

Citation	Summary of requirement	Am I subject to this requirement?	Explanations
§ 63.10(a)	Recordkeeping/Reporting General Requirements.	Yes	See §§ 63.7131 through 63.7133.
§ 63.10(b)(1)–(b)(2)(xii) § 63.10(b)(2)(xiii)	Records Records for Relative Accuracy Test.	Yes. No.	
§ 63.10(b)(2)(xiv) § 63.10(b)(3) § 63.10(c)	Records for Notification Applicability Determinations ... Additional CMS Record-keeping.	Yes. Yes. No	See § 63.7132.
§ 63.10(d)(1)	General Reporting Requirements.	Yes.	
§ 63.10(d)(2) § 63.10(d)(3)	Performance Test Results Opacity or VE Observations ..	Yes. Yes	For the periodic monitoring requirements in Table 6 to subpart AAAAA, report according to § 63.10(d)(3) only if VE observed and subsequent visual opacity test is required.
§ 63.10(d)(4)	Progress Reports	Yes.	
§ 63.10(d)(5)	Startup, Shutdown, Malfunction Reports.	Yes.	
§ 63.10(e)	Additional CMS Reports	No	
§ 63.10(f)	Waiver for Recordkeeping/Reporting.	Yes.	
§ 63.11(a)–(b) § 63.12(a)–(c)	Control Device Requirements State Authority and Delegations.	No Yes.	Flares not applicable.
§ 63.13(a)–(c)	State/Regional Addresses	Yes.	
§ 63.14(a)–(b)	Incorporation by Reference ...	No.	
§ 63.15(a)–(b)	Availability of Information	Yes.	

Subpart BBBB—National Emission Standards for Hazardous Air Pollutants for Semiconductor Manufacturing

SOURCE: 68 FR 27925, May 22, 2003, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 63.7180 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for semiconductor manufacturing facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

§ 63.7181 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate a semiconductor manufacturing process unit that is a major source of hazardous air pollutants (HAP) emissions or that is located

at, or is part of, a major source of HAP emissions.

(b) A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, any single HAP at a rate of 10 tons per year (tpy) or more or any combination of HAP at a rate of 25 tpy or more.

§ 63.7182 What parts of my facility does this subpart cover?

(a) This subpart applies to each new, reconstructed, or existing affected source that you own or operate that manufactures semiconductors.

(b) An affected source subject to this subpart is the collection of all semiconductor manufacturing process units used to manufacture p-type and n-type semiconductors and active solid-state devices from a wafer substrate, including research and development activities integrated into a semiconductor

manufacturing process unit. A semiconductor manufacturing process unit includes the equipment assembled and connected by ductwork or hard-piping including furnaces and associated unit operations; associated wet and dry work benches; associated recovery devices; feed, intermediate, and product storage tanks; product transfer racks and connected ducts and piping; pumps, compressors, agitators, pressure-relief devices, sampling connecting systems, open-ended valves or lines, valves, connectors, and instrumentation systems; and control devices.

(c) Your affected source is a new affected source if you commence construction of the affected source after May 8, 2002, and you meet the applicability criteria in § 63.7181 at the time you commence construction.

(d) Your affected source is a reconstructed affected source if you meet the criteria for “reconstruction,” as defined in § 63.2.

(e) Your source is an existing affected source if it is not a new or reconstructed affected source.

§ 63.7183 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section.

(1) If you start up your affected source before May 22, 2003, then you must comply with the emission standards for new and reconstructed sources in this subpart no later than May 22, 2003.

(2) If you start up your affected source after May 22, 2003, then you must comply with the emission standards for new and reconstructed sources in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the emission standards for existing sources no later than 3 years from May 22, 2003.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP and an affected source subject to this subpart, paragraphs (c)(1) and (2) of this section apply.

(1) Any portion of your existing facility that is a new affected source as

specified at § 63.7182(c), or a reconstructed affected source as specified at § 63.7182(d), must be in compliance with this subpart upon startup.

