process vents at existing affected sources producing MBS corresponds to the TRE range of 1.0 to 4.0 for other continuous process vents, as it applies to monitoring, recordkeeping, and reporting.

(c) Owners or operators of new affected sources producing SAN using a batch process shall comply with the applicable requirements in § 63.1321.

(d) Affected sources producing PET or polystyrene using a continuous process are not subject to the provisions of this section and instead are subject to the emissions control provisions of §63.1316, the monitoring provisions of §63.1317, the testing and compliance demonstration provisions of §63.1318, the recordkeeping provisions of § 63.1319, and the reporting provisions of § 63.1320. However, in some instances, as specified in §63.1316, select continuous process vents present

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at affected sources producing PET or polystyrene using a continuous process are subject to the provisions of this section.

- - 35. Section 63.1316 is amended by:
- a. Revising the section title;
- b. Revising paragraph (a);
- c. Revising paragraph (b);
- introductory text:
- d. Revising paragraph (b)(1) introductory text;
- e. Revising paragraph (b)(1)(i) introductory text;
- f. Revising paragraphs (b)(1)(i)(A) and (b)(1)(i)(B);
- g. Revising paragraphs (b)(1)(ii)
- (b)(1)(iii), and (b)(1)(iv);
- h. Revising paragraph (b)(2) introductory text;
- i. Revising paragraphs (b)(2)(i), (b)(2)(ii), (b)(2)(iii), and (b)(2)(iv);
- j. Revising paragraph (c) introductory
- text:

k. Revising paragraph (c)(1) introductory text;

- l. Revising paragraphs (c)(1)(i) and (c)(1)(ii);
- m. Revising paragraph (c)(1)(iii)(A); n. Revising paragraph (c)(1)(iii)(C);
- and

o. Revising paragraph (c)(3). The revisions read as follows:

§63.1316 PET and polystyrene affected sources-emissions control provisions.

(a) The owner or operator of an affected source producing PET using a continuous process shall comply with paragraph (b) of this section. The owner or operator of an affected source producing polystyrene using a continuous process shall comply with paragraph (c) of this section. As specified in paragraphs (b) and (c) of this section, owners or operators shall comply with §63.1315 for certain continuous process vents and with §63.1321 for all batch process vents. The owner or operator of an affected source producing PET using a batch process or producing polystyrene using a batch process shall comply with §63.1315 for continuous process vents and with §63.1321 for batch process vents, instead of the provisions of §§ 63.1316 through 63.1320.

(b) The owner or operator of an affected source producing PET using a continuous process shall comply with the requirements specified in paragraphs (b)(1) or (b)(2) of this section, as appropriate, and are not required to comply with the requirements specified in 40 CFR part 60, subpart DDD. Compliance can be based on either organic HAP or TOC.

(1) The owner or operator of an affected source producing PET using a continuous dimethyl terephthalate process shall comply with paragraphs (b)(1)(i) through (b)(1)(iv) of this section.

(i) The owner or operator of an existing affected source with organic HAP emissions greater than 0.12 kg organic HAP per Mg of product from continuous process vents in the collection of material recovery sections (i.e., methanol recovery) within the affected source shall comply with either paragraph(b)(1)(i)(A), (b)(1)(i)(B), or(b)(1)(i)(C) of this section. Emissions from continuous process vents in the collection of material recovery sections within the affected source shall be determined by the procedures specified in §63.1318(b). The owner or operator of a new affected source shall comply with either paragraph (b)(1)(i)(A), (b)(1)(i)(B), or (b)(1)(i)(C) of this section.

(A) Organic HAP emissions from all continuous process vents in each individual material recovery section shall, as a whole, be no greater than 0.018 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of material recovery sections within the affected source shall, as a whole, be no greater than 0.018 kg organic HAP per Mg product from all associated TPPU(s);

(B) As specified in \S 63.1318(d), the owner or operator shall maintain the daily average outlet gas stream temperature from each final condenser in a material recovery section at a temperature of $+3^{\circ}C(+37^{\circ}F)$ or less (*i.e.*, colder);

(ii) Limit organic HAP emissions from continuous process vents in the collection of polymerization reaction sections within the affected source by complying with either paragraph (b)(1)(ii)(A) or (b)(1)(ii)(B) of this section.

(A) Organic HAP emissions from all continuous process vents in each individual polymerization reaction section (including emissions from any equipment used to further recover ethylene glycol, but excluding emissions from process contact cooling towers) shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of polymerization reaction sections within the affected source shall, as a whole, be no greater than 0.02 kg organic HAP per Mg product from all associated TPPU(s); or

(B) Comply with paragraph (b)(1)(v) of this section.

(iii) Continuous process vents not included in a material recovery section, as specified in paragraph (b)(1)(i) of this section, and not included in a polymerization reaction section, as specified in paragraph (b)(1)(ii) of this section, shall comply with §63.1315.

(iv) Batch process vents shall comply with § 63.1321.

* *

> (2) The owner or operator of an affected source producing PET using a continuous terephthalic acid process shall comply with paragraphs (b)(2)(i) through (b)(2)(iv) of this section.

(i) Limit organic HAP emissions from continuous process vents in the collection of raw material preparation sections within the affected source by complying with either paragraph (b)(2)(i)(A) or (b)(2)(i)(B) of this section.

(A) Organic HAP emissions from all continuous process vents associated with the esterification vessels in each individual raw materials preparation section shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents associated with the esterification vessels in the collection of raw material preparation sections within the affected source shall, as a whole, be no greater than 0.04 kg organic HAP per Mg of product from all associated TPPU(s). Other continuous process vents (i.e., those not associated with the esterification vessels) in the collection of raw materials preparation sections within the affected source shall comply with §63.1315; or

(B) Comply with paragraph (b)(2)(v) of this section.

(ii) Limit organic HAP emissions from continuous process vents in the collection of polymerization reaction sections within the affected source by complying with either paragraph (b)(2)(ii)(A) or (b)(2)(ii)(B) of this section.

(A) Organic HAP emissions from all continuous process vents in each individual polymerization reaction section (including emissions from any equipment used to further recover ethylene glycol, but excluding emissions from process contact cooling towers) shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of polymerization reaction sections within the affected source shall, as a whole, be no greater than 0.02 kg organic HAP per Mg of product from all associated TPPU(s); or

(B) Comply with paragraph (b)(2)(v) of this section.

(iii) Continuous process vents not included in a raw materials preparation section, as specified in paragraphs (b)(2)(i) of this section, and not included in a polymerization reaction section, as specified in paragraph (b)(2)(ii) of this section, shall comply with §63.1315.

(iv) Batch process vents shall comply with § 63.1321.

* * * *

(c) The owner or operator of an affected source producing polystyrene resin using a continuous process shall comply with the requirements specified in paragraphs (c)(1) through (c)(3) of this section, as appropriate, instead of the requirements specified in 40 CFR part 60, subpart DDD. Compliance can be based on either organic HAP or TOC.

(1) Limit organic HAP emissions from continuous process vents in the collection of material recovery sections within the affected source by complying with either paragraph (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this section.

(i) Organic HAP emissions from all continuous process vents in each individual material recovery section shall, as a whole, be no greater than 0.0036 kg organic HAP per Mg of product from the associated TPPU(s); or alternatively, organic HAP emissions from all continuous process vents in the collection of material recovery sections within the affected source shall, as a whole, be no greater than 0.0036 kg organic HAP per Mg of product from all associated TPPU(s);

(ii) As specified in § 63.1318(d), the owner or operator shall maintain the daily average outlet gas stream temperature from each final condenser in a material recovery section at a temperature of -25°C (-13°F) or less (*i.e.*, colder); or

(iii) * *

(A) Reduce the emissions in a combustion device to achieve 98 weight percent reduction or to achieve a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent. If an owner or operator elects to comply with the 20 ppmv standard, the concentration shall include a correction to 3 percent oxygen only when supplemental combustion air is used to combust the emissions;

(C) Combust the emissions in a flare that complies with the requirements of § 63.1333(e).

(3) Batch process vents shall comply with § 63.1321.

36. Section 63.1317 is revised (including the section title) to read as follows:

§63.1317 PET and polystyrene affected sources—monitoring provisions.

Continuous process vents using a control or recovery device to comply with § 63.1316 shall comply with the applicable monitoring provisions specified for continuous process vents in § 63.1315(a), except that references to group determinations (*i.e.*, total resource effectiveness) do not apply and owners or operators are not required to comply with § 63.113.

37. Section 63.1318 is amended by:

a. Revising the section title;

b. Revising paragraph (a);

c. Revising paragraph (b) introductory text;

d. Revising paragraph (b)(1)(i) introductory text;

e. Revising paragraph (c); and

f. Revising paragraph (d).

The revisions read as follows:

§63.1318 PET and polystyrene affected sources—testing and compliance demonstration provisions.

(a) Except as specified in paragraphs (b) through (d) of this section, continuous process vents using a control or recovery device to comply with § 63.1316 shall comply with the applicable testing and compliance provisions for continuous process vents specified in § 63.1315, except that, for the purposes of this paragraph (a), references to group determinations (*i.e.*, total resource effectiveness) do not apply and owners or operators are not required to comply with § 63.113.

(b) PET Affected Sources Using a Dimethyl Terephthalate Process— Applicability Determination Procedure. Owners or operators shall calculate organic HAP emissions from the collection of material recovery sections at an existing affected source producing PET using a continuous dimethyl terephthalate process to determine whether \S 63.1316(b)(1)(i) is applicable using the procedures specified in either paragraph (b)(1) or (b)(2) of this section. (1) * * *

(i) The mass emission rate for each continuous process vent, E_i, shall be determined according to the procedures specified in $\S63.116(c)(4)$. The sampling site for determining whether §63.1316(b)(1)(i) is applicable shall be at the outlet of the last recovery or control device. When the provisions of §63.116(c)(4) specify that Method 18, 40 CFR part 60, appendix A shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A shall comply with paragraphs (b)(1)(i)(A) and (b)(1)(i)(B) of this section.

* * * *

(c) Compliance with Mass Emissions per Mass Product Standards. Owners or operators complying with § 63.1316(b)(1)(i)(A), (b)(1)(ii), (b)(2)(i), (b)(2)(ii), and (c)(1)(i) shall demonstrate compliance with the mass emissions per mass product requirements using the procedures specified in paragraph (b)(1) of this section.

(d) Compliance with Temperature Limits for Final Condensers. Owners or operators complying with \S 63.1316(b)(1)(i)(B) or \S 63.1316(c)(1)(ii) shall demonstrate continuous compliance based on an average exit temperature determined for each operating day. Calculation of the daily average exit temperature shall follow the provisions of \S 63.1335(d)(3). The provisions of \S 63.1334(f) and (g) shall apply for the purposes of determining whether or not an owner or operator is to be deemed out of compliance for a given operating day.

38. Section 63.1319 is amended by:

a. Revising the section title;

b. Revising paragraph (a);

c. Revising paragraph (b) introductory text;

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

e. Revising paragraph (c).

The revisions read as follows:

§ 63.1319 PET and polystyrene affected sources—recordkeeping provisions.

(a) Except as specified in paragraphs (b) and (c) of this section, owners or operators using a control or recovery device to comply with § 63.1316 shall comply with the applicable recordkeeping provisions specified in § 63.1315, except that, for the purposes of this paragraph (a), references to group determinations (*i.e.*, total resource effectiveness) do not apply, and owners or operators are not required to comply with § 63.113.

(b) Records Demonstrating Compliance With the Applicability Determination Procedure for PET Affected Sources Using a Dimethyl Terephthalate Process. Owners or operators complying with § 63.1316(b)(1)(i) by demonstrating that mass emissions per mass product are less than or equal to the level specified in § 63.1316(b)(1)(i) (*i.e.*, 0.12 kg organic HAP per Mg of product) shall keep the following records.

(2) Records of any change in process operation that increases the mass emissions per mass product.

(c) Records Demonstrating Compliance with Temperature Limits for Final Condensers. Owners or operators of continuous process vents complying with § 63.1316(b)(1)(i)(B) or § 63.1316(c)(1)(ii) shall keep records of the daily averages required by \S 63.1318, per the recordkeeping provisions specified in \S 63.1335(d).

39. Section 63.1320 is revised to read as follows:

§63.1320 PET and polystyrene affected sources—reporting provisions.

(a) Except as specified in paragraph (b) of this section, owners and operators using a control or recovery device to comply with § 63.1316 shall comply with the applicable reporting provisions specified in § 63.1315, except that, for the purposes of this paragraph (a), references to group determinations (*i.e.*, total resource effectiveness) do not apply, and owners or operators are not required to comply with § 63.113.

(b) Reporting for PET Affected Sources Using a Dimethyl Terephthalate Process. Owners or operators complying with § 63.1316 by demonstrating that mass emissions per mass product are less than or equal to the level specified in § 63.1316(b)(1)(i) (*i.e.*, 0.12 kg organic HAP per Mg of product) shall comply with paragraphs (b)(1) through (b)(3) of this section.

(1) Include the information specified in § 63.1319(b)(2) in each Periodic Report, required by § 63.1335(e)(6), as appropriate.

(2) Include the information specified in § 63.1319(b)(1) in the Notification of Compliance Status, required by § 63.1335(e)(5).

(3) Whenever a process change, as defined in §63.115(e), is made that causes emissions from continuous process vents in the collection of material recovery sections (i.e., methanol recovery) within the affected source to be greater than 0.12 kg organic HAP per Mg of product, the owner or operator shall submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator. This report may be included in the next Periodic Report as specified in § 63.1335(e)(6)(iii)(D)(2). The report shall include the information specified in §63.1319(b)(1) and a description of the process change.

40. Section 63.1321 is amended by revising paragraphs (a) and (c), to read as follows:

§63.1321 Batch process vents provisions.

(a) *Batch process vents.* Except as specified in paragraphs (b) through (d) of this section, owners and operators of new and existing affected sources with batch process vents shall comply with the requirements in \$ 63.1322 through 63.1327. The batch process vent group status shall be determined in accordance with \$ 63.1323. Owners or

operators of batch process vents classified as Group 1 shall comply with the reference control technology requirements for Group 1 batch process vents in §63.1322, the monitoring requirements in §63.1324, the performance test methods and procedures to determine compliance in §63.1325, the recordkeeping requirements in §63.1326, and the reporting requirements in §63.1327. Owners or operators of all Group 2 batch process vents shall comply with the applicable reference control technology requirements in §63.1322, the applicable recordkeeping requirements in §63.1326, and the applicable reporting requirements in §63.1327.

* * *

(c) Aggregate batch vent streams. Aggregate batch vent streams, as defined in § 63.1312, are subject to the control requirements specified in § 63.1322(b), as well as the monitoring, testing, recordkeeping, and reporting requirements specified in §§ 63.1324 through 63.1327 for aggregate batch vent streams.

41. Section 63.1322 is amended by: a. Revising paragraph (a) introductory text;

b. Revising paragraph (a)(1)(i);

c. Revising paragraph (b) introductory text;

d. Revising paragraph (b)(1)(i);

e. Revising paragraph (b)(2); f. Revising paragraphs (c)(1) and

(c)(2);

g. Revising paragraph (e);

h. Revising paragraph (f);

i. Revising paragraph (g); and

j. Adding paragraph (h).

The revisions and additions read as follows:

§63.1322 Batch process vents—reference control technology.

(a) *Batch process vents.* The owner or operator of a Group 1 batch process vent, as determined using the procedures in § 63.1323, shall comply with the requirements of either paragraph (a)(1) or (a)(2) of this section, except as provided for in paragraph (a)(3) of this section. Compliance may be based on either organic HAP or TOC. (1) * * *

(i) The owner or operator shall comply with the requirements of § 63.1333(e) for the flare.

(b) Aggregate batch vent streams. The owner or operator of an aggregate batch vent stream that contains one or more Group 1 batch process vents shall comply with the requirements of either paragraph (b)(1) or (b)(2) of this section, except as provided for in paragraph (b)(3) of this section. Compliance may be based on either organic HAP or TOC. (1) * * *

(i) The owner or operator shall comply with the requirements of \S 63.1333(e) for the flare.

* * *

(2) For each aggregate batch vent stream, reduce organic HAP emissions by 90 weight percent or to a concentration of 20 parts per million by volume, whichever is less stringent, on a continuous basis using a control device. For purposes of complying with the 20 parts per million by volume outlet concentration standard, the outlet concentration shall be calculated on a dry basis. When a combustion device is used for purposes of complying with the 20 parts per million by volume outlet concentration standard, the concentration shall be corrected to 3 percent oxygen if supplemental combustion air is used to combust the emissions. If supplemental combustion air is not used, a correction to 3 percent oxygen is not required. * *

(c) * * *

(1) If a combustion device is used to comply with paragraph (a)(2), (a)(3), (b)(2), or (b)(3) of this section for a halogenated batch process vent, halogenated aggregate batch vent stream, or halogenated continuous process vent, said emissions exiting the combustion device shall be ducted to a halogen reduction device that reduces overall emissions of hydrogen halides and halogens by at least 99 percent before discharge to the atmosphere.

(2) A halogen reduction device may be used to reduce the halogen atom mass emission rate of said emissions to less than 3,750 kg/yr for batch process vents or aggregate batch vent streams and to less than 0.45 kilograms per hour for continuous process vents prior to venting to any combustion control device, and thus make the batch process vent, aggregate batch vent stream, or continuous process vent nonhalogenated. The nonhalogenated batch process vent, aggregate batch vent stream, or continuous process vent shall then comply with the requirements of either paragraph (a) or (b) of this section, as appropriate.

* * * *

(e) Combination of batch process vents or aggregate batch vent streams with continuous process vents. If a batch process vent or aggregate batch vent stream is combined with a continuous process vent, the owner or operator shall determine whether the combined vent stream is subject to the provisions of \S 63.1321 through 63.1327 according to paragraphs (e)(1) and (e)(2) of this section.

(1) A batch process vent or aggregate batch vent stream combined with a continuous process vent is not subject to the provisions of §§ 63.1321 through 63.1327, if the requirements in paragraph (e)(1)(i) and in either paragraph (e)(1)(ii) or (e)(1)(iii) are met.

(i) The only emissions to the atmosphere from the batch process vent or aggregate batch vent stream prior to being combined with the continuous process vent are from equipment subject to § 63.1331.

(ii) The batch process vent or aggregate batch vent stream is combined with a Group 1 continuous process vent prior to the combined vent stream being routed to a control device. In this paragraph (e)(1)(ii), the definition of control device as it relates to continuous process vents shall be used. Furthermore, the combined vent stream discussed in this paragraph (e)(1)(ii) shall be subject to § 63.1315(a)(13)(i).

(iii) The batch process vent or aggregate batch vent stream is combined with a continuous process vent prior to being routed to a recovery device. In this paragraph (e)(1)(iii), the definition of recovery device as it relates to continuous process vents shall be used. Furthermore, the combined vent stream discussed in this paragraph (e)(1)(iii) shall be subject to § 63.1315(a)(13)(ii).

(2) If the batch process vent or aggregate batch vent stream is combined with a Group 2 continuous process vent, the group status of the batch process vent shall be determined prior to its combination with the Group 2 continuous process vent, in accordance with § 63.1323, and the combined vent stream shall be subject to the requirements for aggregate batch vent streams in §§ 63.1321 through 63.1327.

(f) Group 2 batch process vents with annual emissions greater than or equal to the level specified in § 63.1323(d). The owner or operator of a Group 2 batch process vent with annual emissions greater than or equal to the level specified in § 63.1323(d) shall comply with the provisions of paragraph (f)(1), (f)(2), or (h) of this section.

(1) The owner or operator of an affected source shall comply with the requirements in paragraphs (f)(1)(i) through (f)(1)(iv) of this section.

(i) The owner or operator shall establish a batch mass input limitation that ensures the Group 2 batch process vent does not become a Group 1 batch process vent. (ii) Over the course of the affected source's "year," as reported in the Notification of Compliance Status in accordance with § 63.1335(e)(5)(iv), the owner or operator shall not charge a mass of HAP or material to the batch unit operation that is greater than the level established as the batch mass input limitation.

(iii) The owner or operator shall comply with the recordkeeping requirements in § 63.1326(d)(2), and the reporting requirements in § 63.1327(a)(3), (b), and (c).

(iv) The owner or operator shall comply with § 63.1323(i) when process changes are made.

(2) Comply with the requirements of this subpart for Group 1 batch process vents.

(g) Group 2 batch process vents with annual emissions less than the level specified in § 63.1323(d). The owner or operator of a Group 2 batch process vent with annual emissions less than the level specified in § 63.1323(d) shall comply with paragraphs (g)(1), (g)(2), (g)(3), or (g)(4) of this section.

(1) The owner or operator of the affected source shall comply with the requirements in paragraphs (g)(1)(i) through (g)(1)(iv) of this section.

(i) The owner or operator shall establish a batch mass input limitation that ensures emissions do not exceed the level specified in § 63.1323(d).

(ii) Over the course of the affected source's "year," as reported in the Notification of Compliance Status in accordance with § 63.1335(e)(5)(iv), the owner or operator shall not charge a mass of HAP or material to the batch unit operation that is greater than the level established as the batch mass input limitation.

(iii) The owner or operator shall comply with the recordkeeping requirements in $\S 63.1326(d)(1)$, and the reporting requirements in $\S 63.1327(a)(2)$, (b), and (c).

(iv) The owner or operator of the affected source shall comply with § 63.1323(i) when process changes are made.

(2) Comply with the requirements of paragraph (f)(1) of this section;

(3) Comply with the requirements of paragraph (f)(2) of this section; or (4) Comply with the requirements of

(4) Comply with the requirements of paragraph (h) of this section.

(h) Owners or operators of Group 2 batch process vents are not required to establish a batch mass input limitation if the batch process vent is Group 2 at the conditions specified in paragraphs (h)(1) and (h)(2) of this section and if the owner or operator complies with the recordkeeping provisions in \S 63.1326(a)(1) through (3), 63.1326(a)(9), and 63.1326(a)(4) through (6) as applicable, and the reporting requirements in § 63.1327(a)(5), (a)(6), and (b).

(1) Emissions for the single highest-HAP recipe (considering all products that are produced in the batch unit operation) are used in the group determination; and

(2) The group determination assumes that the batch unit operation is operating at the maximum design capacity of the TPPU for 12 months.

42. Section 63.1323 is amended by:

a. Revising paragraph (a)(1);

b. Revising paragraph (b) introductory text;

c. Revising paragraphs (b)(1) and (b)(2);

d. Revising paragraphs (b)(4)(i)(A) through (b)(4)(i)(C);

- e. Revising paragraph (b)(4)(ii)(B)(1);
- f. Revising paragraph (b)(5)
- introductory text;

g. Revising paragraph (b)(5)(ii);

h. Revising paragraph (b)(5)(iii) introductory text;

i. Revising paragraph (b)(5)(iv);

j. Revising paragraph (b)(5)(v)

introductory text;

k. Revising paragraph (b)(5)(v)(A);

l. Revising paragraph (b)(6);

m. Revising paragraph (d);

n. Revising paragraph (e) introductory text:

o. Revising paragraph (e)(1)

introductory text;

p. Revising paragraph (e)(1)(i); q. Revising paragraph (e)(1)(iii);

r. Revising paragraphs (e)(1)(11),

(e)(3);

s. Revising paragraph (g);

t. Revising paragraph (h)(1)(iii);

u. Revising paragraph (h)(2);

v. Revising paragraph (i);

w. Revising paragraph (j) introductory text;

x. Revising paragraph (j)(3); and

y. Adding paragraph (b)(9). The revisions and additions read as

follows:

§63.1323 Batch process vents—methods and procedures for group determination.

(a) * * *

(1) The procedures specified in paragraphs (b) through (g) of this section shall be followed to determine the group status of each batch process vent. This determination shall be made in accordance with either paragraph (a)(1)(i) or (a)(1)(ii) of this section.

(i) An owner or operator may choose to determine the group status of a batch process vent based on the expected mix of products. For each product, emission characteristics of the single highest-HAP recipe, as defined in paragraph (a)(1)(iii) of this section, for that product shall be used in the procedures in paragraphs (b) through (i) of this section.

(ii) An owner or operator may choose to determine the group status of a batch process vent based on annualized production of the single highest-HAP recipe, as defined in paragraph (a)(1)(iii) of this section, considering all products produced or processed in the batch unit operation. The annualized production of the highest-HAP recipe shall be based exclusively on the production of the single highest-HAP recipe of all products produced or processed in the batch unit operation for a 12 month period. The production level used may be the actual production rate. It is not necessary to assume a maximum production rate (i.e., 8,760 hours per year at maximum design production).

(iii) The single highest-HAP recipe for a product means the recipe of the product with the highest total mass of HAP charged to the reactor during the production of a single batch of product.

(b) Determination of annual emissions. The owner or operator shall calculate annual uncontrolled TOC or organic HAP emissions for each batch process vent using the methods described in paragraphs (b)(1) through (b)(8) of this section. To estimate emissions from a batch emissions episode, owners or operators may use either the emissions estimation equations in paragraphs (b)(1) through (b)(4) of this section, or direct measurement as specified in paragraph (b)(5) of this section. Engineering assessment may be used to estimate emissions from a batch emission episode only under the conditions described in paragraph (b)(6) of this section. In using the emissions estimation equations in paragraphs (b)(1) through (b)(4) of this section, individual component vapor pressure and molecular weight may be obtained from standard references. Methods to determine individual HAP partial pressures in multicomponent systems are described in paragraph (b)(9) of this

$$E_{\text{episode}} = \frac{(V_{\text{ves}})(P)(MW_{\text{wavg}})}{RT} (1 - 0.37^{\text{m}}) \qquad [\text{Eq. 2}]$$

section. Other variables in the emissions estimation equations may be obtained through direct measurement, as defined in paragraph (b)(5) of this section, through engineering assessment, as defined in paragraph (b)(6)(ii) of this section, by process knowledge, or by any other appropriate means. Assumptions used in determining these variables must be documented. Once emissions for the batch emission episode have been determined using either the emissions estimation equations, direct measurement, or engineering assessment, emissions from a batch cycle shall be calculated in accordance with paragraph (b)(7) of this section, and annual emissions from the batch process vent shall be calculated in accordance with paragraph (b)(8) of this section.

(1) TOC or organic HAP emissions from the purging of an empty vessel shall be calculated using Equation 2 of this subpart. Equation 2 of this subpart does not take into account evaporation of any residual liquid in the vessel.

m = Number of volumes of purge gas

(2) TOC or organic HAP emissions

from the purging of a filled vessel shall

be calculated using Equation 3 of this

Where:

- E_{episode} = Emissions, kg/episode.
- V_{ves} = Volume of vessel, m³.
- P = TOC or total organic HAP partial pressure, kPa.
- MŴ_{wavg} = Weighted average molecular weight of TOC or organic

HAP in vapor, determined in accordance with paragraph

- (b)(4)(i)(D) of this section, kg/kmol.
- R = Ideal gas constant, 8.314 m³·kPa/ kmol·K.
- T = Temperature of vessel vapor space, K.

$$E_{\text{episode}} = \frac{(y)(V_{dr})(P^2)(MW_{wavg})}{RT\left(P - \sum_{i=1}^{n} P_i x_i\right)} (T_m) \qquad [Eq. 3]$$

Where:

- $E_{episode} = Emissions, kg/episode.$
- y = Saturated mole fraction of all TOC or organic HAP in vapor phase.
- $V_{dr} = Volumetric gas displacement rate, m³/min.$
- P = Pressure in vessel vapor space, kPa.
- MW_{wavg} = Weighted average molecular weight of TOC or organic HAP in vapor, determined in accordance with paragraph (b)(4)(i)(D) of this section, kg/kmol.
- R = Ideal gas constant, 8.314 m³·kPa/ kmol·K.
- T = Temperature of vessel vapor space, K.
- P_i = Vapor pressure of TOC or individual organic HAP i, kPa. x_i = Mole fraction of TOC or organic
- HAP i in the liquid.
- n = Number of organic HAP in stream.
 Note: Summation not applicable if TOC emissions are being estimated.
 T_m = Minutes/episode.

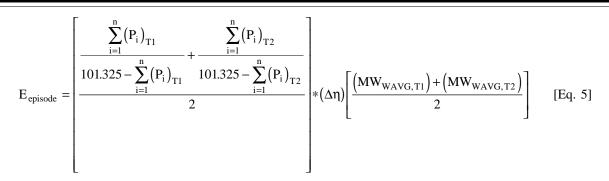
(4) * * *

used.

subpart.

(i) * * *

(A) Emissions caused by heating of a vessel shall be calculated using Equation 5 of this subpart. The assumptions made for this calculation are atmospheric pressure of 760 millimeters of mercury (mm Hg) and the displaced gas is always saturated with volatile organic compounds (VOC) vapor in equilibrium with the liquid mixture.



Where:

- E_{episode} = Emissions, kg/episode. (P_i)_{T1}, (P_i)_{T2} = Partial pressure (kPa) of TOC or each organic HAP i in the
 - vessel headspace at initial (T1) and final (T2) temperature. n = Number of organic HAP in stream. Note: Summation not applicable if
 - TOC emissions are being estimated. $\Delta \eta$ = Number of kilogram-moles (kgmoles) of gas displaced, determined in accordance with paragraph (b)(4)(i)(B) of this section.

101.325 = Constant, kPa. $(\text{MW}_{WAVG,T1}), (\text{MW}_{WAVG,T2}) =$ Weighted average molecular weight of TOC or total organic HAP in the displaced gas stream, determined in accordance with paragraph

(b)(4)(i)(D) of this section, kg/kmol. (B) The moles of gas displaced, $\Delta\eta$, is calculated using Equation 6 of this subpart.

$$\Delta \eta = \frac{V_{fs}}{R} \left[\left(\frac{Pa_1}{T_1} \right) - \left(\frac{Pa_2}{T_2} \right) \right] \qquad [Eq. 6]$$

Where:

- $\Delta \eta$ = Number of kg-moles of gas displaced.
- V_{fs} = Volume of free space in the vessel, m³.
- R = Ideal gas constant, 8.314 m³·kPa/ kmol·K.
- $Pa_1 = Initial noncondensible gas$
- partial pressure in the vessel, kPa. $Pa_2^{-} = Final noncondensible gas partial$
- pressure, kPa. T_1 = Initial temperature of vessel, K.
- T_2 = Final temperature of vessel, K.

(C) The initial and final pressure of the noncondensible gas in the vessel shall be calculated using Equation 7 of this subpart.

Pa = 101.325 -
$$\sum_{i=1}^{n} (P_i)_T$$
 [Eq. 7]

Where:

Pa = Initial or final partial pressure of noncondensible gas in the vessel headspace, kPa.

101.325 = Constant, kPa.

- $(P_i)T = Partial pressure of TOC or each$ organic HĀP i in the vessel headspace, kPa, at the initial or final temperature (T1 or T2). n = Number of organic HAP in stream.
 - Note: Summation not applicable if TOC emissions are being estimated.

*

- * * *
- (ii) * * * (B) * * *

(1) If the final temperature of the heatup is at or lower than 5 K below the boiling point, the final temperature for the last increment shall be the final temperature for the heatup, even if the last increment is less than 5 K. * * *

(5) The owner or operator may estimate annual emissions for a batch emission episode by direct measurement. If direct measurement is used, the owner or operator shall either perform a test for the duration of a representative batch emission episode or perform a test during only those periods of the batch emission episode for which the emission rate for the entire episode can be determined or for which the emissions are greater than the average emission rate of the batch emission episode. The owner or operator choosing either of these options shall develop an emission profile for the entire batch emission episode, based on either process

$$E_{episode} = K \left[\sum_{j=1}^{n} (C_{j}) (M_{j}) \right] AFR (T_{h}) \qquad [Eq. 9]$$

knowledge or test data collected, to demonstrate that test periods are representative. Examples of information that could constitute process knowledge include calculations based on material balances and process stoichiometry. Previous test results may be used provided the results are still relevant to the current batch process vent conditions. Performance tests shall follow the procedures specified in paragraphs (b)(5)(i) through (b)(5)(iii) of this section. The procedures in either paragraph (b)(5)(iv) or (b)(5)(v) of this section shall be used to calculate the emissions per batch emission episode.

* * *

(ii) Annual average batch vent flow rate shall be determined as specified in paragraph (e) of this section.

(iii) Method 18 or Method 25A, 40 CFR part 60, appendix A, shall be used to determine the concentration of TOC or organic HAP, as appropriate. Alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of appendix A of this part may be used. The use of Method 25A, 40 CFR part 60, appendix A shall conform with the requirements in paragraphs (b)(5)(iii)(A) and (b)(5)(iii)(B) of this section.

(iv) If an integrated sample is taken over the entire batch emission episode to determine the average batch vent concentration of TOC or total organic HAP, emissions shall be calculated using Equation 9 of this subpart.

Where:

- E_{episode} = Emissions, kg/episode.
- K = Constant, $2.494 \times 10^{-6} (ppmv)^{-1}$ (gm-mole/scm) (kg/gm) (min/hr), where standard temperature is 20

°C.

- C_i = Average batch vent concentration of TOC or sample organic HAP component j of the gas stream, dry basis, ppmv.
- M_i = Molecular weight of TOC or sample organic HAP component j of the gas stream, gm/gm-mole.
- AFR = Average batch vent flow rate of gas stream, dry basis, scmm.

- $T_h = Hours/episode$
- n = Number of organic HAP in stream. Note: Summation not applicable if TOC emissions are being estimated using a TOC concentration measured using Method 25A, 40 CFR part 60, appendix A.

(v) If grab samples are taken to determine the average batch vent concentration of TOC or total organic HAP, emissions shall be calculated according to paragraphs (b)(5)(v)(A) and (b)(5)(v)(B) of this section.

(A) For each measurement point, the emission rate shall be calculated using Equation 10 of this subpart.

$$E_{\text{point}} = K \left[\sum_{j=1}^{n} C_{j} M_{j} \right] FR \qquad [Eq. 10]$$

Where:

- E_{point} = Emission rate for individual measurement point, kg/hr.
- K = Constant, 2.494×10^{-6} (ppmv)⁻¹ (gm-mole/scm) (kg/gm) (min/hr), where standard temperature is 20 °C.
- C_j = Concentration of TOC or sample organic HAP component j of the gas stream, dry basis, ppmv.
- M_j = Molecular weight of TOC or sample organic HAP component j of the gas stream, gm/gm-mole.
- FR = Flow rate of gas stream for the measurement point, dry basis, scmm.
- n = Number of organic HAP in stream. Note: Summation not applicable if TOC emissions are being estimated using a TOC concentration measured using Method 25A, 40 CFR part 60, appendix A.

(6) Engineering assessment may be used to estimate emissions from a batch emission episode, if the criteria in paragraph (b)(6)(i) are met. Data or other information used to demonstrate that the criteria in paragraph (b)(6)(i) of this section have been met shall be reported as specified in paragraph (b)(6)(ii) of this section. Paragraph (b)(6)(ii) of this section defines engineering assessment, for the purposes of estimating emissions from a batch emissions episode. All data, assumptions, and procedures used in an engineering assessment shall be documented.

(i) If the criteria specified in paragraph (b)(6)(i)(A), (B), or (C) are met for a specific batch emission episode, the owner or operator may use engineering assessment, as described in paragraph (b)(6)(ii) of this section, to estimate emissions from that batch emission episode, and the owner or operator is not required to use the emissions estimation equations described in paragraphs (b)(1) through (b)(4) of this section to estimate emissions from that batch emission episode.

(A) Previous test data, where the measurement of organic HAP or TOC emissions was an outcome of the test, show a greater than 20 percent discrepancy between the test value and the value estimated using the applicable equations in paragraphs (b)(1) through (b)(4) of this section. Paragraphs (b)(6)(i)(A)(1) and (2) of this section describe test data that will be acceptable under this paragraph (b)(6)(i)(A).

(1) Test data for the batch emission episode obtained during production of the product for which the demonstration is being made.

(2) Test data obtained for a batch emission episode from another process train, where the test data were obtained during production of the product for which the demonstration is being made. Test data from another process train may be used only if the owner or operator can demonstrate that the data are representative of the batch emission episode for which the demonstration is being made, taking into account the nature, size, operating conditions, production rate, and sequence of process steps (e.g., reaction, distillation, etc.) of the equipment in the other process train.

(B) Previous test data obtained during the production of the product for which the demonstration is being made, for the batch emission episode with the highest organic HAP emissions on a mass basis, show a greater than 20 percent discrepancy between the test value and the value estimated using the applicable equations in paragraphs (b)(1) through (b)(4) of this section. If the criteria in this paragraph (b)(6)(i)(B) are met, then engineering assessment may be used for all batch emission episodes associated with that batch cycle for the batch unit operation.

(C) The owner or operator has requested and been granted approval to use engineering assessment to estimate emissions from a batch emissions episode. The request to use engineering assessment to estimate emissions from a batch emissions episode shall contain sufficient information and data to demonstrate to the Administrator that engineering assessment is an accurate means of estimating emissions for that particular batch emissions episode. The request to use engineering assessment to estimate emissions for a batch emissions episode shall be submitted in the Precompliance Report required under §63.506(e)(3).

(ii) Engineering assessment includes, but is not limited to, the following: (A) Previous test results, provided the tests are representative of current operating practices;

(B) Bench-scale or pilot-scale test data obtained under conditions representative of current process operating conditions;

(C) Flow rate, TOC emission rate, or organic HAP emission rate specified or implied within a permit limit applicable to the batch process vent; and

(D) Design analysis based on accepted chemical engineering principles, measurable process parameters, or physical or chemical laws or properties. Examples of analytical methods include, but are not limited to:

(1) Use of material balances;

(2) Estimation of flow rate based on physical equipment design such as pump or blower capacities;

(3) Estimation of TOC or organic HAP concentrations based on saturation conditions; and

(4) Estimation of TOC or organic HAP concentrations based on grab samples of the liquid or vapor.

(iii) Data or other information used to demonstrate that the criteria in paragraph (b)(6)(i) of this section have been met shall be reported as specified in paragraphs (b)(6)(iii)(A) and (b)(6)(iii)(B) of this section.

(A) Data or other information used to demonstrate that the criteria in paragraph (b)(6)(i)(A) or (b)(6)(i)(B) of this section have been met shall be reported in the Notification of Compliance Status, as required in § 63.1327(a)(6).

