

each process vent as specified in § 65.5(c)(2).

(b) *Group 1.* A process vent is considered Group 1 if it meets at least one of the following specifications:

(1) The owner or operator designates the process vent as Group 1.

(2) At representative operating conditions expected to yield the lowest TRE index value for the process vent, the TRE index value is less than or equal to 1.0, the flow rate is greater than or equal to 0.011 standard cubic meter per minute (0.40 standard cubic foot per minute), and the concentration is greater than or equal to the applicable criterion in table 1 of this subpart. Procedures for determining the TRE index value, flow rate, and concentration are specified in § 65.64.

(c) *Group 2A.* A process vent is considered Group 2A if, at representative operating conditions expected to yield the lowest TRE index value, it has a TRE index value of greater than 1.0 and less than or equal to 4.0, a flow rate of greater than or equal to 0.011 standard cubic meter per minute (0.40 standard cubic foot per minute), and a concentration greater than or equal to the applicable table 1 criterion. Procedures for determining the TRE index value, flow rate, and concentration are specified in § 65.64.

(d) *Group 2B.* A process vent is considered Group 2B if, at representative operating conditions expected to yield the lowest TRE index value, it has a TRE index value of greater than 4.0; or a flow rate of less than 0.011 standard cubic meter per minute (0.40 standard cubic foot per minute); or a concentration less than the applicable criterion in table 1 of this subpart. Procedures for determining the TRE index value, flow rate, and concentration are specified in § 65.64.

**§ 65.63 Performance and group status change requirements.**

(a) *Group 1 performance requirements.* Except for the additional requirement for halogenated vent streams as provided in paragraph (b) of this section, the owner or operator of a Group 1 process vent shall comply with the requirements of either paragraph (a)(1), (2), or (3) of this section.

(1) *Flare.* Reduce emissions of regulated material using a flare meeting the applicable requirements of § 65.142(b).

(2) *98 percent or 20 parts per million standard.* Reduce emissions of regulated material or TOC by at least 98 weight-percent or to a concentration of less than 20 parts per million by volume, whichever is less stringent. For combustion devices, the emission reduction or concentration shall be calculated on a dry basis, and corrected to 3 percent oxygen. The owner or operator shall meet the requirements in § 65.142(b) and paragraphs (a)(2)(i) and/or (a)(2)(ii) of this section.

(i) Compliance with paragraph (a)(2) of this section may be achieved by using any combination of recovery and/or control device to meet the 20 parts per million by volume concentration standard; or by using any combination of recovery and/or control device to meet the 98 weight percent reduction standard, if the recovery device meets the conditions of paragraph (a)(2)(ii) of this section.

(ii) An owner or operator may use a recovery device alone or in combination with one or more control devices to reduce emissions of total regulated material by 98 weight-percent if all of the following conditions are met:

(A) For process vents referenced to this part by 40 CFR part 63, subpart G, the recovery device (and any control device that operates in combination with the recovery device to reduce emissions of total regulated material by 98 weight-percent) was installed before December 31, 1992.

(B) The recovery device that will be used to reduce emissions of total regulated material by 98 weight-percent is the last recovery device before emission to the atmosphere.

(C) The recovery device alone or in combination with one or more control devices is capable of reducing emissions of total regulated material by 98 weight-percent but is not capable of reliably reducing emissions of total regulated material to a concentration of 20 parts per million by volume.

(D) If the owner or operator disposed of the recovered material, the recovery device would be considered a control

device and comply with the requirements of this subpart and § 65.142(b) for control devices.

(3) *TRE index value.* Achieve and maintain a TRE index value greater than 1.0 at the outlet of the final recovery device, or prior to release from the process vent to the atmosphere if no recovery device is present. If the TRE index value is greater than 1.0, the process vent shall meet the provisions for a Group 2A or 2B process vent specified in either paragraph (c), (d), (e), or (f) of this section, whichever is applicable.

(b) *Halogenated Group 1 performance requirement.* Halogenated Group 1 process vents that are combusted shall be controlled according to paragraph (b)(1) or (2) of this section. The owner or operator shall either designate the Group 1 process vent as a halogenated Group 1 process vent or shall determine whether the process vent is halogenated using the procedures specified in § 65.64(g). If determined, the halogen concentration in the vent stream shall be recorded and reported in the Initial Compliance Status Report as specified in § 65.160(d). If the owner or operator designates the process vent as a halogenated Group 1 process vent, then this shall also be recorded and reported in the Initial Compliance Status Report.