(2) Any portion of your facility that is an existing affected source, as specified at § 63.7182(e), must be in compliance with this subpart by not later than 3 years after it becomes a major source.

(d) You must meet the notification requirements in § 63.7189 and in subpart A of this part. You must submit some of the notifications (*e.g.*, Initial Notification) before the date you are required to comply with the emission limitations in this subpart.

EMISSION STANDARDS

§ 63.7184 What emission limitations, operating limits, and work practice standards must I meet?

(a) If you have a new, reconstructed, or existing affected source, as defined in § 63.7182(b), you must comply with all applicable emission limitations in this section on and after the compliance dates specified in § 63.7183.

(b) *Process vents—organic HAP emissions.* For each organic HAP process vent, other than process vents from storage tanks, you must limit organic HAP emissions to the level specified in paragraph (b)(1) or (2) of this section. These limitations can be met by venting emissions from your process vent through a closed vent system to any combination of control devices meeting the requirements of § 63.982(a)(2).

(1) Reduce the emissions of organic HAP from the process vent stream by 98 percent by weight.

(2) Reduce or maintain the concentration of emitted organic HAP from the process vent to less than or equal to 20 parts per million by volume (ppmv).

(c) *Process vents—inorganic HAP emissions.* For each inorganic HAP process vent, other than process vents from storage tanks, you must limit inorganic HAP emissions to the level specified in paragraph (c)(1) or (2) of this section. These limitations can be met by venting emissions from your process vent through a closed vent system to a halogen scrubber meeting the requirements of §§ 63.983 (closed vent system requirements) and § 63.994 (halogen

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scrubber requirements); the applicable general monitoring requirements of § 63.996; the applicable performance test requirements; and the monitoring, recordkeeping and reporting requirements referenced therein.

(1) Reduce the emissions of inorganic HAP from the process vent stream by 95 percent by weight.

(2) Reduce or maintain the concentration of emitted inorganic HAP from the process vent to less than or equal to 0.42 ppmv.

(d) *Storage tanks.* For each storage tank, 1,500 gallons or larger, you must limit total HAP emissions to the level specified in paragraph (d)(1) or (2) of this section if the emissions from the storage tank vent contains greater than 0.42 ppmv inorganic HAP. These limitations can be met by venting emissions from your storage tank through a closed vent system to a halogen scrubber meeting the requirements of §§ 63.983 (closed vent system requirements) and 63.994 (halogen scrubber requirements); the applicable general monitoring requirements of § 63.996; the applicable performance test requirements; and the monitoring, recordkeeping and reporting requirements referenced therein.

(1) Reduce the emissions of inorganic HAP from each storage tank by 95 percent by weight.

(2) Reduce or maintain the concentration of emitted inorganic HAP from the process vent to less than or equal to 0.42 ppmv.

(e) You must comply with the applicable work practice standards and operating limits contained in § 63.982(a)(1) and (2). The closed vent system inspection requirements of § 63.983(c), as referenced by § 63.982(a)(1) and (2), do not apply.

(f) *Process vents—combined HAP emissions.* For each combined HAP process vent, other than process vents from storage tanks, you must reduce or maintain the concentration of emitted HAP from the process vent to less than or equal to 14.22 ppmv. These limitations can be met by venting emissions from your process vent through a closed vent system to any combination

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of control devices meeting the requirements of § 63.982(a)(2).

[68 FR 27925, May 22, 2003, as amended at 73 FR 42532, July 22, 2008]

COMPLIANCE REQUIREMENTS

§ 63.7185 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the requirements of § 63.7184 at all times, except during periods of startup, shutdown, or malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i).

(c) You must develop a written startup, shutdown, and malfunction plan (SSMP). Your SSMP must be prepared in accordance with the provisions in § 63.6(e)(3).

(d) You must perform all the items listed in paragraphs (d)(1) through (3) of this section:

(1) Submit the necessary notifications in accordance with § 63.7189.

(2) Submit the necessary reports in accordance with § 63.7190.

(3) Maintain all necessary records you have used to demonstrate compliance with this subpart in accordance with § 63.7191.

[68 FR 27925, May 22, 2003, as amended at 71 FR 20467, Apr. 20, 2006]

§ 63.7186 By what date must I conduct performance tests or other initial compliance demonstrations?

For each process vent or storage tank vent emission limitation in § 63.7184 for which initial compliance is demonstrated by meeting a percent by weight HAP emissions reduction, or a HAP concentration limitation, you must conduct performance tests or an initial compliance demonstration within 180 days after the compliance date that is specified for your source in § 63.7183 and according to the provisions in § 63.7(a)(2).

§ 63.7187 What performance tests and other compliance procedures must I use?

(a) You must conduct each performance test in Table 1 to this subpart

that applies to you as specified for process vents in § 63.982(a)(2) and storage tanks in § 63.982(a)(1). Performance tests must be conducted under maximum operating conditions or HAP emissions potential. Section 63.982(a)(1) and (2) only includes methods to measure the total organic regulated material or total organic carbon (TOC) concentration. The EPA Methods 26 and 26A are included in Table 1 to this subpart in addition to the test methods contained within § 63.982(a)(1) and (2). The EPA Method 26 or 26A must be used for testing regulated material containing inorganic HAP. Method 320 of 40 CFR part 63, appendix A, must be used to measure total vapor phase organic and inorganic HAP concentrations.

(b) If, without the use of a control device, your process vent stream has an organic HAP concentration of 20 ppmv or less or an inorganic HAP concentration of 0.42 ppmv or less, or your storage tank vent stream has an inorganic HAP concentration of 0.42 ppmv or less, you may demonstrate that the vent stream is compliant by engineering assessments and calculations or by conducting the applicable performance test requirements specified in Table 1 to this subpart. Your engineering assessments and calculations, as with performance tests (as specified in § 63.982(a)(1) and (2)), must represent your maximum operating conditions or HAP emissions potential and must be approved by the Administrator. You must demonstrate continuous compliance by certifying that your operations will not exceed the maximum operating conditions or HAP emissions potential represented by your engineering assessments, calculations, or performance test.

(c) If you are using a control device to comply with the emission limitations in § 63.7184 and the inlet concentration of HAP to the control device is 20 ppmv or less, then you may demonstrate that the control device meets the percent by weight HAP emission reduction limitation in § 63.7184(c)(1) or (d)(1) by conducting a design evaluation as specified in paragraph (i) of this section. Your design evaluation must represent your maximum operating conditions or HAP

emissions potential and must be approved by the Administrator. You must demonstrate continuous compliance by certifying that your operations will not exceed the maximum operating conditions or HAP emissions potential represented by your design evaluation.

(d) [Reserved]

(e) For each monitoring system required in this section, you must develop and submit for approval a site-specific monitoring plan that addresses the criteria specified in paragraphs (e)(1) through (3) of this section.

(1) Installation of the continuous monitoring system (CMS) sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device);

(2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system; and

(3) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations).

(f) In your site-specific monitoring plan, you must also address the procedural processes in paragraphs (f)(1) through (3) of this section.

(1) Ongoing operation and maintenance procedures in accordance with the general requirements of § 63.8(c)(1), (3), (4)(ii), (7), and (8);

(2) Ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d); and

(3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of § 63.10(c), (e)(1), and (e)(2)(i).

(g) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(h) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(i) *Design evaluation.* To demonstrate that a control device meets the required percent by weight inorganic HAP emission reduction limitation in § 63.7184(c)(1) or (d)(1), a design evaluation must address the composition of

the inorganic HAP concentration of the vent stream entering the control device. A design evaluation also must address other vent stream characteristics and control device operating parameters as specified in any one of paragraphs (i)(1) through (5) of this section, depending on the type of control device that is used. If the vent stream is not the only inlet to the control device, the efficiency demonstration must also consider all other vapors, gases, and liquids, other than fuels, received by the control device.

(1) For a condenser, the design evaluation shall consider the vent stream flow rate, relative humidity, and temperature and shall establish the design outlet organic HAP compound concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet. The temperature of the gas stream exiting the condenser must be measured and used to establish the outlet organic HAP concentration.

(2) For a carbon adsorption system that regenerates the carbon bed directly onsite in the control device such as a fixed-bed adsorber, the design evaluation shall consider the vent stream flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration level, adsorption cycle time, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total regeneration stream mass or volumetric flow over the period of each complete carbon bed regeneration cycle, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon. For vacuum desorption, the pressure drop shall be included.

(3) For a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device such as a carbon canister, the design evaluation shall consider the vent stream mass or volumetric flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound con-

centration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(4) For a scrubber, the design evaluation shall consider the vent stream composition, constituent concentrations, liquid-to-vapor ratio, scrubbing liquid flow rate and concentration, temperature, and the reaction kinetics of the constituents with the scrubbing liquid. The design evaluation shall establish the design exhaust vent stream organic compound concentration level and will include the additional information in paragraphs (i)(5)(i) and (ii) of this section for trays and a packed column scrubber.

(i) Type and total number of theoretical and actual trays;

(ii) Type and total surface area of packing for entire column, and for individual packed sections if column contains more than one packed section.

[68 FR 27925, May 22, 2003, as amended at 71 FR 20467, Apr. 20, 2006]

§63.7188 What are my monitoring installation, operation, and maintenance requirements?

If you comply with the emission limitations of §63.7184 by venting the emissions of your semiconductor process vent through a closed vent system to a control device, you must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must meet the applicable general monitoring, installation, operation, and maintenance requirements specified in §63.996.

(b) You must meet the monitoring, installation, operation, and maintenance requirements specified for closed vent systems and applicable control devices in §§63.983 through 63.995. If you used the design evaluation procedure in §63.7187(i) to demonstrate compliance, you must use the information from the design evaluation to establish the operating parameter level for monitoring of the control device.

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APPLICATIONS, NOTIFICATIONS, REPORTS, AND RECORDS

§ 63.7189 What applications and notifications must I submit and when?

(a) You must submit all of the applications and notifications in §§ 63.7(b) and (c); 63.8(e), (f)(4) and (f)(6); and 63.9(b) through (e), (g) and (h) that apply to you by the dates specified.

(b) As specified in § 63.9(b)(2), if you start up your new or reconstructed affected source before May 22, 2003, you must submit an Initial Notification not later than 120 calendar days after May 22, 2003.

(c) As specified in § 63.9(b)(3), if you start up your new or reconstructed affected source on or after May 22, 2003, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in § 63.7(b)(1).

(e) If you are required to conduct a performance test or other initial compliance demonstration, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii) and according to paragraphs (e)(1) and (2) of this section.

(1) For each initial compliance demonstration that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration. If you used the design evaluation procedure in § 63.7187(i) to demonstrate compliance, you must include the results of the design evaluation in the Notification of Compliance Status.

(2) For each initial compliance demonstration required that includes a performance test conducted according to the requirements in Table 1 to this subpart, you must submit a notification of the date of the performance evaluation at least 60 days prior to the date the performance evaluation is scheduled to begin as required in § 63.8(e)(2).

§ 63.7190 What reports must I submit and when?

(a) You must submit each of the following reports that apply to you.

(1) *Periodic compliance reports.* You must submit a periodic compliance report that contains the information required under paragraphs (c) through (e) of this section, and any requirements specified to be reported for process vents in § 63.982(a)(2) and storage tanks in § 63.982(a)(1).

(2) *Immediate startup, shutdown, and malfunction report.* You must submit an Immediate Startup, Shutdown, and Malfunction Report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP. Your report must contain actions taken during the event. You must submit this report by fax or telephone within 2 working days after starting actions inconsistent with you SSMP. You are required to follow up this report with a report specifying the information in § 63.10(d)(5)(ii) by letter within 7 working days after the end of the event unless you have made alternative arrangements with your permitting authority.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the date according to paragraphs (b)(1) through (5) of this section.

(1) The first periodic compliance report must cover the period beginning on the compliance date that is specified for your affected source in § 63.7183 and ending on June 30 or December 31, whichever date is the first date following the end of the first 12 calendar months after the compliance date that is specified for your source in § 63.7183.

(2) The first periodic compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first 12 calendar months after the compliance date that is specified for your affected source in § 63.7183.

(3) Each subsequent periodic compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

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(4) Each subsequent periodic compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent periodic compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The periodic compliance report must contain the information specified in paragraphs (c)(1) through (5) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there are no deviations from any emission limitations that apply to you, a statement that there were no deviations from the emission limitations during the reporting period and that no CMS was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(5) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, your periodic compliance report must include the information in § 63.10(d)(5) for each startup, shutdown, and malfunction.

(d) For each deviation from an emission limitation that occurs at an affected source where you are not using a CMS to comply with the emission limitations, the periodic compliance report must contain the information in paragraphs (d)(1) through (2) of this section.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause), if applicable.

(e) For each deviation from an emission limitation occurring at an affected source where you are using a CMS to demonstrate compliance with the emission limitation, you must include the information in paragraphs (e)(1) through (8) of this section.

(1) The date and time that each malfunction started and stopped, and the reason it was inoperative.

(2) The date and time that each CMS was inoperative, except for calibration checks.

(3) The date and time that each CMS was out-of-control, including the information in § 63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period, and the cause of the deviation.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total source operating time during the reporting period.

(7) An identification of each HAP that was monitored at the affected source.

(8) The date of the latest CMS certification or audit.

§ 63.7191 What records must I keep?

(a) You must keep the records listed in paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Notification of Compliance Status and periodic report of compliance that you submitted, according to the requirements in § 63.10(b)(2)(xiv).

(2) The records in § 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunctions.

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(3) Records of performance tests and performance evaluations as required in § 63.10(b)(2)(viii).

(b) For each CMS, you must keep the records listed in paragraphs (b)(1) through (5) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) All required measurements needed to demonstrate compliance with a relevant standard (*e.g.*, 30-minute averages of CMS data, raw performance testing measurements, raw performance evaluation measurements).

(3) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) Records for process vents according to the requirements specified in § 63.982(a)(2) and storage tank vents according to the requirements specified in § 63.982(a)(1).

§ 63.7192 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to § 63.10(b)(1).

(b) As specified in § 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records offsite for the remaining 3 years.

OTHER REQUIREMENTS AND INFORMATION

§ 63.7193 What parts of the General Provisions apply to me?

Table 2 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.13 apply to you.

§ 63.7194 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environ-

mental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the U.S. EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are as listed in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the non-opacity emission limitations in § 63.7184 under § 63.6(g).

(2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.

(3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.

(4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.

§ 63.7195 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §§ 63.2 and 63.981, the General Provisions of this part (40 CFR part 63, subpart A), and in this section as follows:

Combined HAP process vent means a *process vent* that emits both inorganic and organic HAP to the atmosphere.

Control device means a combustion device, recovery device, recapture device, or any combination of these devices used for the primary purpose of reducing emissions to comply with this subpart. Devices that are inherent to a process or are integral to the operation of a process are not considered control devices for the purposes of this subpart, even though these devices may have the secondary effect of reducing emissions.

Inorganic HAP process vent means a process vent that emits only inorganic HAP to the atmosphere.

Organic HAP process vent means a process vent that emits only organic HAP to the atmosphere.