(B) The request for approval to use engineering assessment to estimate emissions from a batch emissions episode as allowed under paragraph (b)(6)(i)(C) of this section, and sufficient data or other information for demonstrating to the Administrator that engineering assessment is an accurate means of estimating emissions for that particular batch emissions episode shall be submitted with the Precompliance Report, as required in § 63.1335(e)(3). * * * *

(9) Individual HAP partial pressures in multicomponent systems shall be determined using the appropriate method specified in paragraphs (b)(9)(i) through (b)(9)(iii) of this section.

(i) If the components are miscible, use Raoult's law to calculate the partial pressures;

(ii) If the solution is a dilute aqueous mixture, use Henry's law constants to calculate partial pressures;

(iii) If Raoult's law or Henry's law are not appropriate or available, the owner or operator may use any of the options in paragraphs (b)(9)(iii)(A), (B), or (C) of this section.

(A) Experimentally obtained activity coefficients, Henry's law constants, or solubility data;

(B) Models, such as groupcontribution models, to predict activity coefficients; or

(C) Assume the components of the system behave independently and use the summation of all vapor pressures from the HAPs as the total HAP partial pressure. * * * *

(d) Minimum emission level exemption. A batch process vent with annual emissions of TOC or organic HAP less than 11,800 kg/yr is considered a Group 2 batch process vent and the owner or operator of said batch process vent shall comply with the requirements in §63.1322(f) or (g). Annual emissions of TOC or organic HAP are determined at the exit of the batch unit operation, as described in paragraph (a)(2) of this section, and are determined as specified in paragraph (b) of this section. The owner or operator of said batch process vent is not required to comply with the provisions in

paragraphs (e) through (g) of this section.

(e) Determination of average batch vent flow rate and annual average batch *vent flow rate.* The owner or operator shall determine the average batch vent flow rate for each batch emission episode in accordance with one of the procedures provided in paragraphs (e)(1) through (e)(2) of this section. The annual average batch vent flow rate for a batch process vent shall be calculated as specified in paragraph (e)(3) of this section.

(1) Determination of the average batch vent flow rate for a batch emission episode by direct measurement shall be made using the procedures specified in paragraphs (e)(1)(i) through (e)(1)(iii) of this section.

(i) The volumetric flow rate (FR_i) for a batch emission episode, in standard cubic meters per minute (scmm) at 20°C, shall be determined using Method 2, 2A, 2C, or 2D, 40 CFR part 60, appendix A, as appropriate.

* *

$$AFR = \frac{\sum_{i=1}^{n} (DUR_i) (AFR_{episode, i})}{\sum_{i=1}^{n} (DUR_i)} \qquad [Eq. 15]$$

(iii) The average batch vent flow rate for a batch emission episode shall be calculated using Equation 14 of this subpart.

$$AFR_{episode} = \frac{\sum_{i=1}^{n} FR_{i}}{n} \qquad [Eq. 14]$$

Where:

- AFR_{episode} = Average batch vent flow rate for the batch emission episode, scmm.
- FR_i = Flow rate for individual measurement i, scmm.
- n = Number of flow rate measurements taken during the batch emission episode.

(2) The average batch vent flow rate for a batch emission episode may be determined by engineering assessment, as defined in paragraph (b)(6)(i) of this section. All data, assumptions, and procedures used shall be documented.

(3) The annual average batch vent flow rate for a batch process vent shall be calculated using Equation 15 of this subpart.

Where:

*

- AFR = Annual average batch vent flow rate for the batch process vent, scmm.
- DUR_i = Duration of type i batch emission episodes annually, hrs/yr.
- AFR_{episode,i} = Average batch vent flow rate for type i batch emission episode, scmm.
- n = Number of types of batch emission episodes venting from the batch process vent.

(g) Group 1/Group 2 status *determination*. The owner or operator shall compare the cutoff flow rate,

calculated in accordance with paragraph (f) of this section, with the annual average batch vent flow rate, determined in accordance with paragraph (e)(3) of this section. The group determination status for each batch process vent shall be made using the criteria specified in paragraphs (g)(1) and (g)(2) of this section.

(1) If the cutoff flow rate is greater than or equal to the annual average batch vent flow rate of the stream, the batch process vent is classified as a Group 1 batch process vent.

(2) If the cutoff flow rate is less than the annual average batch vent flow rate

$$E_{halogen} = K \Biggl[\sum_{j=1}^{n} \sum_{i=1}^{m} \Bigl(C_{avg_j} \Bigr) \Bigl(L_{j,i} \Bigr) \Bigl(M_{j,i} \Bigr) \Biggr] AFR \qquad [Eq. 17]$$

flow rate of the batch process vent, determined according to paragraph (e) of this section, scmm.

- $M_{j,i}$ = Molecular weight of halogen atom i in compound j, kg/kg-mole.
- $L_{j,i}$ = Number of atoms of halogen i in compound j.

of the stream, the batch process vent is classified as a Group 2 batch process vent.

- (h) * * *
- (1) * * *

(iii) Average concentration of organic compounds containing halogens and hydrogen halides as measured by Method 26 or 26A, 40 CFR part 60, appendix A.

(2) The annual mass emissions of halogen atoms for a batch process vent shall be calculated using Equation 17 of this subpart.

- n = Number of halogenated compounds j in the batch process vent.
- m = Number of different halogens i in each compound j of the batch process vent.

Where:

- $E_{halogen} = Mass of halogen atoms, dry$ basis, kg/yr.
- $K = Constant, 0.022 (ppmv)^{-1} (kg$ mole per scm) (minute/yr), where standard temperature is 20 °C.

AFR = Annual average batch vent

 C_{avg_j} = Annual average batch vent concentration of halogenated compound j in the batch process vent as determined by using Equation 18 of this subpart, dry basis, ppmv.

$$C_{avg_{j}} = \frac{\sum_{i=1}^{n} (DUR_{i})(C_{i})}{\sum_{i=1}^{n} (DUR_{i})}$$
 [Eq. 18]

Where:

 DUR_i = Duration of type i batch

*

*

- emission episodes annually, hrs/yr. C_i = Average batch vent concentration of halogenated compound j in type
- i batch emission episode, ppmv. n = Number of types of batch
- emission episodes venting from the batch process vent.
- *

(i) Process changes affecting Group 2 batch process vents. Whenever process changes, as described in paragraph (i)(1) of this section, are made that affect one or more Group 2 batch process vents and that could reasonably be expected to change one or more Group 2 batch process vents to Group 1 batch process vents or that could reasonably be expected to reduce the batch mass input limitation for one or more Group 2 batch process vents, the owner or operator shall comply with paragraphs (i)(2) and (3) of this section.

(1) Examples of process changes include the changes listed in paragraphs (i)(1)(i), (i)(1)(ii), and (i)(1)(iii) of this section.

(i) For all batch process vents, examples of process changes include, but are not limited to, changes in feedstock type or catalyst type; or whenever there is replacement, removal, or modification of recovery equipment considered part of the batch unit operation as specified in paragraph (a)(2) of this section; or increases in production capacity or production rate. For purposes of this paragraph (i), process changes do not include: Process upsets; unintentional, temporary process changes; and changes that are within the margin of variation on which the original group determination was based.

(ii) For Group 2 batch process vents where the group determination and batch mass input limitation are based on the expected mix of products, the situations described in paragraphs (i)(1)(ii)(A) and (B) of this section shall be considered to be process changes.

(A) The production of combinations of products not considered in establishing the batch mass input limitation. (B) The production of a recipe of a product with a total mass of HAP charged to the reactor during the production of a single batch of product that is higher than the total mass of HAP for the recipe used as the single highest-HAP recipe for that product in the batch mass input limitation determination.

(iii) For Group 2 batch process vents where the group determination and batch mass input limitation are based on the single highest-HAP recipe (considering all products produced or processed in the batch unit operation), the production of a recipe having a total mass of HAP charged to the reactor (during the production of a single batch of product) that is higher than the total mass of HAP for the highest-HAP recipe used in the batch mass input limitation determination shall be considered to be a process change.

(2) For each batch process vent affected by a process change, the owner or operator shall redetermine the group status by repeating the procedures specified in paragraphs (b) through (g) of this section, as applicable; alternatively, engineering assessment, as described in paragraph (b)(6)(i) of this section, may be used to determine the effects of the process change.

(3) Based on the results from paragraph (i)(2) of this section, owners or operators of affected sources shall comply with either paragraph (i)(3)(i), (ii), or (iii) of this section.

(i) If the group redetermination described in paragraph (i)(2) of this section indicates that a Group 2 batch process vent has become a Group 1 batch process vent as a result of the process change, the owner or operator shall submit a report as specified in § 63.1327(b) and shall comply with the Group 1 provisions in §§ 63.1322through 63.1327 in accordance with § 63.1310(i)(2)(ii) or (i)(2)(iii), as applicable.

(ii) If the redetermination described in paragraph (i)(2) of this section indicates that a Group 2 batch process vent with annual emissions less than the level specified in paragraph (d) of this section, that is in compliance with § 63.1322(g), now has annual emissions greater than or equal to the level specified in paragraph (d) of this section but remains a Group 2 batch process vent, the owner or operator shall comply with the provisions in paragraphs (i)(3)(ii)(A) through (C) of this section.

(A) Redetermine the batch mass input limitation;

(B) Submit a report as specified in § 63.1327(c); and

(C) Comply with § 63.1322(f), beginning with the year following the submittal of the report submitted according to paragraph (i)(3)(ii)(B) of this section.

(iii) If the group redetermination described in paragraph (i)(2) of this section indicates no change in group status or no change in the relation of annual emissions to the levels specified in paragraph (d) of this section, the owner or operator shall comply with paragraphs (i)(3)(iii)(A) and (i)(3)(iii)(B) of this section.

(A) The owner or operator shall redetermine the batch mass input limitation; and

(B) The owner or operator shall submit the new batch mass input limitation in accordance with $\S 63.1327(c)$.

(j) Process changes to new SAN affected sources using a batch process. Whenever process changes, as described in paragraph (j)(1) of this section, are made to a new affected source producing SAN using a batch process that could reasonably be expected to adversely impact the compliance status (*i.e.*, achievement of 84 percent emission reduction) of the affected source, the owner or operator shall comply with paragraphs (j)(2) and (3) of this section.

* *

(3) Where the redetermined percent reduction is less than 84 percent, the owner or operator of the affected source shall submit a report as specified in § 63.1327(d) and shall comply with § 63.1322(a)(3) and all associated provisions in accordance with § 63.1310(i).

43. Section 63.1324 is amended by:

a. Revising the section title;

b. Revising paragraph (a) introductory text:

c. Revising paragraph (a)(2);

d. Revising paragraph (c) introductory text;

e. Revising paragraph (c)(4)(ii);

f. Revising paragraph (c)(7);

g. Revising paragraph (d) introductory text;

h. Revising paragraph (e) introductory text;

i. Revising paragraph (e)(2);

j. Revising paragraph (f)(1) introductory text;

k. Revising paragraph (f)(1)(ii);

l. Revising paragraph (f)(3); and m. Removing paragraph (e)(3).

The revisions read as follows:

§63.1324 Batch process vents monitoring equipment.

(a) *General requirements*. Each owner or operator of a batch process vent or aggregate batch vent stream that uses a control device to comply with the requirements in § 63.1322(a) or § 63.1322(b), shall install the monitoring equipment specified in paragraph (c) of this section. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.

(2) Except as otherwise provided in this subpart, the owner or operator shall operate control devices such that the daily average of monitored parameters, established as specified in paragraph (f) of this section, remains above the minimum level or below the maximum level, as appropriate.

* * * * *

(c) Batch process vent and aggregate batch vent stream monitoring equipment. The monitoring equipment specified in paragraphs (c)(1) through (c)(8) of this section shall be installed as specified in paragraph (a) of this section. The parameters to be monitored are specified in Table 7 of this subpart.

(4) * * *

(ii) A flow measurement device equipped with a continuous recorder shall be located at the scrubber influent for liquid flow. Gas stream flow shall be determined using one of the procedures specified in paragraphs (c)(4)(ii)(A) through (c)(4)(ii)(C) of this section.

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

(B) If the scrubber is subject to regulations 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, the owner or operator may determine gas stream flow by the method that had been utilized to comply with those regulations. 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 stream flow determination plan that documents an appropriate method which will be used to determine the gas stream flow. The plan shall require determination of gas stream flow by a method which will at least provide a value for either a representative or the highest gas stream flow anticipated in the scrubber during representative operating conditions other than start-ups, 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 stream flow, and a description of the records that will be maintained to document the determination of gas stream flow. The owner or operator shall maintain the plan as specified in § 63.1335(a).

(7) Where a carbon adsorber is used, an integrating regeneration steam flow or nitrogen flow, or pressure monitoring device having an accuracy of ±10 percent of the flow rate, level, or pressure, or better, capable of recording the total regeneration steam flow or nitrogen flow, or pressure (gauge or absolute) for each regeneration cycle; and a carbon bed temperature monitoring device, capable of recording the carbon bed temperature after each regeneration and within 15 minutes of completing any cooling cycle are required. *

(d) Alternative monitoring parameters. An owner or operator of a batch process vent or aggregate batch vent stream may request approval to monitor parameters other than those required by paragraph (c) of this section. The request shall be submitted according to the procedures specified in § 63.1327(f) and § 63.1335(f). Approval shall be requested if the owner or operator:

(e) Monitoring of bypass lines. Owners or operators of a batch process vent or aggregate batch vent stream using a vent system that contains bypass lines that could divert emissions away from a control device used to comply with \S 63.1322(a) or \S 63.1322(b) shall comply with either paragraph (e)(1) or (e)(2) of this section. 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 (e).

(2) Secure the bypass line damper or 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 damper or valve is maintained in the non-diverting position and emissions are not diverted through the bypass line. Records shall be generated as specified in \S 63.1326(e)(4). (f)* * *

(1) For each parameter monitored under paragraph (c) or (d) of this

section, the owner or operator shall establish a level, defined as either a maximum or minimum operating parameter as denoted in Table 8 of this subpart, that indicates proper operation of the control device. The level shall be established in accordance with the procedures specified in §63.1334. The level may be based upon a prior performance test conducted for determining compliance with a regulation promulgated by EPA, and the owner or operator is not required to conduct a performance test under §63.1325, provided that the prior performance test meets the conditions of §63.1325(b)(3).

(ii) For aggregate batch vent streams using a control device to comply with \S 63.1322(b)(2), the established level shall reflect the applicable emission reduction requirement specified in \S 63.1322(b)(2).

*

(3) The operating day shall be defined as part of establishing the parameter monitoring level and shall be submitted with the information in paragraph (f)(2) of this section. The definition of operating day shall specify the time(s) at which an operating day begins and ends. The operating day shall not exceed 24 hours.

- * * * * * * 44. Section 63.1325 is amended by:
- a. Revising paragraph (a);
- b. Revising paragraph (b) introductory text;
 - c. Revising paragraph (b)(3);
 - d. Revising paragraph (b)(5);
- e. Revising paragraph (c) introductory text;
- f. Revising paragraph (c)(1)(i)(A); g. Revising paragraph (c)(1)(i)(B)
- introductory text;
- h. Revising paragraph (c)(1)(i)(C); i. Revising paragraph (c)(1)(i)(D)
- introductory text;
 - j. Revising paragraph (c)(1)(ii); k. Revising paragraph (c)(1)(iii)

introductory text;

- l. Revising paragraph (c)(1)(iii)(A);
- m. Revising paragraph (c)(1)(r);
- n. Revising paragraph (c)(2)
- introductory text;
 - o. Revising paragraph (d)(1);
- p. Revising paragraph (d)(2)(ii);
- q. Revising paragraphs (d)(3) and (d)(4);
- r. Revising paragraph (e);
- s. Revising paragraph (g); and
- t. Removing paragraph (b)(6).
- The revisions read as follows:

§ 63.1325 Batch process vents performance test methods and procedures to determine compliance.

(a) *Use of a flare.* When a flare is used to comply with § 63.1322(a)(1),

63.1322(a)(3), 63.1322(b)(1), or<math>63.1322(b)(3), the owner or operator ofan affected source shall comply with<math>63.1333(e).

(b) Exceptions to performance tests. An owner or operator is not required to conduct a performance test when a control device specified in paragraphs (b)(1) through (b)(5) of this section is used to comply with § 63.1322(a)(2) or (a)(3).

(3) A control device for which a performance test was conducted for determining compliance with a regulation promulgated by the EPA and the test was conducted using the same Methods specified in this section and either no deliberate process changes have been made since the test, or the owner or operator can demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process changes. Recovery devices used for controlling emissions from continuous process vents complying with §63.1322(a)(3) are also eligible for the exemption described in this paragraph (b)(3).

* * * *

(5) A hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR part 270 and complies with the requirements of 40 CFR part 264, subpart O, or has certified compliance with the interim status requirements of 40 CFR part 265, subpart O.

*

(c) Batch process vent testing and procedures for compliance with § 63.1322(a)(2). Except as provided in paragraph (a) or (b) of this section, an owner or operator using a control device

to comply with §63.1322(a)(2) shall conduct a performance test using the procedures specified in paragraph (c)(1) of this section in order to determine the control efficiency of the control device. An owner or operator shall determine the percent reduction for the batch cycle using the control efficiency of the control device as specified in paragraphs (c)(2)(i) through (c)(2)(iii) of this section and the procedures specified in paragraph (c)(2) of this section. Compliance may be based on either total organic HAP or TOC. For purposes of this paragraph (c), the term "batch emission episode" shall have the meaning "period of the batch emission episode selected for control," which may be the entire batch emission episode or may only be a portion of the batch emission episode.

 $(1)^* * (1)^$

(A) Alternatively, an owner or operator may choose to test only those periods of the batch emission episode during which the emission rate for the entire episode can be determined or during which the emissions are greater than the average emission rate of the batch emission episode. The owner or operator choosing either of these options shall develop an emission profile for the entire batch emission episode, based on either process knowledge or test data collected, to demonstrate that test periods are representative. Examples of information that could constitute process knowledge include calculations based on material balances and process stoichiometry. Previous test results may be used provided the results are still relevant to the current batch process vent conditions.

(B) Method 1 or 1A, 40 CFR part 60, appendix A, as appropriate, shall be used for selection of the sampling sites if the flow measuring device is a pitot tube, except that references to particulate matter in Method 1A do not apply for the purposes of this subpart. No traverse is necessary when Method 2A or 2D, 40 CFR part 60, appendix A is used to determine gas stream volumetric flow rate. Inlet sampling sites shall be located as specified in paragraphs (c)(1)(i)(B)(1) and (c)(1)(i)(B)(2) of this section. Outlet sampling sites shall be located at the outlet of the control device prior to release to the atmosphere.

* * * *

(C) Gas stream volumetric flow rate and/or average batch vent flow rate shall be determined as specified in § 63.1323(e).

(D) Method 18 or Method 25A, 40 CFR part 60, appendix A shall be used to determine the concentration of organic HAP or TOC, as appropriate. Alternatively, any other method or data that has been validated according to the applicable procedures in Method 301 of appendix A of this part may be used. The use of Method 25A, 40 CFR part 60, appendix A shall conform with the requirements in paragraphs (c)(1)(i)(D)(1) and (c)(1)(i)(D)(2) of this section.

* * * *

(ii) If an integrated sample is taken over the entire test period to determine average batch vent concentration of TOC or total organic HAP, emissions per batch emission episode shall be calculated using Equations 19 and 20 of this subpart.

$$E_{\text{episode, inlet}} = K \left[\sum_{j=1}^{n} (C_{j,\text{inlet}}) (M_{j}) \right] (AFR_{\text{inlet}}) (T_{h}) \qquad [Eq. 19]$$

$$E_{\text{episode,outlet}} = K \left[\sum_{j=1}^{n} (C_{j,\text{outlet}}) (M_{j}) \right] (AFR_{\text{outlet}}) (T_{h}) \qquad [Eq. 20]$$

estimated using a TOC concentration measured using Method 25A, 40 CFR part 60, appendix A.

(iii) If grab samples are taken to determine average batch vent concentration of TOC or total organic HAP, emissions shall be calculated according to paragraphs (c)(1)(iii)(A) and (B) of this section.

Where:

- $E_{episode} \mbox{=} Inlet \mbox{ or outlet emissions, } kg/ \\ episode.$
- K=Ĉonstant, 2.494×10⁻⁶ (ppmv)⁻¹ (gm-mole/scm) (kg/gm) (min/hr), where standard temperature is 20 °C.
- C_j=Average inlet or outlet concentration of TOC or sample organic HAP component j of the gas stream for the batch emission

episode, dry basis, ppmv.

- M_j=Molecular weight of TOC or sample organic HAP component j of the gas stream, gm/gm-mole.
- AFR = Average inlet or outlet flow rate of gas stream for the batch emission episode, dry basis, scmm. T_h=Hours/episode.
- n=Number of organic HAP in stream. Note: Summation is not applicable if TOC emissions are being

(A) For each measurement point, the emission rates shall be calculated using Equations 21 and 22 of this subpart.

$$E_{\text{point, inlet}} = K \left[\sum_{j=1}^{n} C_j M_j \right] FR_{\text{inlet}} \qquad [Eq. 21]$$

$$E_{\text{point,outlet}} = K \left[\sum_{j=1}^{n} C_{j} M_{j} \right] FR_{\text{outlet}} \qquad [Eq. 22]$$

Where:

- $$\label{eq:epoint} \begin{split} E_{point} = & Inlet \ or \ outlet \ emission \ rate \ for \\ the \ measurement \ point, \ kg/hr. \end{split}$$
- K=Constant, 2.494 × 10⁻⁶ (ppmv)⁻¹ (gm-mole/scm) (kg/gm) (min/hr), where standard temperature is 20 ^{minus;o}C.
- C_j=Inlet or outlet concentration of TOC or sample organic HAP component j of the gas stream, dry basis, ppmv.
- M_j=Molecular weight of TOC or sample organic HAP component j of the gas stream, gm/gm-mole.
- FR=Inlet or outlet flow rate of gas stream for the measurement point, drv basis, scmm.
- n=Number of organic HAP in stream.

Note: Summation is not applicable if TOC emissions are being estimated using a TOC concentration measured using Method 25A, 40 CFR part 60, appendix A.

*

(v) If the batch process vent 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 across the device shall be determined by comparing the TOC or total organic HAP in all combusted batch process vents and primary and secondary fuels with the TOC or total organic HAP, respectively, exiting the combustion device.

(2) The percent reduction for the batch cycle shall be determined using Equation 26 of this subpart and the control device efficiencies specified in paragraphs (c)(2)(i) through (c)(2)(iii) of this section. All information used to calculate the batch cycle percent reduction, including a definition of the batch cycle identifying all batch emission episodes, shall be recorded as specified in § 63.1326(b)(2). This information shall include identification of those batch emission episodes, or portions thereof, selected for control.

$$PR = \frac{\sum_{i=1}^{n} E_{unc} + \sum_{i=1}^{n} E_{inlet, con} - \sum_{i=1}^{n} (1 - R) E_{inlet, con}}{\sum_{i=1}^{n} E_{unc} + \sum_{i=1}^{n} E_{inlet, con}}$$
(100) [Eq. 26]

Where:

- PR = Percent reduction
- E_{unc} = Mass rate of TOC or total organic HAP for uncontrolled batch emission episode i, kg/hr.
- E_{inlet.con} = Mass rate of TOC or total organic HAP for controlled batch emission episode i at the inlet to the control device, kg/hr.
- R = Control efficiency of control device as specified in paragraphs (c)(2)(i) through (c)(2)(iii) of this section.
- n = Number of uncontrolled batch emission episodes, controlled batch emission episodes, and control devices. The value of n is not necessarily the same for these three items.
- * *
- (d) * * *

(1) Sampling sites shall be located at the inlet and outlet of the scrubber or other halogen reduction device used to reduce halogen emissions in complying with § 63.1322(c)(1) or at the outlet of the halogen reduction device used to reduce halogen emissions in complying with 63.1322(c)(2).

(2) * * *
(ii) Gas stream volumetric flow rate and/or average batch vent flow rate shall be determined as specified in § 63.1323(e).

(3) To determine compliance with the percent reduction specified in §63.1322(c)(1), the mass emissions for any hydrogen halides and halogens present at the inlet of the scrubber or other halogen reduction device shall be summed together. The mass emissions of any hydrogen halides or halogens present at the outlet of the scrubber or other halogen reduction device shall be summed together. Percent reduction shall be determined by subtracting the outlet mass emissions from the inlet mass emissions and then dividing the result by the inlet mass emissions and multiplying by 100.

(4) To determine compliance with the emission limit specified in

§ 63.1322(c)(2), the annual mass emissions for any hydrogen halides and halogens present at the outlet of the halogen reduction device and prior to any combustion device shall be summed together and compared to the emission limit specified in § 63.1322(c)(2).

(e) Aggregate batch vent stream testing for compliance with $\S 63.1322(b)(2)$ or (b)(3). Except as specified in paragraphs (e)(1) through (e)(3) of this section, owners or operators of aggregate batch vent streams complying with $\S 63.1322(b)(2)$ or (b)(3) shall conduct a performance test using the performance testing procedures for continuous process vents in $\S 63.116(c)$.

(1) For purposes of this subpart, when the provisions of § 63.116(c) specify that Method 18, 40 CFR part 60, appendix A, shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A, may be used. The use of Method 25A, 40 CFR part 60, appendix A, shall conform with the requirements in paragraphs (e)(1)(i) and (e)(1)(ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A, shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A, is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(2) When § 63.116(c)(4) refers to complying with an emission reduction of 98 percent, for purposes of this subpart, the 90 percent reduction requirement specified in § 63.1322(b)(2) shall apply.