(1) *Halogen reduction device following combustion.* If a combustion device is used to comply with paragraph (a)(2) of this section for a halogenated process vent, then the process vent exiting the combustion device shall be ducted to a halogen reduction device including, but not limited to, a scrubber before it is discharged to the atmosphere, and the halogen reduction device shall meet the requirements of paragraph (b)(1)(i) or (ii) of this section, as applicable. The halogenated process vent shall not be combusted using a flare.

(i) Except as provided in paragraph (b)(1)(ii) of this section, the halogen reduction device shall reduce overall emissions of hydrogen halides and halogens by 99 percent or shall reduce the outlet mass of total hydrogen halides and halogens to less than 0.45 kilogram per hour (0.99 pound per hour), whichever is less stringent. The owner or operator shall meet the requirements in § 65.142(b).

(ii) If a scrubber or other halogen reduction device was installed prior to December 31, 1992, the device shall reduce overall emissions of hydrogen halides and halogens by 95 percent or shall reduce the outlet mass of total hydrogen halides and halogens to less than 0.45 kilogram per hour (0.99 pound per hour), whichever is less stringent. The owner or operator shall meet the requirements in § 65.142(b).

(2) *Halogen reduction device prior to combustion.* A halogen reduction device, such as a scrubber, or other technique may be used to reduce the process vent halogen atom mass emission rate to less than 0.45 kilogram per hour (0.99 pound per hour) prior to any combustion control device and thus make the process vent nonhalogenated; the process vent must comply with the requirements of paragraph (a)(1) or (2) of this section. The mass emission rate of halogen atoms contained in organic compounds prior to the combustor shall be determined according to the procedures in § 65.64(g). The owner or operator shall maintain the record specified in § 65.160(d) and submit the report specified in § 65.165(d).

(c) *Performance requirements for Group 2A process vents with recovery devices.* For Group 2A process vents, where the owner or operator is using a recovery device to maintain a TRE index value greater than 1.0, the owner or operator shall maintain a TRE index value greater than 1.0 and comply with the requirements for recovery devices in § 65.142(b).

(d) *Performance requirements for Group 2A process vents without recovery devices.* For Group 2A process vents where the owner or operator is not using a recovery device to maintain a TRE index value greater than 1.0, determine the appropriate parameters to be monitored and submit the information as specified in paragraphs (d)(1), (2), and (3) of this section. Such information shall be submitted for approval to the Administrator as part of a title V permit application or by separate notice. The owner or operator shall monitor as specified in § 65.65(a), maintain the record specified in § 65.66(e), and submit reports as specified in § 65.67(c).

(1) *Parameter monitoring.* A description of the parameter(s) to be monitored to ensure the owner or operator of a process vent achieves and maintains the TRE above 1.0, and an explanation of the criteria used to select the parameter(s).

(2) *Demonstration methods and procedures.* A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the process, the schedule for this demonstration, and a statement that the owner or operator will establish a range for the monitored parameter as part of the Initial Compliance Status Report required in § 65.5(d), unless this information has already been included in the operating permit application.

(3) *Monitoring, recordkeeping, and reporting frequency.* The frequency and content of monitoring, recording, and reporting if monitoring and recordkeeping are not continuous, or if reports of daily average values when the monitored parameter value is outside the range established in the operating permit or Initial Compliance Status Report will not be included in periodic reports required under § 65.5(e). The rationale for the proposed monitoring, recording, and reporting system shall be included.

(e) *Group 2B performance requirements.* For Group 2B process vents, the owner or operator shall maintain a TRE index greater than 4.0, a flow rate less than 0.011 scmm, or a concentration less than the applicable criteria in table 1 to this subpart.

(f) *Group 2A or 2B process change requirements.* Whenever process changes are made that could reasonably be expected to change a Group 2A or 2B process vent to a Group 1 vent, the owner or operator shall recalculate the TRE index value, flow, or TOC or organic hazardous air pollutant (HAP) concentration according to paragraph (f)(1), (2), or (3) of this section as specified for each process vent as necessary to determine whether the process vent is Group 1, Group 2A, or Group 2B and shall maintain the applicable records specified in § 65.66(d) and submit the applicable reports specified in § 65.67(b). The owner or operator shall perform the group status determination as soon

as practical after the process change and within 180 days after the process change. Examples of process changes include, but are not limited to, changes in production capacity, production rate, feedstock type, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. For purposes of paragraph (f) of this section, process changes do not include process upsets; unintentional, temporary process changes; and changes that are within the range on which the original TRE index value calculation was based.