Process vent means the point at which HAP emissions are released to the atmosphere from a semiconductor manufacturing process unit or storage tank by means of a stack, chimney, vent, or other functionally equivalent opening. The HAP emission points originating from wastewater treatment equipment, other than storage tanks, are not considered to be a process vent, unless the wastewater treatment equipment emission points are connected to a common vent or exhaust plenum with other process vents.

Semiconductor manufacturing means the collection of semiconductor manufacturing process units used to manufacture p-type and n-type semiconductors or active solid state devices from a wafer substrate, including processing from crystal growth through wafer fabrication, and testing and assembly. Examples of semiconductor or related solid state devices include semiconductor diodes, semiconductor stacks, rectifiers, integrated circuits, and transistors.

Semiconductor manufacturing process unit means the collection of equipment used to carry out a discrete operation in the semiconductor manufacturing process. These operations include, but

are not limited to, crystal growing; solvent stations used to prepare and clean materials for subsequent processing or for parts cleaning; wet chemical stations used for cleaning (other than solvent cleaning); photoresist application, developing, and stripping; etching; gaseous operation stations used for stripping, cleaning, doping, etching, and layering; separation; encapsulation; and testing. Research and development operations associated with semiconductor manufacturing and conducted at a semiconductor manufacturing facility are considered to be semiconductor manufacturing process units.

Storage tank means a stationary unit that is constructed primarily from nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provides structural support and is designed to hold an accumulation of liquids or other materials used in or generated by a semiconductor manufacturing process unit. The following are not storage tanks for the purposes of this subpart:

- (1) Tanks permanently attached to motor vehicles such as trucks, railcars, barges, or ships;
- (2) Flow-through tanks where wastewater undergoes treatment (such as pH adjustment) before discharge, and are not used to accumulate wastewater;
- (3) Bottoms receiver tanks; and
- (4) Surge control tanks.

[68 FR 27925, May 22, 2003, as amended at 73 FR 42532, 73 FR 42532, July 22, 2008]

TABLE 1 TO SUBPART BBBBB OF PART 63—REQUIREMENTS FOR PERFORMANCE TESTS

As stated in §63.7187, you must comply with the requirements for performance tests in the following table:

For . . .	You must . . .	Using . . .	According to the following requirements . . .
1. Process or storage tank vent streams.	<p>a. Select sampling port's location and the number of traverse ports.</p> <p>b. Determine velocity and volumetric flow rate.</p> <p>c. Conduct gas molecular weight analysis.</p>	<p>Method 1 or 1A of 40 CFR part 60, appendix A.</p> <p>Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A.</p> <p>i. Method 3, 3A, or 3B of 40 CFR part 60, appendix A.</p> <p>ii. ASME PTC 19.10-1981-Part 10.</p>	<p>Sampling sites must be located at the inlet (if emission reduction or destruction efficiency testing is required) and outlet of the control device and prior to any releases to the atmosphere.</p> <p>For HAP reduction efficiency testing only; not necessary for determining compliance with a ppmv concentration limit.</p> <p>For flow rate determination only.</p> <p>You may use ASME PTC 19.10-1981-Part 10 (available for purchase from Three Park Avenue, New York, NY 10016-5990) as an alternative to EPA Method 3B.</p>

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Pt. 63, Subpt. BBBB, Table 1

For . . .	You must . . .	Using . . .	According to the following requirements . . .
2. Process vent stream ...	<p>d. Measure moisture content of the stack gas.</p> <p>a. Measure organic and inorganic HAP concentration (two method option).</p>	<p>Method 4 of 40 CFR part 60, appendix A.</p> <p>i. Method 18, 25, or 25A of 40 CFR part 60, appendix A, AND</p> <p>ii. Method 26 or 26A of 40 CFR part 60, appendix A.</p>	<p>For flow rate determination and correction to dry basis, if necessary.</p> <p>(1) To determine compliance with the percent by weight emission reduction limit, conduct simultaneous sampling at inlet and outlet of control device and analyze for same organic and inorganic HAP at both inlet and outlet; and</p> <p>(2) If you use Method 25A to determine the TOC concentration for compliance with the 20 ppmv emission limitation, the instrument must be calibrated on methane or the predominant HAP. If you calibrate on the predominant HAP, you must comply with each of the following:</p> <ul style="list-style-type: none"> —The organic HAP used as the calibration gas must be the single organic HAP representing the largest percent of emissions by volume. —The results are 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 its most sensitive scale. —The span value of the analyzer must be less than 100 ppmv. <p>To determine compliance with 98 percent reduction limit, conduct simultaneous sampling at inlet and outlet of control device and analyze for same organic and inorganic HAP at both inlet and outlet.</p>
3. Storage tank vent stream.	<p>c. Measure organic and inorganic HAP simultaneously (one method option).</p> <p>Measure inorganic HAP concentration.</p>	<p>Method 320 of 40 CFR part 63, appendix A.</p> <p>Method 26 or 26A of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A.</p>	<p>To determine compliance with the percent by weight emission reduction limit, conduct simultaneous sampling at inlet and outlet of control device and analyze for same organic and inorganic HAP at both inlet and outlet.</p> <p>To determine compliance with percent by weight emission reduction limit, conduct simultaneous sampling at inlet and outlet of control device and analyze for same inorganic HAP at both inlet and outlet.</p>

TABLE 2 TO SUBPART BBBBB OF PART 63—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART BBBBB

As stated in § 63.7193, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Applicable to Subpart BBBBB?
§ 63.1	Applicability	Yes.
§ 63.2	Definitions	Yes.
§ 63.3	Units and Abbreviations	Yes.
§ 63.4	Prohibited Activities and Circumvention	Yes.
§ 63.5	Construction and Reconstruction	Yes.
§ 63.6	Compliance with Standards and Maintenance	Yes.
§ 63.7	Performance Testing Requirements	Yes, with the exception of § 63.7(e)(1). The requirements of § 63.7(e)(1) do not apply. Performance testing requirements that apply are specified in this subpart, and in § 63.982(a)(1) and (2).
§ 63.8	Monitoring Requirements	Monitoring requirements are specified in this subpart and in § 63.982(a)(1) and (2). The closed vent system inspection requirements of § 63.983(c), as referenced by § 63.982(a)(1) and (2), do not apply.
§ 63.9	Notification Requirements	Yes.
§ 63.10	Recordkeeping and Reporting Requirements	Yes, with the exception of § 63.10(e). The requirements of § 63.10(e) do not apply. In addition, the recordkeeping and reporting requirements specified in this subpart apply.
§ 63.11	Flares	Yes.
§ 63.12	Delegation	Yes.
§ 63.13	Addresses	Yes.
§ 63.14	Incorporation by Reference	Yes.
§ 63.15	Availability of Information	Yes.

Subpart CCCCC—National Emission Standards for Hazardous Air Pollutants for Coke Ovens Pushing, Quenching, and Battery Stacks

SOURCE: 68 FR 18025, Apr. 14, 2003, unless otherwise noted.

WHAT THIS SUBPART COVERS

§ 63.7280 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for pushing, soaking, quenching, and battery stacks at coke oven batteries. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations, work practice standards, and operation and maintenance requirements in this subpart.

§ 63.7281 Am I subject to this subpart?

You are subject to this subpart if you own or operate a coke oven battery at a coke plant that is (or is part of) a

major source of hazardous air pollutant (HAP) emissions. A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§ 63.7282 What parts of my plant does this subpart cover?

(a) This subpart applies to each new or existing affected source at your coke plant. The affected source is each coke oven battery.

(b) This subpart covers emissions from pushing, soaking, quenching, and battery stacks from each affected source.

(c) An affected source at your coke plant is existing if you commenced construction or reconstruction of the affected source before July 3, 2001.

(d) An affected source at your coke plant is new if you commenced construction or reconstruction of the affected source on or after July 3, 2001. An affected source is reconstructed if it meets the definition of “reconstruction” in § 63.2.