* * *

(g) Batch mass input limitation. The batch mass input limitation required by §63.1322(g)(1) shall be determined by the owner or operator such that annual emissions for the batch process vent remain less than the level specified in §63.1323(d). The batch mass input limitation required by §63.1322(f)(1) shall be determined by the owner or operator such that annual emissions remain at a level that ensures that said batch process vent remains a Group 2 batch process vent, given the actual annual flow rate for said batch process vent determined according to the procedures specified in §63.1323(e)(3). The batch mass input limitation shall be determined using the same basis, as described in §63.1323(a)(1), used to make the group determination (*i.e.*, expected mix of products or highest-HAP recipe.) The establishment of the batch mass input limitation is not dependent upon any past production or activity level.

(1) If the expected mix of products serves as the basis for the batch mass input limitation, the batch mass input limitation shall be determined based on any foreseeable combination of products that the owner or operator expects to manufacture.

(2) If the single highest-HAP recipe serves as the basis for the batch mass input limitation, the batch mass input limitation shall be determined based solely on the production of the single highest-HAP recipe, considering all products produced or processed in the batch unit operation.

45. Section 63.1326 is amended by: a. Revising paragraph (a) introductory text:

b. Revising paragraphs (a)(1) and (a)(2);

c. Revising paragraph (a)(3)(i);

d. Revising paragraph (a)(4); e. Revising paragraphs (a)(7) through

(a)(9); f. Revising paragraph (b) introductory text:

g. Revising paragraph (b)(2);

h. Revising paragraphs (b)(3)(ii) and (b)(3)(iii);

- i. Revising paragraph (b)(4)(iv);
- j. Revising paragraphs (d)(1) and (d)(2);

k. Revising paragraph (e) introductory text;

l. Revising paragraphs (e)(1)(i) and (e)(1)(ii);

m. Revising paragraph (e)(2) introductory text;

n. Revising paragraph (e)(2)(ii);

o. Revising paragraph (e)(4);

p. Revising paragraph (f); and

q. Adding paragraph (g).

The revisions and additions read as follows:

§63.1326 Batch process vents recordkeeping provisions.

(a) Group determination records for batch process vents. Except as provided in paragraphs (a)(7) and (a)(8) of this section, each owner or operator of an affected source shall maintain the records specified in paragraphs (a)(1) through (a)(6) of this section for each batch process vent subject to the group determination procedures of § 63.1323. Except for paragraph (a)(1) of this section, the records required by this paragraph (a) are restricted to the information developed and used to make the group determination under §§ 63.1323(b) through 63.1323(g), as appropriate. If an owner or operator did not need to develop certain information (e.g., annual average batch vent flow rate) to determine the group status, this paragraph (a) does not require that additional information be developed. Paragraph (a)(9) of this section specifies the recordkeeping requirements for Group 2 batch process vents that are exempt from the batch mass input limitation provisions, as allowed under §63.1322(h).

(1) An identification of each unique product that has emissions from one or more batch emission episodes venting from the batch process vent, along with an identification of the single highest-HAP recipe for each product and the mass of HAP fed to the reactor for that recipe.

(2) A description of, and an emission estimate for, each batch emission episode, and the total emissions associated with one batch cycle, as described in either paragraph (a)(2)(i) or (a)(2)(ii) of this section, as appropriate.

(i) If the group determination is based on the expected mix of products, records shall include the emission estimates for the single highest-HAP recipe of each unique product identified in paragraph (a)(1) of this section that was considered in making the group determination under § 63.1323.

(ii) If the group determination is based on the single highest-HAP recipe (considering all products produced or processed in the batch unit operation), records shall include the emission estimates for the single highest-HAP recipe.

(3) * * *

(i) For Group 2 batch process vents, said emissions shall be determined at the batch mass input limitation.

(4) The annual average batch vent flow rate for the batch process vent, determined in accordance with § 63.1323(e).

(7) If a batch process vent is subject to \S 63.1322(a) or (b), none of the records in paragraphs (a)(1) through (a)(6) of this section are required.

(8) If the total annual emissions from the batch process vent during the group determination are less than the appropriate level specified in § 63.1323(d), only the records in paragraphs (a)(1) through (a)(3) of this section are required.

(9) For each Group 2 batch process vent that is exempt from the batch mass input limitation provisions because it meets the criteria of § 63.1322(h), the records specified in paragraphs (a)(9)(i) and (ii) shall be maintained.

(i) Documentation of the maximum design capacity of the TPPU; and

(ii) The mass of HAP or material that can be charged annually to the batch unit operation at the maximum design capacity.

(b) Compliance demonstration records. Each owner or operator of a batch process vent or aggregate batch vent stream complying with § 63.1322(a) or (b), shall keep the following records, as applicable, readily accessible:

(2) If the owner or operator of a batch process vent has chosen to comply with § 63.1322(a)(2), records documenting the batch cycle percent reduction as specified in § 63.1325(c)(2); and (3) * * *

(ii) All visible emission readings, heat content determinations, flow rate measurements, and exit velocity determinations made during the compliance determination required by § 63.1333(e); and

(iii) Periods when all pilot flames were absent.

(4) * * *

(iv) For a scrubber or other halogen reduction device following a combustion device to control halogenated batch process vents or halogenated aggregate batch vent streams, the percent reduction of total hydrogen halides and halogens as determined under § 63.1325(d)(3) or the emission limit determined under §63.1325(d)(4).

- * *
 - (d) * * *

(1) The owner or operator of a Group 2 batch process vent that has chosen to comply with §63.1322(g) shall keep the following records readily accessible:

(i) Records designating the established batch mass input limitation required by §63.1322(g)(1) and specified in §63.1325(g).

(ii) Records specifying the mass of HAP or material charged to the batch unit operation.

(2) The owner or operator of a Group 2 batch process vent that has chosen to comply with §63.1322(f) shall keep the following records readily accessible:

(i) Records designating the established batch mass input limitation required by §63.1322(f)(1) and specified in §63.1325(g).

(ii) Records specifying the mass of HAP or material charged to the batch unit operation.

(e) Controlled batch process vent continuous compliance records. Each owner or operator of a batch process vent that has chosen to use a control device to comply with §63.1322(a) shall keep the following records, as applicable, readily accessible:

(1) * * *

(i) For flares, the records specified in Table 7 of this subpart shall be maintained in place of continuous records.

(ii) For carbon adsorbers, the records specified in Table 7 of this subpart shall be maintained in place of batch cycle daily averages.

(2) Records of the batch cycle daily average value of each continuously monitored parameter, except as provided in paragraph (e)(2)(iii) of this section, as calculated using the procedures specified in paragraphs (e)(2)(i) and (e)(2)(ii) of this section.

(ii) Monitoring data recorded during periods of monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments shall not be included in computing the batch cycle daily averages. In addition, monitoring data recorded during periods of nonoperation of the TPPU (or specific portion thereof) resulting in cessation of organic HAP emissions, or periods of start-up, shutdown, or malfunction shall not be included in computing the batch cycle daily averages.

(4) Where a seal or closure mechanism is used to comply with §63.1324(e)(2), hourly records of whether a diversion was detected at any time are not required. The owner or operator shall record whether the monthly visual inspection of the seals or closure mechanisms has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line damper or valve position has changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal that has broken.

(f) Aggregate batch vent stream continuous compliance records. In addition to the records specified in paragraphs (b) and (c) of this section, each owner or operator of an aggregate batch vent stream using a control device to comply with § 63.1322(b)(1) or (b)(2) shall keep the following records readily accessible:

(1) Continuous records of the equipment operating parameters specified to be monitored under §63.1324(c) and listed in Table 7 of this subpart, as applicable, or specified by the Administrator in accordance with §63.1327(f), as allowed under §63.1324(d), with the exceptions listed in (f)(1)(i) and (f)(1)(ii) of this section.

(i) For flares, the records specified in Table 7 of this subpart shall be maintained in place of continuous records.

(ii) For carbon adsorbers, the records specified in Table 7 of this subpart shall be maintained in place of daily averages.

(2) Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in § 63.1335(d).

(3) For demonstrating compliance with the monitoring of bypass lines as specified in §63.1324(e), records as specified in paragraphs (e)(3) or (e)(4) of this section, as appropriate.

(g) Documentation supporting the establishment of the batch mass input limitation shall include the information specified in paragraphs (g)(1) through (g)(5) of this section, as appropriate.

(1) Identification of whether the purpose of the batch mass input limitation is to comply with §63.1322(f)(1) or (g)(1).

(2) Identification of whether the batch mass input limitation is based on the

single highest-HAP recipe (considering all products) or on the expected mix of products for the batch process vent as allowed under § 63.1323(a)(1).

(3) Definition of the operating year, for the purposes of determining compliance with the batch mass input limitation.

(4) If the batch mass input limitation is based on the expected mix of products, the owner or operator shall provide documentation that describes as many scenarios for differing mixes of products (*i.e.*, how many of each type of product) as the owner or operator desires the flexibility to accomplish. Alternatively, the owner or operator shall provide a description of the relationship among the mix of products that will allow a determination of compliance with the batch mass input limitation under any number of scenarios.

(5) The mass of HAP or material allowed to be charged to the batch unit operation per year under the batch mass input limitation.

46. Section 63.1327 is amended by: a. Revising paragraph (a) introductory text;

b. Revising paragraph (b);

c. Revising paragraph (c) introductory text;

d. Revising paragraph (c)(2);

e. Revising paragraph (d);

f. Revising paragraph (e);

g. Revising paragraph (g);

h. Removing paragraph (c)(3);

i. Adding paragraph (a)(5); and

*

j. Adding paragraph (a)(6). The revisions and additions read as follows:

§63.1327 Batch process vents-reporting requirements.

(a) The owner or operator of a batch process vent or aggregate batch vent stream at an affected source shall submit the information specified in paragraphs (a)(1) through (a) $(\bar{6})$ of this section, as appropriate, as part of the Notification of Compliance Status specified in §63.1335(e)(5).

(5) For each Group 2 batch process vent that is exempt from the batch mass input limitation provisions because it meets the criteria of §63.1322(h), the information specified in §63.1326(a)(1) through (3), and the information specified in $\S63.1326(a)(4)$ through (6) as applicable, calculated at the conditions specified in §63.1322(h).

(6) When engineering assessment has been used to estimate emissions from a batch emissions episode and the criteria specified in § 63.1323(b)(6)(i)(A) or (B) have been met, the owner or operator shall submit the information

demonstrating that the criteria specified in § 63.1323(Ĕ)(6)(i)(A) or (B) have been met as part of the Notification of Compliance Status required by §63.1335(e)(5).

(b) Whenever a process change, as defined in §63.1323(i)(1), is made that causes a Group 2 batch process vent to become a Group 1 batch process vent, the owner or operator shall notify the Administrator and submit a description of the process change within 180 days after the process change is made or with the next Periodic Report, whichever is later. The owner or operator of an affected source shall comply with the Group 1 batch process vent provisions in §§ 63.1321 through 63.1327 in accordance with § 63.480(i)(2)(ii).

(c) Whenever a process change, as defined in §63.1323(i)(1), is made that causes a Group 2 batch process vent with annual emissions less than the level specified in §63.1323(d) for which the owner or operator has chosen to comply with §63.1322(g) to have annual emissions greater than or equal to the level specified in §63.1323(d) but remains a Group 2 batch process vent, or if a process change is made that requires the owner or operator to redetermine the batch mass input limitation as specified in §63.1323(i)(3), the owner or operator shall submit a report within 180 days after the process change is made or with the next Periodic Report, whichever is later. The following information shall be submitted:

(2) The batch mass input limitation determined in accordance with §63.1322(f)(1).

(d) Whenever a process change, as defined in §63.1323(j)(1), is made that could potentially cause the percent reduction for all process vents at a new SAN affected source using a batch process to be less than 84 percent, the owner or operator shall notify the Administrator and submit a description of the process change within 180 days after the process change is made or with the next Periodic Report, whichever is later. The owner or operator shall comply with §63.1322(a)(3) and all associated provisions in accordance with § 63.1310(i).

(e) The owner or operator is not required to submit a report of a process change if one of the conditions specified in paragraphs (e)(1) or (e)(2) of this section is met.

(1) The change does not meet the description of a process change in §63.1323(i) or (j).

(2) The redetermined group status remains Group 2 for an individual batch

process vent with annual emissions greater than or equal to the level specified in §63.1323(d) and the batch mass input limitation does not decrease, a Group 2 batch process vent with annual emissions less than the level specified in §63.1323(d) complying with §63.1322(g) continues to have emissions less than the level specified in §63.1323(d) and the batch mass input limitation does not decrease, or the achieved emission reduction remains at 84 percent or greater for new SAN affected sources using a batch process. * * *

(g) Owners or operators of affected sources complying with § 63.1324(e), shall comply with paragraph (g)(1) or (g)(2) of this section, as appropriate.

(1) Submit reports of the times of all periods recorded under § 63.1326(e)(3) when the batch process vent is diverted from the control device through a bypass line, with the next Periodic Report.

(2) Submit reports of all occurrences recorded under §63.1326(e)(4) in which the seal mechanism is broken, the bypass line damper or valve position has changed, or the key to unlock the bypass line damper or valve was checked out, with the next Periodic Report.

47. Section 63.1328 is revised to read as follows:

§63.1328 Heat exchange systems provisions.

(a) Except as specified in paragraph (b) of this section, each owner or operator of an affected source shall comply with §63.104, with the differences noted in paragraphs (c) through (h) of this section, for the purposes of this subpart.

(b) The provisions of paragraph (a) of this section do not apply to each process contact cooling tower that is associated with an existing affected source manufacturing PET.

(c) When the term "chemical manufacturing process unit" is used in §63.104, the term "thermoplastic product process unit" shall apply for purposes of this subpart, with the exception noted in paragraph (d) of this section.

(d) When the phrase "a chemical manufacturing process unit meeting the conditions of § 63.100(b)(1) through (b)(3) of this subpart, except for chemical manufacturing process units meeting the condition specified in §63.100(c) of this subpart" is used in §63.104(a), the term "a TPPU, except for TPPUs meeting the condition specified in §63.1310(b)" shall apply for purposes of this subpart.

(e) When §63.104 refers to Table 4 of subpart F of this part or Table 9 of subpart G of this part, the owner or operator is only required to consider organic HAP listed on Table 6 of this subpart, except for ethylene glycol which need not be considered under this section, for purposes of this subpart.

(f) When §63.104(c)(3) specifies the monitoring plan retention requirements, and when §63.104(f)(1) refers to the record retention requirements in §63.103(c)(1), the requirements in §§ 63.1335(a) and 63.1335(h) shall apply, for purposes of this subpart.

(g) When §63.104(f)(2) requires information to be reported in the Periodic Reports required by §63.152(c), the owner or operator shall instead report the information specified in §63.104(f)(2) in the Periodic Reports required by §63.1335(e)(6), for the purposes of this subpart.

(h) The compliance date for heat exchange systems subject to the provisions of this section is specified in §63.1311.

48. Section 63.1329 is amended by:

a. Revising paragraph (a);

b. Revising paragraph (c) introductory text;

c. Revising paragraphs (c)(1)(i)

through (c)(1)(iii); and d. Revising paragraph (c)(2).

The revisions read as follows:

§63.1329 Process contact cooling towers provisions.

(a) The owner or operator of each new affected source that manufactures PET is required to comply with paragraph (b) of this section. The owner or operator of each existing affected source that manufactures PET using a continuous terephthalic acid high viscosity multiple end finisher process that utilizes a process contact cooling tower shall comply with paragraph (c) of this section, and is not required to comply with paragraph (b) of this section. The compliance date for process contact cooling towers subject to the provisions of this section is specified in §63.1311. *

* *

(c) Existing affected source requirements. The owner or operator of an existing affected source subject to this section who manufactures PET using a continuous terephthalic acid high viscosity multiple end finisher process, and who is subject or becomes subject to 40 CFR part 60, subpart DDD, shall maintain an ethylene glycol concentration in the process contact cooling tower at or below 4.0 percent by weight averaged on a daily basis over a rolling 14-day period of operating days. Compliance with this paragraph (c)

shall be determined as specified in paragraphs (c)(1) through (c)(4) of this section. It should be noted that compliance with this paragraph (c) does not exempt owners or operators from complying with the provisions of §63.1330 for those process wastewater streams that are sent to the process contact cooling tower.

(1) *

(i) At least one sample per operating day shall be collected using the procedures specified in 40 CFR 60.564(j)(1)(i). An average ethylene glycol concentration by weight shall be calculated on a daily basis over a rolling

14-day period of operating days. Each daily average ethylene glycol concentration so calculated constitutes a performance test.

(ii) The owner or operator may elect to reduce the sampling program to any 14 consecutive operating day period once every two calendar months, if at least seventeen consecutive 14-day rolling average concentrations immediately preceding the reduced sampling program are each less than 1.2 weight percent ethylene glycol. If the average concentration obtained over the 14 operating day sampling during the reduced test period exceeds the upper

$$CI_{95} = \frac{\sum_{i=1}^{n} X_{i}}{n} + 2 \sqrt{\frac{n \sum_{i=1}^{n} (X_{i}^{2}) - \left(\sum_{i=1}^{n} X_{i}\right)^{2}}{n (n-1)}}$$
 [Eq. 27]

95 percent confidence interval calculated from the most recent test results in which no one 14-day average exceeded 1.2 weight percent ethylene glycol, then the owner or operator shall reinstitute a daily sampling program. The 95 percent confidence interval shall be calculated as specified in paragraph (c)(1)(iii) of this section. A reduced program may be reinstituted if the requirements specified in this paragraph (c)(1)(ii) are met.

(iii) The upper 95 percent confidence interval shall be calculated using the Equation 27 of this subpart:

- CI₉₅ = 95 percent confidence interval $X_i = daily ethylene glycol$
- concentration for each operating day used to calculate each 14-day rolling average used in test results to justify implementing the reduced testing program.
- n = number of ethylene glycol concentrations.

(2) Measuring an alternative parameter, such as carbon oxygen demand or biological oxygen demand, that is demonstrated to be directly proportional to the ethylene glycol concentration shall be allowed. Such parameter shall be measured during the initial 14-day performance test during which the facility is shown to be in compliance with the ethylene glycol concentration standard whereby the ethylene glycol concentration is determined using the procedures described in paragraph (c)(1) of this section. The alternative parameter shall be measured on a daily basis and the average value of the alternative parameter shall be calculated on a daily basis over a rolling 14-day period of operating days. Each daily average value of the alternative parameter constitutes a performance test.

49. Section 63.1330 is amended by: a. Revising paragraph (a);

b. Revising paragraph (b); and c. Adding paragraph (c).

The revisions and additions read as

follows:

§63.1330 Wastewater provisions.

(a) Except as specified in paragraphs (d) and (e) of this section, the owner or operator of each affected source shall

comply, as specified in paragraph (b) of this section, with the requirements of §§ 63.132 through 63.147 for each process wastewater stream originating at an affected source, with the requirements of §63.148 for leak inspection provisions, and with the requirements of § 63.149 for equipment that is subject to §63.149. Further, the owner or operator of each affected source shall comply with the requirements of §63.105(a) for maintenance wastewater as specified in paragraph (c) of this section.

(b) The owner or operator of each affected source shall comply with the requirements of §§ 63.132 through 63.149, with the differences noted in paragraphs (b)(1) through (b)(22) of this section for the purposes of this subpart.

(1) When the determination of equivalence criteria in §63.102(b) is referred to in §§ 63.132, 63.133, and 63.137, the provisions in §63.6(g) shall apply for the purposes of this subpart.

(2) When the storage vessel requirements contained in §§ 63.119 through 63.123 are referred to in §§ 63.132 through 63.149, §§ 63.119 through 63.123 are applicable, with the exception of the differences referred to in §63.1314, for the purposes of this subpart.

(3) When § 63.146(a) requires the submission of a request for approval to monitor alternative parameters according to the procedures specified in §63.151(f) or (g), owners or operators requesting to monitor alternative parameters shall follow the procedures specified in §63.1335(f) for the purposes of this subpart.

(4) When § 63.147(d) requires owners or operators to keep records of the daily average value of each continuously monitored parameter for each operating day as specified in §63.152(f), owners and operators shall instead keep records of the daily average value of each continuously monitored parameter as specified in §63.1335(d) for the purposes of this subpart.

(5) When §§ 63.132 through 63.149 refer to an "existing source," the term "existing affected source," as defined in §63.1310(a), shall apply for the purposes of this subpart.

(6) When §§ 63.132 through 63.149 refer to a "new source," the term "new affected source," as defined in § 63.1310(a), shall apply for the purposes of this subpart.

(7) When § 63.132(a) and (b) refer to the "applicable dates specified in §63.100 of subpart F of this part," the compliance dates specified in §63.1311 shall apply for the purposes of this subpart.

 $(\bar{8})$ The provisions of paragraphs (b)(8)(i), (b)(8)(ii), and (b)(8)(iii) of this section clarify the organic HAP that an owner or operator shall consider when complying with the requirements in §§ 63.132 through 63.149.

(i) When §§ 63.132 through 63.149 refer to table 8 of compounds, the owner or operator is only required to consider 1,3-butadiene for purposes of this subpart.

(ii) When §§ 63.132 through 63.149 refer to table 9 of compounds, the owner or operator is only required to consider compounds that meet the definition of organic HAP in §63.1312 and that are listed on table 9 of 40 CFR part 63, for the purposes of this subpart, except for ethylene glycol which need not be considered.

(iii) When §§ 63.132 through 63.149 refer to compounds in table 36 of 40 CFR part 63, subpart G, or compounds on List 1 and/or List 2, as listed on table 36 of 40 CFR part 63, subpart G, the owner or operator is only required to consider compounds that meet the definition of organic HAP in § 63.1312 and that are listed in table 36 of 40 CFR part 63, subpart G, for the purposes of this subpart.

(9) Whenever §§ 63.132 through 63.149 refer to a "chemical manufacturing process unit," the term "thermoplastic product process unit," (or TPPU) as defined in § 63.1312, shall apply for the purposes of this subpart. In addition, when § 63.149 refers to "a chemical manufacturing process unit that meets the criteria of § 63.100(b) of subpart F of this part," the term "a TPPU as defined in § 63.1312(b)" shall apply for the purposes of this subpart.

(10) Whenever §§ 63.132 through 63.149 refer to a Group 1 wastewater stream or a Group 2 wastewater stream, the definitions of these terms contained in § 63.1312 shall apply for the purposes of this subpart.

(11) When § 63.149(d) refers to "§ 63.100(f) of subpart F", the phrase "§ 63.1310(c)" shall apply for the purposes of this subpart. In addition, where § 63.149(d) states "and the item of equipment is not otherwise exempt from controls by the provisions of subpart A, F, G, or H of this part", the phrase "and the item of equipment is not otherwise exempt from controls by the provisions of subparts A, F, G, H, or JJJ of this part" shall apply for the purposes of this subpart.

(12) When \S 63.149(e)(1) and (e)(2) refer to "a chemical manufacturing process unit subject to the new source requirements of 40 CFR \S 63.100(l)(1) or 40 CFR \S 63.100(l)(2)," the phrase "a TPPU that is part of a new affected source or that is a new affected source," shall apply for the purposes of this subpart.

(13) When the Notification of **Compliance Status requirements** contained in §63.152(b) are referred to in §§ 63.138 and 63.146, the Notification of Compliance Status requirements contained in §63.1335(e)(5) shall apply for the purposes of this subpart. In addition, when §§ 63.132 through 63.149 require that information be reported according to §63.152(b) in the Notification of Compliance Status, the owner or operator of an affected source shall report the specified information in the Notification of Compliance Status required by § 63.1335(e)(5) for the purposes of this subpart.

(14) When the Periodic Report requirements contained in §63.152(c) are referred to in § 63.146, the Periodic Report requirements contained in § 63.1335(e)(6) shall apply for the purposes of this subpart. In addition, when §§ 63.132 through 63.149 require that information be reported in the Periodic Reports required in § 63.152(c), the owner or operator of an affected source shall report the specified information in the Periodic Reports required in § 63.1335(e)(6) for the purposes of this subpart.

(15) When § 63.143(f) specifies that owners or operators shall establish the range that indicates proper operation of the treatment process or control device, the owner or operator shall instead comply with the requirements of § 63.1334(c) or (d) for establishing parameter level maximums/minimums for the purposes of this subpart.

(16) When § 63.146(b)(7) and § 63.146(b)(8) require that "the information on parameter ranges specified in § 63.152(b)(2)" be reported in the Notification of Compliance Status, owners and operators of affected sources are instead required to report the information on parameter levels as specified in § 63.1335(e)(5)(i) for the purposes of this subpart.

(17) When the term "range" is used in §§ 63.132 through 63.149, the term "level" apply instead for the purposes of this subpart. This level shall be determined using the procedures specified in § 63.1334.

(18) For the purposes of this subpart, the owner or operator of an affected source is not required to include process wastewater streams that contain styrene when conducting performance tests for the purposes of calculating the required mass removal (RMR) or the actual mass removal (AMR) under the provisions described in § 63.145(f) or § 63.145(g). For purposes of this paragraph, a process wastewater stream is considered to contain styrene if the wastewater stream meets the requirements in paragraph (b)(18)(i), (ii), (iii), (iv), or (v) of this section.

(i) The wastewater stream originates at equipment that produces ABS or ABS latex;

(ii) The wastewater stream originates at equipment that produces EPS;

(iii) The wastewater stream originates at equipment that produces MABS;

(iv) The wastewater stream originates at equipment that produces MBS; or

(v) The wastewater stream originates at equipment that produces SAN.

(19) When the provisions of

§ 63.139(c)(1)(ii), § 63.145(d)(4), or § 63.145(i)(2) specify that Method 18, 40 CFR part 60, appendix A, shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A, may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A, shall conform with the requirements in paragraphs (b)(19)(i) and (b)(19)(ii) of this section.

(i) The organic HAP used as the calibration gas for Method 25A, 40 CFR part 60, appendix A, shall be the single organic HAP representing the largest percent by volume of the emissions.

(ii) The use of Method 25A, 40 CFR part 60, appendix A, is acceptable if the response from the high-level calibration gas is at least 20 times the standard deviation of the response from the zero calibration gas when the instrument is zeroed on the most sensitive scale.

(20) In § 63.145(j), instead of the reference to § 63.11(b), and instead of § 63.145(j)(1) and § 63.145(j)(2), the requirements in § 63.1333(e) shall apply.

(21) The owner or operator of a facility which receives a Group 1 wastewater stream, or a residual removed from a Group 1 wastewater stream, for treatment pursuant to $\S 63.132(g)$ is subject to the requirements of $\S 63.132(g)$ with the differences identified in this section, and is not subject to subpart DD of this part with respect to that material.

(22) When \S 63.132(g) refers to "\$ 63.133 through 63.137" or "\$ 63.133 through 63.147", the provisions in this section 63.1330 shall apply, for the purposes of this subpart.

(c) For each affected source, the owner or operator shall comply with the requirements for maintenance wastewater in § 63.105, except that when § 63.105(a) refers to "organic HAPs listed in table 9 of subpart G of this part," the owner or operator is only required to consider compounds that meet the definition of organic HAP in § 63.1312 and that are listed in table 9 of 40 CFR part 63, subpart G, except for ethylene glycol which need not be considered, for the purposes of this subpart.

* *

50. Section 63.1331 is amended by: a. Revising paragraph (a) introductory text;

b. Revising paragraph (a)(2);

c. Revising paragraphs (a)(4) and (a)(5);

d. Revising paragraph (a)(6) introductory text;

e. Revising paragraph (a)(6)(i);

f. Revising paragraphs (a)(6)(ii)(A) and (a)(6)(ii)(B);

g. Revising paragraph (a)(7);

h. Revising paragraph (a)(8)

introductory text;

i. Revising paragraph (a)(10);

j. Revising paragraph (b);

k. Adding paragraphs (a)(6)(iii) and (a)(6)(iv);

l. Adding paragraphs (a)(11) through (a)(13); and

m. Removing and reserving paragraph (a)(9).

The revisions and additions read as follows:

§63.1331 Equipment leak provisions.

(a) Except as provided for in paragraphs (b) and (c) of this section, the owner or operator of each affected source shall comply with the requirements of subpart H of this part, with the differences noted in paragraphs (a)(1) through (a)(13) of this section.

(2) The compliance date for the equipment leak provisions contained in this section is provided in §63.1311. Whenever subpart H of this part refers to the compliance dates specified in any paragraph contained in §63.100, the compliance dates listed in §63.1311(d) shall instead apply, for the purposes of this subpart. When §63.182(c)(4) refers to "sources subject to subpart F," the phrase "sources subject to this subpart" shall apply, for the purposes of this subpart. In addition, extensions of compliance dates are addressed by §63.1311(e) instead of §63.182(a)(6), for the purposes of this subpart.

* * * *

(4) As specified in § 63.1335(e)(5), the Notification of Compliance Status required by paragraphs § 63.182(a)(2) and § 63.182(c) shall be submitted within 150 days (rather than 90 days) of the applicable compliance date specified in § 63.1311 for the equipment leak provisions.

(5) The information specified by § 63.182(a)(3) and § 63.182(d) (*i.e.*, Periodic Reports) shall be submitted as part of the Periodic Reports required by § 63.1335(e)(6).

(6) For pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in light liquid or heavy liquid service; and instrumentation systems, owners or operators of affected sources producing PET shall comply with the requirements of paragraphs (a)(6)(i) and (a)(6)(ii) of this section instead of with the requirements of §63.169. Owners or operators of PET affected sources shall comply with all other provisions of subpart H of this part for pumps, valves, connectors, and agitators in heavy liquid service; pressure relief devices in light liquid or heavy liquid service; and instrumentation systems, except as specified in paragraphs (a)(6)(iii) through (a)(6)(iv) of this section.

(i) A leak is determined to be detected if there is evidence of a potential leak found by visual, audible, or olfactory means. Method 21, 40 CFR part 60, appendix A may not be used to determine the presence or absence of a leak.

(ii)(A) When a leak is detected, it shall be repaired as soon as practical, but not later than 15 days after it is detected, except as provided in § 63.171.

(B) The first attempt at repair shall be made no later than 5 days after each leak is detected.

(iii) An owner or operator is not required to develop an initial list of identification numbers as would otherwise be required under \S 63.181(b)(1)(i) or \S 63.181(b)(4).

*

(iv) When recording the detection of a leak under \S 63.182(d)(1), the owner or operator of an affected source shall comply with paragraphs (a)(6)(iv)(A) through (a)(6)(iv)(B) of this section.

(A) When complying with \S 63.181(d)(1), provide an identification number for the leaking equipment at the time of record keeping. Further, the owner or operator is not required to record the identification number of the instrument (*i.e.*, Method 21 instrument) because the use of Method 21 is not an acceptable method for determining a leak under this paragraph (a)(6).

(B) An owner or operator is not required to comply with § 63.181(d)(4) which requires a record of the maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A.

(7) When § 63.166(b)(4)(i) refers to Table 9 of subpart G of this part, the owner or operator is only required to consider organic HAP listed on Table 6 of this subpart for purposes of this subpart, except for ethylene glycol which need not be considered.

(8) When the provisions of subpart H of this part specify that Method 18, 40 CFR part 60, appendix A, shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A, may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A, shall conform with the requirements in paragraphs (a)(8)(i) and (a)(8)(ii) of this section.

* * * * *

(9) [Reserved.]

(10) If specific items of equipment, comprising part of a process unit subject to this subpart, are managed by different administrative organizations (*e.g.*, different companies, affiliates, departments, divisions, *etc.*), those items of equipment may be aggregated with any TPPU within the affected source for all purposes under subpart H of this part, providing there is no delay in achieving the applicable compliance date.

(11) When the terms "equipment" and "equipment leak" are used in subpart H of this part, the definitions of these terms in § 63.1312 shall apply for the purposes of this subpart.

(12) The phrase "the provisions of subparts F, I, or JJJ of this part" shall apply instead of the phrase "the provisions of subpart F or I of this part" throughout §§ 63.163 and 63.168, for the purposes of this subpart. In addition, the phrase "subparts F, I, and JJJ" shall apply instead of the phrase "subparts F and I" in § 63.174(c)(2)(iii), for the purposes of this subpart.

(13) An owner or operator using a flare to comply with the requirements of this section shall conduct a compliance demonstration as specified in \S 63.1333(e).

(b) The provisions of this section do not apply to each TPPU producing PET using a process other than a continuous terephthalic acid (TPA) high viscosity multiple end finisher process that is part of an affected source if all of the equipment leak components subject to this section § 63.1331 in the TPPU are either in vacuum service or in heavy liquid service.

(1) Owners and operators of a TPPU exempted under paragraph (b) of this section shall comply with paragraph (b)(1)(i) or (b)(1)(ii) of this section.

(i) Retain information, data, and analyses used to demonstrate that all of the components in the exempted TPPU are either in vacuum service or in heavy liquid service. For components in vacuum service, examples of information that could document this include, but are not limited to, analyses of process stream composition and process conditions, engineering calculations, or process knowledge. For components in heavy liquid service, such documentation shall include an analysis or demonstration that the process fluids do not meet the criteria of "in light liquid service" or "in gas or vapor service.'

(ii) When requested by the Administrator, demonstrate that all of the components in the TPPU are either in vacuum service or in heavy liquid service.

(2) If changes occur at a TPPU exempted under paragraph (b) of this section such that all of the components in the TPPU are no longer either in vacuum service or in heavy liquid service (*e.g.*, by either process changes or the addition of new components), the owner or operator of the affected source shall comply with the provisions of this section for all of the components at the TPPU. The owner or operator shall 38128

submit a report within 180 days after the process change is made or the information regarding the process change is known to the owner or operator. This report may be included in the next Periodic Report, as specified in paragraph (a)(5) of this section. A description of the process change shall be submitted with this report.

* * * * 51. Section 63.1333 is amended by:

a. Revising the section title;

b. Revising paragraph (a) introductory text:

c. Revising paragraphs (a)(1) and (a)(2);

d. Revising paragraph (a)(4);

e. Revising paragraph (b) introductory text:

f. Adding paragraph (a)(5); and

g. Adding paragraph (e). The revisions and additions read as

follows:

§63.1333 Additional requirements for performance testing.

(a) Performance testing shall be conducted in accordance with §63.7(a)(1), (a)(3), (d), (e)(1), (e)(2), (e)(4), (g), and (h), with the exceptions specified in paragraphs (a)(1) through (a)(5) of this section and the additions specified in paragraphs (b) through (d) of this section. Sections 63.1314 through 63.1330 also contain specific testing requirements.

(1) Performance tests shall be conducted according to the provisions of § 63.7(e)(1) and (e)(2), except that performance tests shall be conducted at maximum representative operating conditions achievable during one of the time periods described in paragraph (a)(1)(i) of this section, without causing any of the situations described in paragraph (a)(1)(ii) of this section to occur.

(i) The 6-month period that ends 2 months before the Notification of Compliance Status is due, according to §63.1335(e)(5); or the 6-month period that begins 3 months before the performance test and ends 3 months after the performance test.

(ii) Causing damage to equipment; necessitating that the owner or operator make product that does not meet an existing specification for sale to a customer; or necessitating that the owner or operator make product in excess of demand.

(2) The requirements in §63.1335(e)(5) shall apply instead of the references in § 63.7(g) to the Notification of Compliance Status requirements in §63.9(h).

*

(4) The owner or operator shall notify the Administrator of the intention to

conduct a performance test at least 30 days before the performance test is scheduled to allow the Administrator the opportunity to have an observer present during the test. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator by mutual agreement.

(5) Performance tests shall be performed no later than 150 days after the compliance dates specified in this subpart (*i.e.*, in time for the results to be included in the Notification of Compliance Status), rather than according to the time periods in §63.7(a)(2) of subpart A of this part.

(b) Each owner or operator of an existing affected source producing MBS complying with § 63.1315(b)(2) shall determine compliance with the mass emission per mass product standard by using Equation 49 of this subpart. When determining E_i, when the provisions of §63.116(c)(4) specify that Method 18, 40 CFR part 60, appendix A, shall be used, Method 18 or Method 25A, 40 CFR part 60, appendix A, may be used for the purposes of this subpart. The use of Method 25A, 40 CFR part 60, appendix A, shall conform with the requirements in paragraphs (b)(1) and (b)(2) of this section.

$$ER_{MBS} = \frac{\sum_{i=1}^{n} E_i}{PP_M} \qquad [Eq. 49]$$

Where:

- ER_{MBS} = Emission rate of organic HAP or TOC from continuous process vents, kg/Mg product.
- E_i = Emission rate of organic HAP or TOC from continuous process vent i as calculated using the procedures specified in §63.116(c)(4), kg/ month.
- PP_M = Amount of polymer produced in one month as determined by the procedures specified in §63.1318(b)(1)(ii), Mg/month.
- n = Number of continuous process vents.
- *

(e) Notwithstanding any other provision of this subpart, if an owner or operator of an affected source uses a flare to comply with any of the requirements of this subpart, the owner

or operator shall comply with paragraphs (e)(1) through (e)(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. If a compliance demonstration has been conducted previously for a flare, using the techniques specified in paragraphs (e)(1) through (e)(3) of this section, that compliance demonstration may be used to satisfy the requirements of this paragraph if either no deliberate process changes have been made since the compliance demonstration, or the results of the compliance demonstration reliably demonstrate compliance despite process changes.

(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); and

(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 $\S63.11(b)(8)$, as appropriate.

52. Section 63.1334 is amended by:

a. Revising paragraph (a);

b. Revising paragraph (b) introductory text;

c. Revising paragraph (b)(3) introductory text;

d. Revising paragraphs (b)(3)(i)(A) through (b)(3)(i)(D);

e. Revising paragraph (b)(3)(ii);

f. Revising paragraph (c);

g. Revising paragraph (d);

h. Revising paragraph (f)(1)

introductory text;

i. Revising paragraphs (f)(1)(ii) and (f)(1)(iii);

j. Revising paragraph (f)(2)

introductory text;

k. Revising paragraph (f)(2)(ii);

l. Removing and reserving paragraph (b)(1);

m. Removing and reserving paragraph (e);

n. Removing paragraph (b)(3)(i)(E);

o. Adding paragraph (f)(1)(v); and

p. Adding paragraph (f)(3) through

(f)(7).

The revisions and additions read as follows:

§63.1334 Parameter monitoring levels and excursions.

(a) Establishment of parameter monitoring levels. The owner or operator of a control or recovery device that has one or more parameter monitoring level requirements specified under this subpart shall establish a maximum or minimum level for each