(1) *Flow rate.* The flow rate shall be determined as specified in the sampling site and flow rate determination procedures in § 65.64(b) and (d) or by using best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in § 65.64(i).

(2) *Concentration.* The TOC or organic HAP concentration shall be determined as specified in § 65.64(b) and (c) or by using best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in § 65.64(i).

(3) *TRE index value.* The TRE index value shall be recalculated based on measurements of process vent flow rate, TOC, and/or organic HAP concentrations, and heating values as specified in § 65.64(b), (c), (d), (e), (f), (g), and (h) as applicable, or based on best engineering assessment of the effects of the change. Engineering assessments shall meet the specifications in § 65.64(i).

(4) *Group status change to Group 1.* Where the process change causes the group status to change to Group 1, the owner or operator shall comply with the Group 1 process vent provisions in paragraph (a) of this section and, if they apply, the halogenated Group 1 process vent provisions in paragraph (b) of this section upon initial startup after the change and thereafter unless the owner or operator demonstrates to the Administrator that achieving compliance will take longer than making the process change. If this demonstration is made to the Administrator's satisfaction, the owner or operator shall comply as expeditiously as practical, but in no event later than 3 years

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after the emission point becomes Group 1, and shall comply with the following procedures to establish a compliance date:

(i) The owner or operator shall submit to the Administrator for approval a compliance schedule, along with a justification for the schedule.

(ii) The compliance schedule shall be submitted with the operating permit application or amendment or by other appropriate means.

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

(5) *Group status change to Group 2A.* Whenever a process change causes the process vent group status to change to Group 2A, the owner or operator shall comply with the provisions of paragraph (c) or (d) of this section upon completion of the group status determination of the process vent.

(6) *Group status change to Group 2B.* Whenever a process change causes the process vent group status to change to Group 2B, the owner or operator shall comply with the provisions of paragraph (e) of this section as soon as practical after the process change.

**§ 65.64 Group determination procedures.**

(a) *General.* The provisions of this section provide calculation and measurement methods for parameters that are used to determine group status.

(b)(1) *Sampling site.* For purposes of determining TOC or HAP concentration, process vent volumetric flow rate, heating value, or TRE index value as specified under paragraph (c), (d), (e), (f), or (h) of this section, the sampling site shall be located after the last recovery device (if any recovery devices are present) but prior to the inlet of any control device that is present, and prior to release to the atmosphere.

(2) *Sampling site when a halogen reduction device is used prior to a combustion device.* An owner or operator using a scrubber or other halogen reduction device to reduce the process vent halogen atom mass emission rate to less than 0.45 kilogram per hour (0.99 pound per hour) prior to a combustion control device in compliance with § 65.63(b)(2)

shall determine the halogen atom mass emission rate prior to the combustor and after the scrubber or other halogen reduction device according to the procedures in paragraph (g) of this section.

(3) *Sampling site selection method.* Method 1 or 1A of appendix A of 40 CFR part 60, as appropriate, shall be used for selection of the sampling site. No traverse site selection method is needed for process vents smaller than 0.10 meter (4 inches) in nominal inside diameter.

(c) *TOC or HAP concentration.* The TOC or HAP concentrations used for TRE index value calculations in paragraph (h) of this section shall be determined based on paragraph (c)(1) or (i) of this section, or any other method or data that have been validated according to the protocol in Method 301 of appendix A of 40 CFR part 63. For concentrations needed for comparison with the appropriate concentration in table 1 of this subpart, TOC or HAP concentration shall be determined based on paragraph (c)(1), (c)(2), or (i) of this section or any other method or data that have been validated according to the protocol in Method 301 of appendix A of 40 CFR part 63. The owner or operator shall record the TOC or HAP concentration as specified in § 65.66(c).

(1) *Method 18.* The procedures specified in paragraph (c)(1)(i) and (ii) of this section shall be used to calculate parts per million by volume concentration using Method 18 of appendix A of 40 CFR part 60.

(i) The minimum sampling time for each run shall be 1 hour in which either an integrated sample or four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15-minute intervals during the run.

(ii) The concentration of either TOC (minus methane and ethane) or organic HAP emissions shall be calculated using the following two procedures, as applicable.

(A) The TOC concentration ( $C_{TOC}$ ) is the sum of the concentrations of the individual components and shall be computed for each run using Equation 64-1 of this section: