

## SECTION IV. APPENDICES.

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### The Following Appendices Are Enforceable Parts of This Permit:

#### Table of Contents

[Appendix A, Glossary.](#)

[Appendix I, List of Insignificant Emissions Units and/or Activities.](#)

[Appendix RR, Facility-wide Reporting Requirements.](#)

[Appendix TR, Facility-wide Testing Requirements.](#)

[Appendix TV, Title V General Conditions.](#)

[Appendix 40 CFR 63, NESHAP Subpart A – General Provisions.](#)

[Appendix 40 CFR 63, NESHAP Subpart AAAA – National Emission Standards for Hazardous Air Pollutants:  
Municipal Solid Waste Landfills.](#)

[Appendix 40 CFR 63, NESHAP Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for  
Stationary Reciprocating Internal Combustion Engines.](#)

[Appendix 40 CFR 63, NESHAP Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants  
for Source Category: Gasoline Dispensing Facilities.](#)

[Appendix 40 CFR 61, NESHAP Subpart A – General Provisions.](#)

[Appendix 40 CFR 61, NESHAP Subpart M – National Emission Standard for Asbestos.](#)

[Appendix NSPS, Subpart A – General Provisions.](#)

[Appendix NSPS, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills.](#)

[Appendix NSPS, Subpart XXX – Standards of Performance for Municipal Solid Waste Landfills that Commenced  
Construction, Reconstruction, or Modification after July 17, 2014.](#)

## ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

**Abbreviations and Acronyms:**

<b>°F:</b> degrees Fahrenheit	<b>LONG:</b> Longitude
<b>acfm:</b> actual cubic feet per minute	<b>MACT:</b> maximum achievable technology
<b>AOR:</b> Annual Operating Report	<b>mm:</b> millimeter
<b>ARMS:</b> Air Resource Management System (Department's database)	<b>MMBtu:</b> million British thermal units
<b>BACT:</b> best available control technology	<b>MSDS:</b> material safety data sheets
<b>BHP:</b> brake horsepower	<b>MW:</b> megawatt
<b>Btu:</b> British thermal units	<b>NESHAP:</b> National Emissions Standards for Hazardous Air Pollutants
<b>CAA:</b> Clean Air Act	<b>NO<sub>x</sub>:</b> nitrogen oxides
<b>CAAA:</b> Clean Air Act Amendments of 1990	<b>NSPS:</b> New Source Performance Standards
<b>CAM:</b> compliance assurance monitoring	<b>O&amp;M:</b> operation and maintenance
<b>CEMS:</b> continuous emissions monitoring system	<b>O<sub>2</sub>:</b> oxygen
<b>cfm:</b> cubic feet per minute	<b>ORIS:</b> Office of Regulatory Information Systems
<b>CFR:</b> Code of Federal Regulations	<b>OS:</b> Organic Solvent
<b>CI:</b> compression ignition	<b>Pb:</b> lead
<b>CO:</b> carbon monoxide	<b>PM:</b> particulate matter
<b>COMS:</b> continuous opacity monitoring system	<b>PM<sub>10</sub>:</b> particulate matter with a mean aerodynamic diameter of 10 microns or less
<b>DARM:</b> Division of Air Resource Management	<b>PSD:</b> prevention of significant deterioration
<b>DCA:</b> Department of Community Affairs	<b>psi:</b> pounds per square inch
<b>DEP:</b> Department of Environmental Protection	<b>PTE:</b> potential to emit
<b>Department:</b> Department of Environmental Protection	<b>RACT:</b> reasonably available control technology
<b>dscfm:</b> dry standard cubic feet per minute	<b>RATA:</b> relative accuracy test audit
<b>EPA:</b> Environmental Protection Agency	<b>RICE:</b> reciprocating internal combustion engine
<b>ESP:</b> electrostatic precipitator (control system for reducing particulate matter)	<b>RMP:</b> Risk Management Plan
<b>EU:</b> emissions unit	<b>RO:</b> Responsible Official
<b>F.A.C.:</b> Florida Administrative Code	<b>SAM:</b> sulfuric acid mist
<b>F.D.:</b> forced draft	<b>scf:</b> standard cubic feet
<b>F.S.:</b> Florida Statutes	<b>scfm:</b> standard cubic feet per minute
<b>FGR:</b> flue gas recirculation	<b>SI:</b> spark ignition
<b>Fl:</b> fluoride	<b>SIC:</b> standard industrial classification code
<b>ft<sup>2</sup>:</b> square feet	<b>SNCR:</b> selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
<b>ft<sup>3</sup>:</b> cubic feet	<b>SOA:</b> Specific Operating Agreement
<b>g:</b> grams	<b>SO<sub>2</sub>:</b> sulfur dioxide
<b>gpm:</b> gallons per minute	<b>TPH:</b> tons per hour
<b>gr:</b> grains	<b>TPY:</b> tons per year
<b>HAP:</b> hazardous air pollutant	<b>UTM:</b> Universal Transverse Mercator coordinate system
<b>HP:</b> horsepower	<b>VE:</b> visible emissions
<b>Hg:</b> mercury	<b>VOC:</b> volatile organic compounds
<b>ICE:</b> internal combustion engine	<b>x:</b> By or times
<b>I.D.:</b> induced draft	
<b>ID:</b> identification	
<b>ISO:</b> International Standards Organization (refers to those conditions at 288 Kelvin, 60% relative humidity and 101.3 kilopascals pressure.)	
<b>kPa:</b> kilopascals	
<b>kW:</b> kilowatts	
<b>LAT:</b> Latitude	
<b>lb:</b> pound	
<b>lbs/hr:</b> pounds per hour	

## APPENDIX A

### ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

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#### **Citations:**

*The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers and ID numbers.*

#### **Code of Federal Regulations:**

*Example:* [40 CFR 60.334]

Where:

40	refers to Title 40
CFR	refers to Code of Federal Regulations
60	refers to Part 60
60.334	refers to Regulation 60.334

#### **Florida Administrative Code (F.A.C.) Rules:**

*Example:* [Rule 62-213.205, F.A.C.]

Where:

62	refers to Title 62
62-213	refers to Chapter 62-213
62-213.205	refers to Rule 62-213.205, F.A.C.

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#### **Identification Numbers:**

#### **Facility Identification (ID) Number:**

*Example:* Facility ID No.: 1050221

Where:

105	=	3-digit number code identifying the facility is located in Polk County
0221	=	4-digit number assigned by state database.

#### **Permit Numbers:**

*Example:* 1050221-002-AV, or  
1050221-001-AC

Where:

AC	=	Air Construction Permit
AV	=	Air Operation Permit (Title V Source)
105	=	3-digit number code identifying the facility is located in Polk County
0221	=	4-digit number assigned by permit tracking database
001 or 002	=	3-digit sequential project number assigned by permit tracking database

*Example:* PSD-FL-185  
PA95-01  
AC53-208321

Where:

PSD	=	Prevention of Significant Deterioration Permit
PA	=	Power Plant Siting Act Permit
AC53	=	old Air Construction Permit numbering identifying the facility is located in Polk County

[Table of Contents](#)

## APPENDIX I

### LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

#### Brief Description of Emissions Units and/or Activities

##### 1. EU-008. Non-Stationary Internal Combustion Engines and Grinder

Description	Date Acquired at Site	Horsepower (hp)	Serial Number
Onan Diesel Floodlight Generator Set	2/17/2005	20 hp	981251884
John Deere 6-inch diesel Pump Set	9/19/2005	80 hp	0539445/44
Perkins/Wacker diesel pump with trailer	1/14/2004	84 hp	0126756/40
Bandit Grinder with CAT diesel generator	9/30/2016	540 hp	2860XP

##### 2. Vehicle Refueling Operations and Associated Fuel Storage:

Tank Description	Approximate Volume (gallons)
Off-Road Diesel	4,000
On-Road Diesel	1,000
Various Small Storage Tanks Containing New and Used Motor Oil; Hydraulic Fluid; Antifreeze; and, Other Maintenance Supplies	<500 each

[Table of Contents](#)

**APPENDIX RR**  
**FACILITY-WIDE REPORTING REQUIREMENTS**  
 (Version Dated 2/13/2014)

**RR1. Reporting Schedule.** This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

Report	Reporting Deadline(s)	Related Condition(s)
Plant Problems/Permit Deviations	Immediately upon occurrence (See RR2.d.)	RR2, RR3
Malfunction Excess Emissions Report	Quarterly (if requested)	RR3
Semi-Annual Monitoring Report	Every 6 months	RR4
Annual Operating Report	April 1	RR5
EAOR Title V Annual Emissions Fee Invoice and Fee Payment	April 1	RR6
Annual Statement of Compliance	Within 60 days after the end of each calendar year (or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement); and  Within 60 days after submittal of a written agreement for transfer of responsibility, or  Within 60 days after permanent shutdown.	RR7
Notification of Administrative Permit Corrections	As needed	RR8
Notification of Startup after Shutdown for More than One Year	Minimum of 60 days prior to the intended startup date or, if emergency startup, as soon as possible after the startup date is ascertained	RR9
Permit Renewal Application	225 days prior to the expiration date of permit	TV18
Test Reports	Maximum 45 days following compliance tests	TR8

*{Permitting Note: See permit Section III. Emissions Units and Specific Conditions, for any additional Emission Unit-specific reporting requirements.}*

**RR2. Reports of Problems.**

- a. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.
  - b. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
    - (1) A description of and cause of noncompliance; and
    - (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
  - c. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
  - d. "Immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of Rule 62-4.160(15) and 40 CFR 70.6(a)(3)(iii)(B), "promptly" or "prompt" shall have the same meaning as "immediately".
- [Rules 62-4.130, 62-4.160(8), 62-4.160(15), and 62-213.440(1)(b), F.A.C.; 40 CFR 70.6(a)(3)(iii)(B)]

**APPENDIX RR**  
**FACILITY-WIDE REPORTING REQUIREMENTS**  
(Version Dated 2/13/2014)

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**RR3. Reports of Deviations from Permit Requirements.** The permittee shall report in accordance with the requirements of Rule 62-210.700(5), F.A.C. (below), and Rule 62-4.130, F.A.C. (condition RR2.), deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

*Rule 62-210.700(5):* In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. (See condition RR2.). A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.  
[Rules 62-213.440(1)(b)3.b., and 62-210.700(5)F.A.C.]

**RR4. Semi-Annual Monitoring Reports.** The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. [Rule 62-213.440(1)(b)3.a., F.A.C.]

**RR5. Annual Operating Report.** The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. [Rules 62-210.370(2) & (3), 62-210.900 and 62-213.440(3)(a)2., F.A.C.]

**RR6. EAOR Title V Annual Emissions Fee Invoice and Fee Payment.** Each Title V source permitted to operate in Florida must pay between January 15 and April 1 of each year, an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C.

- a. If the Department has not received the fee by March 1 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by April 1. If the fee is not postmarked or electronically submitted by April 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, F.S. If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid. The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than one percent of the fee due, up to \$50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.
- b. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five years and shall be made available to the Department upon request.
- c. A copy of the EAOR Title V Annual Emissions Fee Invoice generated by the electronic annual operating report (EAOR) application, must be submitted along with the annual emissions fee payment.

[Rules 62-210.370(3), 62-210.900 and 62-213.205, F.A.C.]

**RR7. Annual Statement of Compliance.**

- a. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit that includes all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C., using DEP Form No. 62-213.900(2). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C., for Title V requirements and with Rule 62-214.350, F.A.C., for Acid Rain requirements. Such statements shall be submitted (postmarked) to the Department and EPA:
  - (1) Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and

**APPENDIX RR**  
**FACILITY-WIDE REPORTING REQUIREMENTS**  
(Version Dated 2/13/2014)

- (2) Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
  - b. In lieu of individually identifying all applicable requirements and specifying times of compliance with, non-compliance with, and deviation from each, the responsible official may use DEP Form No. 62-213.900(2) as such statement of compliance so long as the responsible official identifies all reportable deviations from and all instances of non-compliance with any applicable requirements and includes all information required by the federal regulation relating to each reportable deviation and instance of non-compliance.
  - c. The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.
- [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

**RR8. Notification of Administrative Permit Corrections.**

A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:

- a. Typographical errors noted in the permit;
  - b. Name, address or phone number change from that in the permit;
  - c. A change requiring more frequent monitoring or reporting by the permittee;
  - d. A change in ownership or operational control of a facility, subject to the following provisions:
    - (1) The Department determines that no other change in the permit is necessary;
    - (2) The permittee and proposed new permittee have submitted an Application for Transfer of Air Permit, and the Department has approved the transfer pursuant to Rule 62-210.300(7), F.A.C.; and
    - (3) The new permittee has notified the Department of the effective date of sale or legal transfer.
  - e. Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), adopted and incorporated by reference at Rule 62-204.800, F.A.C., and changes made pursuant to Rules 62-214.340(1) and (2), F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o;
  - f. Changes listed at 40 CFR 72.83(a)(11) and (12), adopted and incorporated by reference at Rule 62-204.800, F.A.C., to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-7651o, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 62-210.360(1)(e), F.A.C.; and
  - g. Any other similar minor administrative change at the source.
- [Rule 62-210.360, F.A.C.]

**RR9. Notification of Startup.** The owners or operator of any emissions unit or facility which has a valid air operation permit which has been shut down more than one year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of 60 days prior to the intended startup date.

- a. The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
- b. If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

**RR10. Report Submission.** Except as provided in Rule 62-297.310(10), F.A.C., the permittee shall submit all compliance related notifications and reports required of this permit to the Compliance Authority. {See front of permit for address and phone number.} [Rules 62-4.130, 62-4.160 and 62-213.440, F.A.C.]

**RR11. EPA Report Submission.** Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to: Air, Pesticides & Toxics Management Division, United States Environmental Protection Agency, Region 4, Sam Nunn Atlanta Federal Center, 61 Forsyth Street SW, Atlanta, GA 30303-8960. Phone: 404/562-9077.

**APPENDIX RR**  
**FACILITY-WIDE REPORTING REQUIREMENTS**  
(Version Dated 2/13/2014)

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- RR12. Acid Rain Report Submission.** Acid Rain Program Information shall be submitted, as necessary, to: Department of Environmental Protection, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Phone: 850/717-9000 Email: [DARM\\_Permitting@dep.state.fl.us](mailto:DARM_Permitting@dep.state.fl.us).
- RR13. Report Certification.** All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]
- RR14. Certification by Responsible Official (RO).** In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]
- RR15. Confidential Information.** Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. Any permittee may claim confidentiality of any data or other information by complying with this procedure. [Rules 62-213.420(2), and 62-213.440(1)(d)6., F.A.C.]
- RR16. Forms and Instructions.** The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The forms are listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, by contacting the appropriate permitting authority or by accessing the Department's web site at: <http://www.dep.state.fl.us/air/rules/forms.htm>.
- a. Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) (Effective 12/31/2013)
  - b. Statement of Compliance Form (Effective 06/02/2002).
  - c. Responsible Official Notification Form (Effective 06/02/2002).
- [Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

[Table of Contents](#)



**APPENDIX TR**  
**FACILITY-WIDE TESTING REQUIREMENTS**  
(Version Dated 3/9/2015)

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Unless otherwise specified in a specific rule, this permit, or other order, the following testing requirements apply to each emissions unit for which testing is required. An emissions test is an emissions rate test, a concentration test, or an opacity test.

**TR1. Required Number of Test Runs.** For emission rate or concentration limitations, an emissions test shall consist of three valid test runs to determine the total air pollutant emission rate or concentration through the test section of the stack or duct. A valid test run is a test run that meets all requirements of the applicable test method. An emissions test shall also consist of three distinct determinations of any applicable process parameters corresponding to the three distinct test run time periods during which the emission rate or concentration was measured when such data are needed in conjunction with emissions data to compare the emissions test results with the applicable emission limiting standards. Such data shall be obtained pursuant to condition **TR5**. [Subsection 62-297.310(6), F.A.C.]. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, results of the two valid runs shall be accepted, provided that the arithmetic mean of the results of the two valid runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(2), F.A.C.]

**TR2. Operating Conditions during Emissions Testing.** Testing of emissions shall be conducted with the emissions unit operating at the testing capacity as defined below. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted.

- a. Combustion Turbines. (Reserved)
- b. All Other Sources. Testing capacity is defined as at least 90 percent of the maximum operation rate specified by the permit.

[Rule 62-297.310(3), F.A.C.]

**TR3. Calculation of Emission Rate or Concentration.** The emission rate or concentration used for comparison with the relevant standard shall be the arithmetic average of the emission rate or concentration determined by each of the three valid test runs unless otherwise specified in an applicable rule or test method. Data collected during periods of soot blowing shall not be excluded from any calculation of emission rate or concentration. [Rule 62-297.310(4), F.A.C.]

**TR4. Required Sampling Times and Observation Periods.** Unless otherwise specified in an applicable test method, rule, permit, or other order, the owner or operator shall conduct emissions tests in accordance with the following procedures:

- a. *Emission Rate or Concentration Tests.* The required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes, except that for operations that are typically completed within less than the minimum required sampling time, the duration of each test run shall include each occurrence of the operation during the minimum required sampling time. The test period shall include the period of typical operation during which the highest representative emissions are expected to occur.
- b. *Opacity Tests.* When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a visible emissions test shall be 60 minutes for emissions units that are subject to a multiple-valued opacity standard, and 30 minutes for all other emissions units, except that for batch, cyclical processes, or other operations that are typically completed within less than the minimum observation period, the period of observation shall include each occurrence of the operation during the minimum observation period. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

[Rule 62-297.310(5), F.A.C.]

**TR5. Determination of Process Parameters.**

- a. *Required Process Equipment.* The owner or operator of an emissions unit for which emissions tests are required shall install, operate, and maintain equipment or instruments necessary to determine process parameters, when such data are needed in conjunction with emissions data to compare emissions test results with applicable emission limiting standards.
- b. *Accuracy of Process Measurement Equipment.* Equipment or instruments used to directly or indirectly determine process parameters shall be calibrated and adjusted so as to determine the value of the process parameter to within 10 percent of its true value.

**APPENDIX TR**  
**FACILITY-WIDE TESTING REQUIREMENTS**  
(Version Dated 3/9/2015)

[Rule 62-297.310(6), F.A.C.]

**TR6. Required Emissions Testing Facilities.**

- a. The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required, shall provide emissions testing facilities that meet the requirements of 40 CFR 60.8(e), adopted and incorporated in Rule 62-204.800, F.A.C.
- b. *Permanent Emissions Testing Facilities.* The owner or operator of an emissions unit, for which an emissions test other than a visible emissions test is required on at least an annual basis, shall install and maintain permanent emissions testing facilities.
- c. *Temporary Emissions Testing Facilities.* The owner or operator of an emissions unit that is not required to conduct an emissions test on at least an annual basis may use permanent or temporary emissions testing facilities. If the owner or operator chooses to use temporary emissions testing facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

[Rule 62-297.310(7), F.A.C.]

**TR7. Frequency of Emissions Tests.** The following provisions apply only to those emissions units that are subject to an emissions-limiting standard for which emissions testing is required.

a. *Annual Emissions Tests Required.*

- (1) Where used in Rules 62-210.310, 62-297.310, or Chapter 62-296, F.A.C., to refer to frequency of required emissions tests, the terms “annual”, “annually”, and “annually thereafter” shall mean no less frequently than once every calendar year (January 1 – December 31).
- (2) Unless exempted by paragraph a.(5), below [subparagraph 62-297.310(8)(a)5., F.A.C.], the owner or operator shall have an emissions unit tested annually for each of the following pollutants that has an emissions-limiting standard for which emissions testing is required:
  - (a) Each hazardous air pollutant regulated by 40 CFR Part 61, adopted and incorporated by reference at Rule 62-204.800, F.A.C.; and
  - (b) Any other regulated air pollutant, as defined at Rule 62-210.200, F.A.C., or a pollutant designated as a surrogate to a regulated air pollutant by an applicable rule or order, if allowable emissions equal or exceed 100 tons per year.
- (3) Unless exempted by paragraph a.(5), below [subparagraph 62-297.310(8)(a)5., F.A.C.], the owner or operator shall have an emissions unit tested annually for visible emissions, if there is an applicable standard other than the general opacity standard of subparagraph 62-296.320(4)(b)1., F.A.C.
- (4) Unless exempted by paragraph a.(5), below [subparagraph 62-297.310(8)(a)5., F.A.C.], the owner or operator shall have an emissions unit tested annually if a rule, permit or other order issued after March 9, 2015, requires an initial emissions test but is silent as to the frequency of additional testing. A rule, permit, or other order that states that no further testing is required after an initial test, or which expressly lists or describes the tests that shall be conducted annually, is not considered silent as to the frequency of additional testing. Annual testing is not required where a permit or other order issued prior to March 9, 2015, is silent as to the frequency of additional testing.
- (5) Exemptions from paragraphs a.(2), (3) and (4), above [subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C.].
  - (a) An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order requires emissions testing at some other specific frequency. If multiple applicable rules, permits, or other orders, other than paragraphs a.(2), (3) and (4), above [subparagraphs 62-297.310(8)(a)2., 3., and 4., F.A.C.], require different testing frequencies, testing must comply with the frequency requirements of each such rule, permit, or order.
  - (b) An annual emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the pollutant emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.
  - (c) An annual emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted

**APPENDIX TR**  
**FACILITY-WIDE TESTING REQUIREMENTS**  
(Version Dated 3/9/2015)

and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

- (d) An annual emissions test shall not be required for any emissions unit that operated for 400 hours or less (including during startup and shutdown) during the calendar year. If an emission unit operates for more than 400 hours during the calendar year, an emissions test shall be completed no later than 60 days after the emissions unit's annual operation exceeds 400 hours, or by the end of the calendar year, whichever is later.
  - (e) An annual emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel, provided that the emissions unit does not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during the calendar year. If an emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined during the calendar year, other than during startup, an emissions test shall be completed no later than 60 days after the emissions unit's liquid fuel or solid fuel or fuel blend burning exceeds 400 hours combined, or by the end of the calendar year, whichever is later.
  - (f) An annual emissions test shall not be required for each fuel-specific emissions limit, provided the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during the calendar year. If an emissions unit burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during the calendar year, an emissions test for that fuel or fuel blend shall be completed no later than 60 days after the unit's burning of that fuel or fuel blend exceeds 400 hours, or by the end of the calendar year, whichever is later.
  - (g) An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of this condition **TR7**. [Subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit next starts up.
  - (h) An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for the sole purpose of conducting an annual emissions test to meet the frequency requirements of this condition **TR7**. [Subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.
  - (i) An annual emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or, emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.
- b. *Emissions Tests Prior to Obtaining an Air Operation Permit.*
- (1) Unless exempted by paragraph b.(3), below [subparagraph 62-297.310(8)(b)3., F.A.C.], prior to obtaining an initial or renewal air operation permit for any emissions unit that is subject to any emission-limiting standard, the owner or operator shall have an emissions test conducted for each such standard to assist in providing reasonable assurance, per Rule 62-4.070, F.A.C., that the emission-limiting standard can be met and shall submit the test report as specified in subsection 62-297.310(10), F.A.C. For an emissions unit at a Title V source, such prior emissions testing is not required provided that an emissions testing compliance plan is included in the Title V permit.
  - (2) For the purpose of renewal of an air operation permit, the owner or operator may satisfy the requirements of paragraph b.(1), above [subparagraph 62-297.310(8)(b)1., F.A.C.], for any emissions unit by submitting the most recent emissions test, as specified in condition **TR9**. [Subsection 62-297.310(10), F.A.C.], provided such test occurred within the term of the current operation permit.
  - (3) Exemptions from paragraph b.(1), above [subparagraph 62-297.310(8)(b)1., F.A.C.].
    - (a) An emissions test shall not be required for any pollutant for which a rule, permit, or other order requires that the emissions be measured by a continuous emission monitoring system and, either that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., or that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 75, adopted and incorporated in Rule 62-204.800, F.A.C.
    - (b) An emissions test shall not be required for visible emissions for which a rule, permit, or other order requires that emissions be measured by a continuous opacity monitoring system, and that system meets the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted

**APPENDIX TR**  
**FACILITY-WIDE TESTING REQUIREMENTS**  
(Version Dated 3/9/2015)

---

and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures.

- (c) For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit that, in the previous five-year period of permitted operation, operated for 400 hours or less (including during startup and shutdown) during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently exceeds 400 hours of operation during a calendar year, emissions must be tested no later than 60 days after 400 hours of operation is exceeded in that calendar year, or by the end of that calendar year, whichever is later.
  - (d) For the purpose of renewal of an air operation permit, an emissions test shall not be required for any emissions unit with emissions generated solely from the combustion of fuel provided that, in the previous five-year period of permitted operation, the emissions unit did not burn any liquid fuel or solid fuel or fuel blend for more than 400 hours combined, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns any liquid fuel or solid fuel or fuel blend for more than 400 hours combined during a calendar year, emissions must be tested no later than 60 days after the emissions unit's combined burning of any liquid fuel or solid fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.
  - (e) An emissions test shall not be required for each fuel-specific emissions limit prior to the renewal of an air operation permit for an emissions unit provided that, in the previous five-year period of permitted operation, the fuel or fuel blend subject to a fuel-specific limit was not burned for more than 400 hours, other than during startup, during each calendar year included in the five-year period of permitted operation. The first time an emissions unit subsequently burns a fuel or fuel blend subject to a fuel-specific emission limit for more than 400 hours, other than during startup, during any calendar year, an emissions test for that fuel or fuel blend must be completed no later than 60 days after the emissions unit's burning of that fuel or fuel blend exceeds 400 hours in that calendar year, or by the end of that calendar year, whichever is later.
  - (f) An emissions unit shall not be required to start up for the sole purpose of conducting an emissions test to meet the frequency requirements of this condition **TR7**. [Subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after the emissions unit starts up.
  - (g) An emissions unit permitted to burn multiple fuels or fuel blends shall not be required to switch fuels for the sole purpose of conducting the emissions test to meet the frequency requirements of this condition **TR7**. [Subsection 62-297.310(8), F.A.C.]. In such a case, an emissions test shall be completed no later than 60 days after a switch is made to burn the fuel or fuel blend for which testing is required.
  - (h) An emissions test for visible emissions shall not be required for emissions units exempted from air permitting pursuant to paragraphs 62-210.300(3)(a) or (b), F.A.C.; emissions units determined to be insignificant pursuant to paragraph 62-213.430(6)(b), F.A.C.; or emissions units authorized pursuant to the general permit provisions in subsection 62-210.300(4), F.A.C., unless the general permit specifically requires such testing.
- c. *Special Compliance Tests*. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit, unless the Department obtains other information sufficient to demonstrate compliance. The owner or operator of the emissions unit shall provide a report on the results of said tests to the Department in accordance with the provisions of condition **TR9**. [Subsection 62-297.310(10), F.A.C.]. [Rule 62-297.310(8), F.A.C.]

**TR8. Scheduling and Notification.** At least 15 days prior to the date on which each required emissions test is to begin, the owner or operator shall notify the air compliance program identified by permit, unless shorter notice is agreed to by the appropriate air compliance program. The notification shall include the date, time, place of each such test, Facility ID Number, Emission Unit ID Number(s) and description(s), Emission Point Number(s) and description(s), test method(s), pollutant(s) to be tested, along with the name and telephone number of the person who will be responsible for conducting such test(s) for the owner or operator. If a scheduled emissions test needs to be re-scheduled, the owner or operator shall submit to the appropriate air compliance program a revised notification at least seven days prior to the re-scheduled emissions test date or arrange a re-scheduled test date with the appropriate air compliance program by mutual agreement. [Rule 62-297.310(9), F.A.C.]

**APPENDIX TR**  
**FACILITY-WIDE TESTING REQUIREMENTS**  
(Version Dated 3/9/2015)

**TR9. Test Reports.**

- a. The owner or owner's authorized agent of an emissions unit for which an emissions test is required shall submit a written test report to the compliance authority specified by permit, on the results of each such test as soon as practicable but no later than 45 days after the last run of each test is completed. Test reports may be submitted electronically.
- b. If the owner or owner's authorized agent of an emissions unit for which an emissions test is required submits the results of each such test electronically using the EPA Electronic Reporting Tool (ERT) (<http://www.epa.gov/ttnchie1/ert/>), the written report specified in paragraph a., above [paragraph 62-297.310(10)(a), F.A.C.], need not be submitted, provided the conditions of paragraphs (1) – (3), below [subparagraphs 62-297.310(10)(b)1. through 3., F.A.C.], are met:
  - (1) The owner or owner's authorized agent shall submit the test information using the ERT as soon as practicable but no later than 45 days after the last run of each test is completed;
  - (2) The test information shall provide, as a minimum, the information specified in paragraphs c.(1) – (24), below [subparagraphs 62-297.310(10)(c)1. through 24., F.A.C.]; and
  - (3) The compliance authority specified by permit must receive written notification, no later than 45 days after the last run of each test is completed, of the date that the test data was submitted using the ERT.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA Method 9 test, shall provide the following information:
  - (1) The type, location, and identification number of the emissions unit tested.
  - (2) The facility at which the emissions unit is located.
  - (3) The owner and, if other than the owner, operator of the emissions unit.
  - (4) The type and amount of fuels and materials typically used and processed, and the actual types and amounts of fuels used and material processed during each test run.
  - (5) If necessary in order to compare the emissions test results with an applicable emission limiting standard, the means, raw data, and computations used to determine the amount of fuels used and materials processed.
  - (6) The type of air pollution control devices installed on the emissions unit, their general condition, their typical operating parameters, and their actual operating parameters during each test run.
  - (7) A diagram of the sampling location, including the distance to any upstream and downstream bends or other flow disturbances.
  - (8) The date, starting time, and duration of each sampling run.
  - (9) The test procedures, including any authorized alternative procedures, used.
  - (10) The number of points sampled, and the configuration and location of the sampling plane.
  - (11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack or duct, temperatures, average meter temperatures, and sample time per point.
  - (12) The type, manufacturer, and configuration of the sampling equipment used.
  - (13) Data related to the required calibration of the test equipment.
  - (14) Data on the identification, processing, and weights of all filters used.
  - (15) Data on the types and amounts of any chemical solutions used.
  - (16) For each sampling run, data on the amount of pollutant collected from each sampling probe.
  - (17) For each sampling run, data on the amount of pollutant collected from the filters.
  - (18) For each sampling run, data on the amount of pollutant collected from the impingers.
  - (19) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  - (20) All measured and calculated data required to be determined by each applicable test procedure for each run.
  - (21) The detailed calculations for one run that relate the collected data to the calculated emission rate or concentration, as applicable.
  - (22) The applicable emission standard, and the resulting maximum allowable emission rate or concentration for the emissions unit, as applicable, plus the test result in the same form and unit of measure.
  - (23) When an emissions test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or owner's authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his or her knowledge.

**APPENDIX TR**  
**FACILITY-WIDE TESTING REQUIREMENTS**  
(Version Dated 3/9/2015)

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- (24) For non-Title V sources, a certification by the owner or owner's authorized agent that, to his or her knowledge, all data submitted are true and correct.
  - (25) Any report submitted for a Title V source shall contain certification by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- [Rule 62-297.310(10), F.A.C.]

[Table of Contents](#)

**APPENDIX TV**  
**TITLE V GENERAL CONDITIONS**  
(Version Dated 02/16/2012)

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**Operation**

- TV1. General Prohibition.** A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit. [Rule 62-4.030, Florida Administrative Code (F.A.C.)]
- TV2. Validity.** This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department. [Rule 62-4.160(2), F.A.C.]
- TV3. Proper Operation and Maintenance.** The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules. [Rule 62-4.160(6), F.A.C.]
- TV4. Not Federally Enforceable. Health, Safety and Welfare.** To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. [Rule 62-4.050(3), F.A.C.]
- TV5. Continued Operation.** An applicant making timely and complete application for permit, or for permit renewal, shall continue to operate the source under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, and in accordance with applicable requirements of the Acid Rain Program, applicable requirements of the CAIR Program, and applicable requirements of the Hg Budget Trading Program, until the conclusion of proceedings associated with its permit application or until the new permit becomes effective, whichever is later, provided the applicant complies with all the provisions of subparagraphs 62-213.420(1)(b)3., F.A.C. [Rules 62-213.420(1)(b)2., F.A.C.]
- TV6. Changes Without Permit Revision.** Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation:
- a. Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
  - b. A permitted source may implement operating changes, as defined in Rule 62-210.200, F.A.C., after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
    - (1) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
    - (2) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
  - c. Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C.
- [Rule 62-213.410, F.A.C.]
- TV7. Circumvention.** No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

**Compliance**

- TV8. Compliance with Chapter 403, F.S., and Department Rules.** Except as provided at Rule 62-213.460, Permit Shield, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

**APPENDIX TV**  
**TITLE V GENERAL CONDITIONS**

(Version Dated 02/16/2012)

- TV9.** Compliance with Federal, State and Local Rules. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of a facility or an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]
- TV10.** Binding and enforceable. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions. [Rule 62-4.160(1), F.A.C.]
- TV11.** Timely information. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rule 62-4.160(15), F.A.C.]
- TV12.** Halting or reduction of source activity. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity. [Rule 62-213.440(1)(d)3., F.A.C.]
- TV13.** Final permit action. Any Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- TV14.** Sudden and unforeseeable events beyond the control of the source. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- TV15.** Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall, as of the effective date of the permit, be deemed compliance with any applicable requirements in effect, provided that the source included such applicable requirements in the permit application. Nothing in this condition or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program, the CAIR Program. [Rule 62-213.460, F.A.C.]
- TV16.** Compliance With Federal Rules. A facility or emissions unit subject to any standard or requirement of 40 CFR, Part 60, 61, 63 or 65, adopted and incorporated by reference at Rule 62-204.800, F.A.C., shall comply with such standard or requirement. Nothing in this chapter shall relieve a facility or emissions unit from complying with such standard or requirement, provided, however, that where a facility or emissions unit is subject to a standard established in Rule 62-296, F.A.C., such standard shall also apply. [Rule 62-296.100(3), F.A.C.]

**Permit Procedures**

- TV17.** Permit Revision Procedures. The permittee shall revise its permit as required by Rules 62-213.400, 62-213.412, 62-213.420, 62-213.430 & 62-4.080, F.A.C.; and, in addition, the Department shall revise permits as provided in Rule 62-4.080, F.A.C. & 40 CFR 70.7(f).
- TV18.** Permit Renewal. The permittee shall renew its permit as required by Rules 62-4.090, 62-213.420(1) and 62-213.430(3), F.A.C. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) [Application for Air Permit - Long Form], 62-213.420(3) [Required Information], 62-213.420(6) [CAIR Part Form], F.A.C. Unless a Title V source submits a timely and complete application for permit renewal in accordance with the requirements this rule, the existing permit shall expire and the source's right to operate shall terminate. For purposes of a permit renewal, a timely application is one that is submitted 225 days before the expiration of a permit that expires on or



**APPENDIX TV**  
**TITLE V GENERAL CONDITIONS**

(Version Dated 02/16/2012)

after June 1, 2009. No Title V permit will be issued for a new term except through the renewal process. [Rules 62-213.420 & 62-213.430, F.A.C.]

**TV19. Insignificant Emissions Units or Pollutant-Emitting Activities.** The permittee shall identify and evaluate insignificant emissions units and activities as set forth in Rule 62-213.430(6), F.A.C.

**TV20. Savings Clause.** If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]

**TV21. Suspension and Revocation.**

- a. Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- b. Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- c. A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
  - (1) Submitted false or inaccurate information in his application or operational reports.
  - (2) Has violated law, Department orders, rules or permit conditions.
  - (3) Has failed to submit operational reports or other information required by Department rules.
  - (4) Has refused lawful inspection under Section 403.091, F.S.
- d. No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(7), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

[Rule 62-4.100, F.A.C.]

**TV22. Not federally enforceable. Financial Responsibility.** The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

**TV23. Emissions Unit Reclassification.**

- a. Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
- b. If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit.

[Rule 62-210.300(6), F.A.C.]

**TV24. Transfer of Permits.** Per Rule 62-4.160(11), F.A.C., this permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility. The permittee shall also comply with the requirements of Rule 62-210.300(7), F.A.C., and use DEP Form No. 62-210.900(7). [Rules 62-4.160(11), 62-4.120, and 62-210.300(7), F.A.C.]

**Rights, Title, Liability, and Agreements**

**TV25. Rights.** As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a

**APPENDIX TV**  
**TITLE V GENERAL CONDITIONS**  
(Version Dated 02/16/2012)

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waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit. [Rule 62-4.160(3), F.A.C.]

**TV26. Title.** This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), (F.A.C.)]

**TV27. Liability.** This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]

**TV28. Agreements.**

- a. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - (1) Have access to and copy any records that must be kept under conditions of the permit;
  - (2) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
  - (3) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- b. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- c. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

[Rules 62-4.160(7), (9), and (10), F.A.C.]

**Recordkeeping and Emissions Computation**

**TV29. Permit.** The permittee shall keep this permit or a copy thereof at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]

**TV30. Recordkeeping.**

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
  - (1) The date, exact place, and time of sampling or measurements, and the operating conditions at the time of sampling or measurement;
  - (2) The person responsible for performing the sampling or measurements;
  - (3) The dates analyses were performed;
  - (4) The person and company that performed the analyses;
  - (5) The analytical techniques or methods used;
  - (6) The results of such analyses.

[Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

**APPENDIX TV**  
**TITLE V GENERAL CONDITIONS**

(Version Dated 02/16/2012)

**TV31. Emissions Computation.** Pursuant to Rule 62-210.370, F.A.C., the following required methodologies are to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with Rule 62-210.370, F.A.C. Rule 62-210.370, F.A.C., is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.

For any of the purposes specified above, the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

- a. *Basic Approach.* The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
  - (1) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
  - (2) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
  - (3) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- b. *Continuous Emissions Monitoring System (CEMS).*
  - (1) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
    - (a) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or,
    - (b) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
  - (2) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
    - (a) A calibrated flowmeter that records data on a continuous basis, if available; or
    - (b) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
  - (3) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- c. *Mass Balance Calculations.*
  - (1) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
    - (a) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and,
    - (b) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
  - (2) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to

**APPENDIX TV**  
**TITLE V GENERAL CONDITIONS**

(Version Dated 02/16/2012)

compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.

- (3) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

d. *Emission Factors.*

- (1) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

- (a) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- (b) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
- (c) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

- (2) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

- e. *Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS.* In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- f. *Accounting for Emissions During Periods of Startup and Shutdown.* In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- g. *Fugitive Emissions.* In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- h. *Recordkeeping.* The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(1) & (2), F.A.C.]

**Responsible Official**

**TV32. Designation and Update.** The permittee shall designate and update a responsible official as required by Rule 62-213.202, F.A.C.

**Prohibitions and Restrictions**

**TV33. Asbestos.** This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source. [40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

**TV34. Refrigerant Requirements.** Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all

## APPENDIX TV

### TITLE V GENERAL CONDITIONS

(Version Dated 02/16/2012)

requirements of 40 CFR 82, Subparts B and F, and with Chapter 62-281, F.A.C.

**TV35. Open Burning Prohibited.** Unless otherwise authorized by Rule 62-296.320(3) or Chapter 62-256, F.A.C., open burning is prohibited.

[Table of Contents](#)

e-CFR data is current as of May 24, 2018

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES**

**Subpart A—General Provisions**

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**Contents**

§63.1	Applicability.
§63.2	Definitions.
§63.3	Units and abbreviations.
§63.4	Prohibited activities and circumvention.
§63.5	Preconstruction review and notification requirements.
§63.6	Compliance with standards and maintenance requirements.
§63.7	Performance testing requirements.
§63.8	Monitoring requirements.
§63.9	Notification requirements.
§63.10	Recordkeeping and reporting requirements.
§63.11	Control device and work practice requirements.
§63.12	State authority and delegations.
§63.13	Addresses of State air pollution control agencies and EPA Regional Offices.
§63.14	Incorporations by reference.
§63.15	Availability of information and confidentiality.
§63.16	Performance Track Provisions.
Table 1 to Subpart A of Part 63—Detection Sensitivity Levels (grams per hour)	

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SOURCE: 59 FR 12430, Mar. 16, 1994, unless otherwise noted.

**§63.1 Applicability.**

(a) *General.* (1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2.

(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.

(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.

(4)(i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.

(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.

(5) [Reserved]

(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.

(7)-(9) [Reserved]

(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.

(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in §63.9(i).

(b) *Initial applicability determination for this part.* (1) The provisions of this part apply to the owner or operator of any stationary source that—

(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and

(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.

(2) [Reserved]

(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in §63.10(b)(3).

(c) *Applicability of this part after a relevant standard has been set under this part.* (1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section.

(2) Except as provided in §63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether—

(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);

(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or

(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.

(3)-(4) [Reserved]

(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.

(d) [Reserved]

(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16595, Apr. 5, 2002]

### **§63.2 Definitions.**

The terms used in this part are defined in the Act or in this section as follows:

*Act* means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Pub. L. 101-549, 104 Stat. 2399).

*Actual emissions* is defined in subpart D of this part for the purpose of granting a compliance extension for an early reduction of hazardous air pollutants.

*Administrator* means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

*Affected source*, for the purposes of this part, means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section 112 of the Act. Each relevant standard will define the "affected source," as defined in this paragraph unless a different definition is warranted based on a published justification as to why this definition would result in significant administrative, practical, or implementation problems and why the different definition would resolve those problems. The term "affected source," as used in this part, is separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively. This definition of "affected source," and the procedures for adopting an alternative definition of "affected source," shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002.

*Alternative emission limitation* means conditions established pursuant to sections 112(i)(5) or 112(i)(6) of the Act by the Administrator or by a State with an approved permit program.

*Alternative emission standard* means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act.

*Alternative test method* means any method of sampling and analyzing for an air pollutant that is not a test method in this chapter and that has been demonstrated to the Administrator's satisfaction, using Method 301 in appendix A of this part, to produce results adequate for the Administrator's determination that it may be used in place of a test method specified in this part.

*Approved permit program* means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).



**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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*Area source* means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

*Commenced* means, with respect to construction or reconstruction of an affected source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

*Compliance date* means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

*Compliance schedule* means: (1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or

(2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached; or

(3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

*Construction* means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

*Continuous emission monitoring system (CEMS)* means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

*Continuous monitoring system (CMS)* is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

*Continuous opacity monitoring system (COMS)* means a continuous monitoring system that measures the opacity of emissions.

*Continuous parameter monitoring system* means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

*Effective date* means:

(1) With regard to an emission standard established under this part, the date of promulgation in the FEDERAL REGISTER of such standard; or

(2) With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of this part.

*Emission standard* means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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*Emissions averaging* is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

*EPA* means the United States Environmental Protection Agency.

*Equivalent emission limitation* means any maximum achievable control technology emission limitation or requirements which are applicable to a major source of hazardous air pollutants and are adopted by the Administrator (or a State with an approved permit program) on a case-by-case basis, pursuant to section 112(g) or (j) of the Act.

*Excess emissions and continuous monitoring system performance report* is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

*Existing source* means any affected source that is not a new source.

*Federally enforceable* means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

(1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;

(2) New source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;

(3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;

(4) Limitations and conditions that are part of an approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP);

(5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;

(6) Limitations and conditions that are part of an operating permit where the permit and the permitting program pursuant to which it was issued meet all of the following criteria:

(i) The operating permit program has been submitted to and approved by EPA into a State implementation plan (SIP) under section 110 of the CAA;

(ii) The SIP imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not "federally enforceable" by EPA;

(iii) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the SIP or enforceable under the SIP, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are otherwise "federally enforceable";

(iv) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter; and

(v) The permit in question was issued only after adequate and timely notice and opportunity for comment for EPA and the public.

(7) Limitations and conditions in a State rule or program that has been approved by the EPA under subpart E of this part for the purposes of implementing and enforcing section 112; and

(8) Individual consent agreements that the EPA has legal authority to create.

*Fixed capital cost* means the capital needed to provide all the depreciable components of an existing source.

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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*Force majeure* means, for purposes of §63.7, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.

*Fugitive emissions* means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

*Hazardous air pollutant* means any air pollutant listed in or pursuant to section 112(b) of the Act.

*Issuance* of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.

*Major source* means 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, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

*Monitoring* means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of four elements:

(1) Indicator(s) of performance—the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. Indicators of performance may include direct or predicted emissions measurements (including opacity), operational parametric values that correspond to process or control device (and capture system) efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design characteristics. Indicators may be expressed as a single maximum or minimum value, a function of process variables (for example, within a range of pressure drops), a particular operational or work practice status (for example, a damper position, completion of a waste recovery task, materials tracking), or an interdependency between two or among more than two variables.

(2) Measurement techniques—the means by which you gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making records of process conditions or work practices.

(3) Monitoring frequency—the number of times you obtain and record monitoring data over a specified time interval. Examples of monitoring frequencies include at least four points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity monitoring systems, and at least once per operating day (or week, month, etc.) for work practice or design inspections.

(4) Averaging time—the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm.

*New affected source* means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory that is subject to a section 112(d) or other relevant standard for new sources. This definition of “new affected source,” and the criteria to be utilized in implementing it, shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30,

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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2002. Each relevant standard will define the term “new affected source,” which will be the same as the “affected source” unless a different collection is warranted based on consideration of factors including:

- (1) Emission reduction impacts of controlling individual sources versus groups of sources;
- (2) Cost effectiveness of controlling individual equipment;
- (3) Flexibility to accommodate common control strategies;
- (4) Cost/benefits of emissions averaging;
- (5) Incentives for pollution prevention;
- (6) Feasibility and cost of controlling processes that share common equipment (e.g., product recovery devices);
- (7) Feasibility and cost of monitoring; and
- (8) Other relevant factors.

*New source* means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part establishing an emission standard applicable to such source.

*One-hour period*, unless otherwise defined in an applicable subpart, means any 60-minute period commencing on the hour.

*Opacity* means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

*Owner or operator* means any person who owns, leases, operates, controls, or supervises a stationary source.

*Performance audit* means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

*Performance evaluation* means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

*Performance test* means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

*Permit modification* means a change to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

*Permit program* means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

*Permit revision* means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

*Permitting authority* means: (1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

- (2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

*Pollution Prevention* means *source reduction* as defined under the Pollution Prevention Act (42 U.S.C. 13101-13109). The definition is as follows:

- (1) *Source reduction* is any practice that:

- (i) Reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(ii) Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

(2) The term *source reduction* includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

(3) The term *source reduction* does not include any practice that alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service.

*Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

*Reconstruction*, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously nonaffected source 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 new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

*Regulation promulgation schedule* means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in the FEDERAL REGISTER.

*Relevant standard* means:

- (1) An emission standard;
- (2) An alternative emission standard;
- (3) An alternative emission limitation; or

(4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the collection of equipment, activities, or both regulated by such standard or limitation. A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes subpart A of this part, as provided by §63.1(a)(4), and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

*Responsible official* means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Administrator.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).

(4) For affected sources (as defined in this part) applying for or subject to a title V permit: “responsible official” shall have the same meaning as defined in part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever is applicable.

*Run* means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.

*Shutdown* means the cessation of operation of an affected source or portion of an affected source for any purpose.

*Six-minute period* means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.

*Source at a Performance Track member facility* means a major or area source located at a facility which has been accepted by EPA for membership in the Performance Track Program (as described at [www.epa.gov/PerformanceTrack](http://www.epa.gov/PerformanceTrack)) and is still a member of the Program. The Performance Track Program is a voluntary program that encourages continuous environmental improvement through the use of environmental management systems, local community outreach, and measurable results.

*Standard conditions* means a temperature of 293 K (68 °F) and a pressure of 101.3 kilopascals (29.92 in. Hg).

*Startup* means the setting in operation of an affected source or portion of an affected source for any purpose.

*State* means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

*Stationary source* means any building, structure, facility, or installation which emits or may emit any air pollutant.

*Test method* means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of this chapter, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of appendix A of this part.

*Title V permit* means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

*Visible emission* means the observation of an emission of opacity or optical density above the threshold of vision.

*Working day* means any day on which Federal Government offices (or State government offices for a State that has obtained delegation under section 112(l)) are open for normal business. Saturdays, Sundays, and official Federal (or where delegated, State) holidays are not working days.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16596, Apr. 5, 2002; 68 FR 32600, May 30, 2003; 69 FR 21752, Apr. 22, 2004; 72 FR 27443, May 16, 2007]

### **§63.3 Units and abbreviations.**

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) *System International (SI) units of measure:*

A = ampere

g = gram

Hz = hertz

J = joule

°K = degree Kelvin

kg = kilogram

l = liter

m = meter

m<sup>3</sup> = cubic meter

mg = milligram =  $10^{-3}$  gram  
 ml = milliliter =  $10^{-3}$  liter  
 mm = millimeter =  $10^{-3}$  meter  
 Mg = megagram =  $10^6$  gram = metric ton  
 MJ = megajoule  
 mol = mole  
 N = newton  
 ng = nanogram =  $10^{-9}$  gram  
 nm = nanometer =  $10^{-9}$  meter  
 Pa = pascal  
 s = second  
 V = volt  
 W = watt  
 $\Omega$  = ohm  
 $\mu$ g = microgram =  $10^{-6}$  gram  
 $\mu$ l = microliter =  $10^{-6}$  liter

(b) *Other units of measure:*

Btu = British thermal unit  
 $^{\circ}$ C = degree Celsius (centigrade)  
 cal = calorie  
 cfm = cubic feet per minute  
 cc = cubic centimeter  
 cu ft = cubic feet  
 d = day  
 dcf = dry cubic feet  
 dcm = dry cubic meter  
 dscf = dry cubic feet at standard conditions  
 dscm = dry cubic meter at standard conditions  
 eq = equivalent  
 $^{\circ}$ F degree Fahrenheit  
 ft = feet  
 ft<sup>2</sup> = square feet  
 ft<sup>3</sup> = cubic feet  
 gal = gallon  
 gr = grain  
 g-eq = gram equivalent  
 g-mole = gram mole  
 hr = hour  
 in. = inch  
 in. H<sub>2</sub> O = inches of water  
 K = 1,000  
 kcal = kilocalorie  
 lb = pound  
 lpm = liter per minute  
 meq = milliequivalent  
 min = minute  
 MW = molecular weight  
 oz = ounces  
 ppb = parts per billion  
 ppbw = parts per billion by weight  
 ppbv = parts per billion by volume  
 ppm = parts per million  
 ppmw = parts per million by weight  
 ppmv = parts per million by volume

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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psia = pounds per square inch absolute  
psig = pounds per square inch gage  
°R = degree Rankine  
scf = cubic feet at standard conditions  
scfh = cubic feet at standard conditions per hour  
scm = cubic meter at standard conditions  
scmm = cubic meter at standard conditions per minute  
sec = second  
sq ft = square feet  
std = at standard conditions  
v/v = volume per volume  
yd<sup>2</sup> = square yards  
yr = year

*(c) Miscellaneous:*

act = actual  
avg = average  
I.D. = inside diameter  
M = molar  
N = normal  
O.D. = outside diameter  
% = percent

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

**§63.4 Prohibited activities and circumvention.**

(a) *Prohibited activities.* (1) No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under section 112(i)(4) of the Act.

(2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

(3)-(5) [Reserved]

(b) *Circumvention.* No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to—

(1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;

(2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and

(c) *Fragmentation.* Fragmentation after November 15, 1990 which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability. The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

**§63.5 Preconstruction review and notification requirements.**

(a) *Applicability.* (1) This section implements the preconstruction review requirements of section 112(i)(1). After the effective date of a relevant standard, promulgated pursuant to section 112(d), (f), or (h) of the Act, under this part, the preconstruction review requirements in this section apply to the owner or operator of new affected sources and reconstructed affected sources that are major-emitting as specified in this section. New and reconstructed affected sources that commence



**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

construction or reconstruction before the effective date of a relevant standard are not subject to the preconstruction review requirements specified in paragraphs (b)(3), (d), and (e) of this section.

(2) This section includes notification requirements for new affected sources and reconstructed affected sources that are not major-emitting affected sources and that are or become subject to a relevant promulgated emission standard after the effective date of a relevant standard promulgated under this part.

*(b) Requirements for existing, newly constructed, and reconstructed sources.* (1) A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

(2) [Reserved]

(3) After the effective date of any relevant standard promulgated by the Administrator under this part, no person may, without obtaining written approval in advance from the Administrator in accordance with the procedures specified in paragraphs (d) and (e) of this section, do any of the following:

(i) Construct a new affected source that is major-emitting and subject to such standard;

(ii) Reconstruct an affected source that is major-emitting and subject to such standard; or

(iii) Reconstruct a major source such that the source becomes an affected source that is major-emitting and subject to the standard.

(4) After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in §63.9(b).

(5) [Reserved]

(6) After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

(c) [Reserved]

(d) *Application for approval of construction or reconstruction.* The provisions of this paragraph implement section 112(i)(1) of the Act.

(1) *General application requirements.* (i) An owner or operator who is subject to the requirements of paragraph (b)(3) of this section must submit to the Administrator an application for approval of the construction or reconstruction. The application must be submitted as soon as practicable before actual construction or reconstruction begins. The application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of §63.9(b)(5). The owner or operator may submit the application for approval well in advance of the date actual construction or reconstruction begins in order to ensure a timely review by the Administrator and that the planned date to begin will not be delayed.

(ii) A separate application shall be submitted for each construction or reconstruction. Each application for approval of construction or reconstruction shall include at a minimum:

(A) The applicant's name and address;

(B) A notification of intention to construct a new major affected source or make any physical or operational change to a major affected source that may meet or has been determined to meet the criteria for a reconstruction, as defined in §63.2 or in the relevant standard;

(C) The address (i.e., physical location) or proposed address of the source;

(D) An identification of the relevant standard that is the basis of the application;

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(E) The expected date of the beginning of actual construction or reconstruction;

(F) The expected completion date of the construction or reconstruction;

(G) [Reserved]

(H) The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in the relevant standard, or if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source reported in units and averaging times specified in the relevant standard. The owner or operator may submit percent reduction information if a relevant standard is established in terms of percent reduction. However, operating parameters, such as flow rate, shall be included in the submission to the extent that they demonstrate performance and compliance; and

(I) [Reserved]

(J) Other information as specified in paragraphs (d)(2) and (d)(3) of this section.

(iii) An owner or operator who submits estimates or preliminary information in place of the actual emissions data and analysis required in paragraphs (d)(1)(ii)(H) and (d)(2) of this section shall submit the actual, measured emissions data and other correct information as soon as available but no later than with the notification of compliance status required in §63.9(h) (see §63.9(h)(5)).

(2) *Application for approval of construction.* Each application for approval of construction must include, in addition to the information required in paragraph (d)(1)(ii) of this section, technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including an identification of each type of emission point for each type of hazardous air pollutant that is emitted (or could reasonably be anticipated to be emitted) and a description of the planned air pollution control system (equipment or method) for each emission point. The description of the equipment to be used for the control of emissions must include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions must include an estimated control efficiency (percent) for that method. Such technical information must include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations.

(3) *Application for approval of reconstruction.* Each application for approval of reconstruction shall include, in addition to the information required in paragraph (d)(1)(ii) of this section—

(i) A brief description of the affected source and the components that are to be replaced;

(ii) A description of present and proposed emission control systems (i.e., equipment or methods). The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations;

(iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;

(iv) The estimated life of the affected source after the replacements; and

(v) A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.

(vi) If in the application for approval of reconstruction the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or other requirements, the owner or operator need not submit the information required in paragraphs (d)(3)(iii) through (d)(3)(v) of this section.

(4) *Additional information.* The Administrator may request additional relevant information after the submittal of an application for approval of construction or reconstruction.

(e) *Approval of construction or reconstruction.* (1)(i) If the Administrator determines that, if properly constructed, or reconstructed, and operated, a new or existing source for which an application under paragraph (d) of this section was

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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submitted will not cause emissions in violation of the relevant standard(s) and any other federally enforceable requirements, the Administrator will approve the construction or reconstruction.

(ii) In addition, in the case of reconstruction, the Administrator's determination under this paragraph will be based on:

(A) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;

(B) The estimated life of the source after the replacements compared to the life of a comparable entirely new source;

(C) The extent to which the components being replaced cause or contribute to the emissions from the source; and

(D) Any economic or technical limitations on compliance with relevant standards that are inherent in the proposed replacements.

(2)(i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of construction or reconstruction within 60 calendar days after receipt of sufficient information to evaluate an application submitted under paragraph (d) of this section. The 60-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(3) Before denying any application for approval of construction or reconstruction, the Administrator will notify the applicant of the Administrator's intention to issue the denial together with—

(i) Notice of the information and findings on which the intended denial is based; and

(ii) Notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator to enable further action on the application.

(4) A final determination to deny any application for approval will be in writing and will specify the grounds on which the denial is based. The final determination will be made within 60 calendar days of presentation of additional information or arguments (if the application is complete), or within 60 calendar days after the final date specified for presentation if no presentation is made.

(5) Neither the submission of an application for approval nor the Administrator's approval of construction or reconstruction shall—

(i) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(ii) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(f) *Approval of construction or reconstruction based on prior State preconstruction review.* (1) Preconstruction review procedures that a State utilizes for other purposes may also be utilized for purposes of this section if the procedures are substantially equivalent to those specified in this section. The Administrator will approve an application for construction or reconstruction specified in paragraphs (b)(3) and (d) of this section if the owner or operator of a new affected source or reconstructed affected source, who is subject to such requirement meets the following conditions:

(i) The owner or operator of the new affected source or reconstructed affected source has undergone a preconstruction review and approval process in the State in which the source is (or would be) located and has received a federally enforceable construction permit that contains a finding that the source will meet the relevant promulgated emission standard, if the source is properly built and operated.

(ii) Provide a statement from the State or other evidence (such as State regulations) that it considered the factors specified in paragraph (e)(1) of this section.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(2) The owner or operator must submit to the Administrator the request for approval of construction or reconstruction under this paragraph (f)(2) no later than the application deadline specified in paragraph (d)(1) of this section (see also §63.9(b)(2)). The owner or operator must include in the request information sufficient for the Administrator's determination. The Administrator will evaluate the owner or operator's request in accordance with the procedures specified in paragraph (e) of this section. The Administrator may request additional relevant information after the submittal of a request for approval of construction or reconstruction under this paragraph (f)(2).

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

**§63.6 Compliance with standards and maintenance requirements.**

(a) *Applicability.* (1) The requirements in this section apply to the owner or operator of affected sources for which any relevant standard has been established pursuant to section 112 of the Act and the applicability of such requirements is set out in accordance with §63.1(a)(4) unless—

(i) The Administrator (or a State with an approved permit program) has granted an extension of compliance consistent with paragraph (i) of this section; or

(ii) The President has granted an exemption from compliance with any relevant standard in accordance with section 112(i)(4) of the Act.

(2) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source, such source shall be subject to the relevant emission standard or other requirement.

(b) *Compliance dates for new and reconstructed sources.* (1) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after proposal of a relevant standard that has an initial startup before the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard not later than the standard's effective date.

(2) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source that has an initial startup after the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard upon startup of the source.

(3) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under this part pursuant to section 112(d), 112(f), or 112(h) of the Act but before the effective date (that is, promulgation) of such standard shall comply with the relevant emission standard not later than the date 3 years after the effective date if:

(i) The promulgated standard (that is, the relevant standard) is more stringent than the proposed standard; for purposes of this paragraph, a finding that controls or compliance methods are “more stringent” must include control technologies or performance criteria and compliance or compliance assurance methods that are different but are substantially equivalent to those required by the promulgated rule, as determined by the Administrator (or his or her authorized representative); and

(ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.

(4) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of a relevant standard established pursuant to section 112(f) shall not be required to comply with the section 112(f) emission standard until the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112(f) standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator must comply with the standard as provided in paragraphs (b)(1) and (2) of this section.

(5) The owner or operator of a new source that is subject to the compliance requirements of paragraph (b)(3) or (4) of this section must notify the Administrator in accordance with §63.9(d)

(6) [Reserved]

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(7) When an area source becomes a major source by the addition of equipment or operations that meet the definition of new affected source in the relevant standard, the portion of the existing facility that is a new affected source must comply with all requirements of that standard applicable to new sources. The source owner or operator must comply with the relevant standard upon startup.

(c) *Compliance dates for existing sources.* (1) After the effective date of a relevant standard established under this part pursuant to section 112(d) or 112(h) of the Act, the owner or operator of an existing source shall comply with such standard by the compliance date established by the Administrator in the applicable subpart(s) of this part. Except as otherwise provided for in section 112 of the Act, in no case will the compliance date established for an existing source in an applicable subpart of this part exceed 3 years after the effective date of such standard.

(2) If an existing source is subject to a standard established under this part pursuant to section 112(f) of the Act, the owner or operator must comply with the standard by the date 90 days after the standard's effective date, or by the date specified in an extension granted to the source by the Administrator under paragraph (i)(4)(ii) of this section, whichever is later.

(3)-(4) [Reserved]

(5) Except as provided in paragraph (b)(7) of this section, the owner or operator of an area source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source shall be subject to relevant standards for existing sources. Such sources must comply by the date specified in the standards for existing area sources that become major sources. If no such compliance date is specified in the standards, the source shall have a period of time to comply with the relevant emission standard that is equivalent to the compliance period specified in the relevant standard for existing sources in existence at the time the standard becomes effective.

(d) [Reserved]

(e) *Operation and maintenance requirements.* (1)(i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

(ii) Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

(2) [Reserved]

(3) *Startup, shutdown, and malfunction plan.* (i) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to—

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(ii) [Reserved]

(iii) When actions taken by the owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, the owner or operator must keep records of these events as specified in paragraph 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in §63.10(d)(5).

(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with §63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.

(vii) Based on the results of a determination made under paragraph (e)(1)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(A) Does not address a startup, shutdown, or malfunction event that has occurred;

(B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

(D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in §63.2.

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by §63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

(ix) The title V permit for an affected source must require that the owner or operator develop a startup, shutdown, and malfunction plan which conforms to the provisions of this part, but may do so by citing to the relevant subpart or subparagraphs of paragraph (e) of this section. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter and the elements of the startup, shutdown, and malfunction plan shall not be considered an applicable requirement as defined in §70.2 and §71.2 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

(f) *Compliance with nonopacity emission standards—(1) Applicability.* The non-opacity emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.

(2) *Methods for determining compliance.* (i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in §63.7, unless otherwise specified in an applicable subpart of this part.

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in §63.6(e) and applicable subparts of this part.

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(B) The performance test was conducted under representative operating conditions for the source;

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e) of this subpart; and

(D) The performance test was appropriately quality-assured, as specified in §63.7(c).

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

(3) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

(g) *Use of an alternative nonopacity emission standard.* (1) If, in the Administrator's judgment, an owner or operator of an affected source has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. Any FEDERAL REGISTER notice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.

(2) An owner or operator requesting permission under this paragraph shall, unless otherwise specified in an applicable subpart, submit a proposed test plan or the results of testing and monitoring in accordance with §63.7 and §63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in §63.7 and §63.8.

(3) The Administrator may establish general procedures in an applicable subpart that accomplish the requirements of paragraphs (g)(1) and (g)(2) of this section.

(h) *Compliance with opacity and visible emission standards—(1) Applicability.* The opacity and visible emission standards set forth in this part must apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.

(2) *Methods for determining compliance.* (i) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable subpart. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance with numerical opacity emission standards in this part, compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting observations in accordance with Test Method 9 in appendix A of part 60 of this chapter or the method specified in paragraph (h)(7)(ii) of this section. Whenever a visible emission test method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of part 60 of this chapter.



**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(ii) [Reserved]

(iii) If an affected source undergoes opacity or visible emission testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—

(A) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;

(B) The opacity or visible emission test was conducted under representative operating conditions for the source;

(C) The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e); and

(D) The opacity or visible emission test was appropriately quality-assured, as specified in §63.7(c) of this section.

(3) [Reserved]

(4) *Notification of opacity or visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting opacity or visible emission observations in accordance with §63.9(f), if such observations are required for the source by a relevant standard.

(5) *Conduct of opacity or visible emission observations.* When a relevant standard under this part includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:

(i) For the purpose of demonstrating initial compliance, opacity or visible emission observations shall be conducted concurrently with the initial performance test required in §63.7 unless one of the following conditions applies:

(A) If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new sources that start up before the standard's effective date. If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 120 days after the compliance date for an existing or modified source; or

(B) If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, or within the time period specified in paragraph (h)(5)(i)(A) of this section, the source's owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under §63.7. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Test Method 9 or Test Method 22 in appendix A of part 60 of this chapter.

(ii) For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours (30 6-minute averages) for the performance test or other required set of observations (e.g., for fugitive-type emission sources subject only to an opacity emission standard).

(iii) The owner or operator of an affected source to which an opacity or visible emission standard in this part applies shall conduct opacity or visible emission observations in accordance with the provisions of this section, record the results of the evaluation of emissions, and report to the Administrator the opacity or visible emission results in accordance with the provisions of §63.10(d).

(iv) [Reserved]

(v) Opacity readings of portions of plumes that contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity emission standards.

(6) *Availability of records.* The owner or operator of an affected source shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(7) *Use of a continuous opacity monitoring system.* (i) The owner or operator of an affected source required to use a continuous opacity monitoring system (COMS) shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results in accordance with the provisions of §63.10(e)(4).

(ii) Whenever an opacity emission test method has not been specified in an applicable subpart, or an owner or operator of an affected source is required to conduct Test Method 9 observations (see appendix A of part 60 of this chapter), the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under §63.7 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the Administrator of that decision, in writing, simultaneously with the notification under §63.7(b) of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under §63.7, unless the owner or operator notifies the Administrator in writing to the contrary not later than with the notification under §63.7(b) of the date the subsequent performance test is scheduled to begin.

(iii) For the purposes of determining compliance with the opacity emission standard during a performance test required under §63.7 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.

(iv) The owner or operator of an affected source using a COMS for compliance purposes is responsible for demonstrating that he/she has complied with the performance evaluation requirements of §63.8(e), that the COMS has been properly maintained, operated, and data quality-assured, as specified in §63.8(c) and §63.8(d), and that the resulting data have not been altered in any way.

(v) Except as provided in paragraph (h)(7)(ii) of this section, the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in §63.8(c), and met Performance Specification 1 in appendix B of part 60 of this chapter, and that the resulting data have not been altered in any way.

(8) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard (including the written reports of the results of the performance tests required by §63.7, the results of Test Method 9 or another required opacity or visible emission test method, the observer certification required by paragraph (h)(6) of this section, and the continuous opacity monitoring system results, whichever is/are applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.

(9) *Adjustment to an opacity emission standard.* (i) If the Administrator finds under paragraph (h)(8) of this section that an affected source is in compliance with all relevant standards for which initial performance tests were conducted under §63.7, but during the time such performance tests were conducted fails to meet any relevant opacity emission standard, the owner or operator of such source may petition the Administrator to make appropriate adjustment to the opacity emission standard for the affected source. Until the Administrator notifies the owner or operator of the appropriate adjustment, the relevant opacity emission standard remains applicable.

(ii) The Administrator may grant such a petition upon a demonstration by the owner or operator that—

(A) The affected source and its associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the performance tests;

(B) The performance tests were performed under the conditions established by the Administrator; and

(C) The affected source and its associated air pollution control equipment were incapable of being adjusted or operated to meet the relevant opacity emission standard.

(iii) The Administrator will establish an adjusted opacity emission standard for the affected source meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity emission standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity emission standard in the FEDERAL REGISTER.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(iv) After the Administrator promulgates an adjusted opacity emission standard for an affected source, the owner or operator of such source shall be subject to the new opacity emission standard, and the new opacity emission standard shall apply to such source during any subsequent performance tests.

(i) *Extension of compliance with emission standards.* (1) Until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part.

(2) *Extension of compliance for early reductions and other reductions—(i) Early reductions.* Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator (or the State with an approved permit program) will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D.

(ii) *Other reductions.* Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) (as defined in section 169(3) of the Act) or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

(3) *Request for extension of compliance.* Paragraphs (i)(4) through (i)(7) of this section concern requests for an extension of compliance with a relevant standard under this part (except requests for an extension of compliance under paragraph (i)(2)(i) of this section will be handled through procedures specified in subpart D of this part).

(4)(i)(A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 1-year extension of compliance is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) Any request under this paragraph for an extension of compliance with a relevant standard must be submitted in writing to the appropriate authority no later than 120 days prior to the affected source's compliance date (as specified in paragraphs (b) and (c) of this section), except as provided for in paragraph (i)(4)(i)(C) of this section. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the date of denial. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards.

(C) An owner or operator may submit a compliance extension request after the date specified in paragraph (i)(4)(i)(B) of this section provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date and the need arose due to circumstances beyond reasonable control of the owner or operator. This request must include, in addition to the information required in paragraph (i)(6)(i) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the original compliance date.

(ii) The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a relevant standard under this paragraph must be submitted in writing to the Administrator not later than 90 calendar days after the effective date of the relevant standard.

(5) The owner or operator of an existing source that has installed BACT or technology required to meet LAER [as specified in paragraph (i)(2)(ii) of this section] prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(6)(i) The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:

(A) A description of the controls to be installed to comply with the standard;

(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(1) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated; and

(2) The date by which final compliance is to be achieved.

(3) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

(4) The date by which final compliance is to be achieved;

(C)-(D)

(ii) The request for a compliance extension under paragraph (i)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(7) Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

(8) *Approval of request for extension of compliance.* Paragraphs (i)(9) through (i)(14) of this section concern approval of an extension of compliance requested under paragraphs (i)(4) through (i)(6) of this section.

(9) Based on the information provided in any request made under paragraphs (i)(4) through (i)(6) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with an emission standard, as specified in paragraphs (i)(4) and (i)(5) of this section.

(10) The extension will be in writing and will—

(i) Identify each affected source covered by the extension;

(ii) Specify the termination date of the extension;

(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;

(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and

(v)(A) Under paragraph (i)(4), specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or

(B) Under paragraph (i)(5), specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.

(11) The owner or operator of an existing source that has been granted an extension of compliance under paragraph (i)(10) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (i)(10) of this section.

(12)(i) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(i) or (i)(5) of this section. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with—

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.

(iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(13)(i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with—

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

(iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(14) The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraph (i)(10)(iii) or (iv) of this section is not met. Upon a

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

determination to terminate, the Administrator will notify, in writing, the owner or operator of the Administrator's determination to terminate, together with:

(i) Notice of the reason for termination; and

(ii) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the determination to terminate, additional information or arguments to the Administrator before further action on the termination.

(iii) A final determination to terminate an extension of compliance will be in writing and will set forth the specific grounds on which the termination is based. The final determination will be made within 30 calendar days after presentation of additional information or arguments, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(15) [Reserved]

(16) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.

(j) *Exemption from compliance with emission standards.* The President may exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16599, Apr. 5, 2002; 68 FR 32600, May 30, 2003; 71 FR 20454, Apr. 20, 2006]

**§63.7 Performance testing requirements.**

(a) *Applicability and performance test dates.* (1) The applicability of this section is set out in §63.1(a)(4).

(2) Except as provided in paragraph (a)(4) of this section, if required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of paragraph (c)(3)(ii)(B) of this section apply, the owner or operator of the affected source must perform such tests within 180 days of the compliance date for such source.

(i)-(viii) [Reserved]

(ix) Except as provided in paragraph (a)(4) of this section, when an emission standard promulgated under this part is more stringent than the standard proposed (see §63.6(b)(3)), the owner or operator of a new or reconstructed source subject to that standard for which construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the owner or operator may choose to demonstrate compliance with either the proposed or the promulgated standard. If the owner or operator chooses to comply with the proposed standard initially, the owner or operator shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source, whichever is later, to demonstrate compliance with the promulgated standard.

(3) The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.

(4) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure:

(i) The owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline specified in paragraph (a)(2) or (a)(3) of this section, or elsewhere in this part, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(ii) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.

(iii) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.

(iv) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(4)(i), (a)(4)(ii), and (a)(4)(iii) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.

(b) *Notification of performance test.* (1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review and approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test.

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in paragraph (b)(1) of this section due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(c) *Quality assurance program.* (1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test.

(2)(i) *Submission of site-specific test plan.* Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.

(iii) The performance testing shall include a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. Gaseous audit samples are designed to audit the performance of the sampling system as well as the analytical system and must be collected by the sampling system during the compliance test just as the compliance samples are collected. If a liquid or solid audit sample is designed to audit the sampling system, it must also be collected by the sampling system during the compliance test. If multiple sampling systems or sampling trains are used during the compliance test for any of the test methods, the tester is only required to use one of the sampling systems per method to collect the audit sample. The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system and at the same time as the compliance samples. Retests are required when there is a failure to produce acceptable results for an audit sample. However, if the audit results do not affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. Acceptance of the test results shall constitute a waiver of the reanalysis requirement, further audits, or retests. The compliance authority may also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample. For pollutants that exist in the gas phase at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in air or nitrogen that can be introduced into the sampling system of the test method at or near the same entry point as a sample from the emission source. If no gas phase audit samples are available, an acceptable alternative is a sample of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. For samples that exist only in a liquid or solid form at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in the same matrix that would be

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

produced when the sample is recovered from the sampling system as required by the test method. An accredited audit sample provider (AASP) is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.

(A) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. No audit samples are required for the following test methods: Methods 3A and 3C of appendix A-3 of part 60 of this chapter; Methods 6C, 7E, 9, and 10 of appendix A-4 of part 60; Methods 18 and 19 of appendix A-6 of part 60; Methods 20, 22, and 25A of appendix A-7 of part 60; Methods 30A and 30B of appendix A-8 of part 60; and Methods 303, 318, 320, and 321 of appendix A of this part. If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test. The compliance authority responsible for the compliance test may waive the requirement to include an audit sample if they believe that an audit sample is not necessary. “Commercially available” means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, [www.epa.gov/ttn/emc](http://www.epa.gov/ttn/emc), to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test. When ordering an audit sample, the source owner, operator, or representative shall give the sample provider an estimate for the concentration of each pollutant that is emitted by the source or the estimated concentration of each pollutant based on the permitted level and the name, address, and phone number of the compliance authority. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the AASP. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The tester may request, and the compliance authority may grant, a waiver to the requirement that a representative of the compliance authority must be present at the testing site during the field analysis of an audit sample. The source owner, operator, or representative may report the results of the audit sample to the compliance authority and then report the results of the audit sample to the AASP prior to collecting any emission samples. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

(B) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:

(1) Preparing the sample;

(2) Confirming the true concentration of the sample;

(3) Defining the acceptance limits for the results from a well qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range;

(4) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;

(5) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;

(6) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;

(7) Reporting the results from each audit sample in a timely manner to the compliance authority and to the source owner, operator, or representative by the AASP. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company



**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.

(8) Evaluating the acceptance limits of samples at least once every two years to determine in consultation with the voluntary consensus standard body if they should be changed.

(9) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.

(C) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria document that describes how audit samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:

(1) Checking audit samples to confirm their true value as reported by the AASP.

(2) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years.

(3) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.

(D) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). The VCSB shall operate in accordance with the procedures and requirements in the Office of Management and Budget *Circular A-119*. A copy of Circular A-119 is available upon request by writing the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, by calling (202) 395-6880 or downloading online at [http://standards.gov/standards\\_gov/a119.cfm](http://standards.gov/standards_gov/a119.cfm). The VCSB shall approve all accrediting bodies. The Administrator will review all technical criteria documents. If the technical criteria documents do not meet the minimum technical requirements in paragraphs (c)(2)(iii)(B) through (C) of this section, the technical criteria documents are not acceptable and the proposed audit sample program is not capable of producing audit samples of sufficient quality to be used in a compliance test. All acceptable technical criteria documents shall be posted on the EPA Web site at the following URL, <http://www.epa.gov/ttn/emc>.

(iv) The owner or operator of an affected source shall submit the site-specific test plan to the Administrator upon the Administrator's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under paragraph (b) of this section, or on a mutually agreed upon date.

(v) The Administrator may request additional relevant information after the submittal of a site-specific test plan.

(3) *Approval of site-specific test plan.* (i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under paragraph (c)(3)(i)(B) of this section. Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator's intention to disapprove the plan together with—

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan.

(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in paragraph (c)(3)(i) of this section, the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see paragraph (e)(2)(i) of this section), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s);

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see paragraph (f) of this section). However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(iii) Neither the submission of a site-specific test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(d) *Performance testing facilities.* If required to do performance testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source, shall provide performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source. This includes:

(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

(2) Safe sampling platform(s);

(3) Safe access to sampling platform(s);

(4) Utilities for sampling and testing equipment; and

(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

(e) *Conduct of performance tests.* (1) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under §63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of this chapter unless the Administrator—

(i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in §63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see paragraph (c) of this section); or

(ii) Approves the use of an intermediate or major change or alternative to a test method (see definitions in §63.90(a)), the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(iii) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or

(iv) Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that—

(i) A sample is accidentally lost after the testing team leaves the site; or

(ii) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or

(iii) Extreme meteorological conditions occur; or

(iv) Other circumstances occur that are beyond the owner or operator's control.

(4) Nothing in paragraphs (e)(1) through (e)(3) of this section shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(f) *Use of an alternative test method*—(1)*General*. Until authorized to use an intermediate or major change or alternative to a test method, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator—

(i) Notifies the Administrator of his or her intention to use an alternative test method at least 60 days before the performance test is scheduled to begin;

(ii) Uses Method 301 in appendix A of this part to validate the alternative test method. This may include the use of specific procedures of Method 301 if use of such procedures are sufficient to validate the alternative test method; and

(iii) Submits the results of the Method 301 validation process along with the notification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this paragraph well in advance of the deadline specified in paragraph (f)(2)(i) of this section to ensure a timely review by the Administrator in order to meet the performance test date specified in this section or the relevant standard.

(3) The Administrator will determine whether the owner or operator's validation of the proposed alternative test method is adequate and issue an approval or disapproval of the alternative test method. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method. However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval/disapproval 45 days after submission of the request to use an alternative method and the request satisfies the requirements in paragraph (f)(2) of this section. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(4) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.

(5) If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of such source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method as allowed under §63.7(f).

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(6) Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator's responsibility to comply with the requirements of this part.

(g) *Data analysis, recordkeeping, and reporting.* (1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is “completed” when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator (see §63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.

(2) Contents of report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include the elements identified in paragraphs (g)(2)(i) through (vi) of this section.

(i) General identification information for the facility including a mailing address, the physical address, the owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility.

(ii) Purpose of the test including the applicable regulation requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard, and any process parameter component, and a brief process description.

(iii) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location.

(iv) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.

(v) Where a test method requires you record or report, the following shall be included in your report: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.

(vi) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test including his/her email address.

(3) For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.

(h) *Waiver of performance tests.* (1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) *Request to waive a performance test.* (i) If a request is made for an extension of compliance under §63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under paragraph (c) of this section is not submitted.

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under §63.6(i), §63.9(h), and §63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least 60 days before the performance test if the site-specific test plan required under paragraph (c) of this section is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

(4) *Approval of request to waive performance test.* The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (h)(3) of this section when he/she—

(i) Approves or denies an extension of compliance under §63.6(i)(8); or

(ii) Approves or disapproves a site-specific test plan under §63.7(c)(3); or

(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

[59 FR 12430, Mar. 16, 1994, as amended at 65 FR 62215, Oct. 17, 2000; 67 FR 16602, Apr. 5, 2002; 72 FR 27443, May 16, 2007; 75 FR 55655, Sept. 13, 2010; 79 FR 11277, Feb. 27, 2014; 81 FR 59825, Aug. 30, 2016]

**§63.8 Monitoring requirements.**

(a) *Applicability.* (1) The applicability of this section is set out in §63.1(a)(4).

(2) For the purposes of this part, all CMS required under relevant standards shall be subject to the provisions of this section upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Administrator.

(3) [Reserved]

(4) Additional monitoring requirements for control devices used to comply with provisions in relevant standards of this part are specified in §63.11.

(b) *Conduct of monitoring.* (1) Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator—

(i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures (see §63.90(a) for definition); or

(ii) Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures (see §63.90(a) for definition).

(iii) Owners or operators with flares subject to §63.11(b) are not subject to the requirements of this section unless otherwise specified in the relevant standard.

(2)(i) When the emissions from two or more affected sources are combined before being released to the atmosphere, the owner or operator may install an applicable CMS for each emission stream or for the combined emissions streams, provided the monitoring is sufficient to demonstrate compliance with the relevant standard.

(ii) If the relevant standard is a mass emission standard and the emissions from one affected source are released to the atmosphere through more than one point, the owner or operator must install an applicable CMS at each emission point unless the installation of fewer systems is—

(A) Approved by the Administrator; or

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(B) Provided for in a relevant standard (e.g., instead of requiring that a CMS be installed at each emission point before the effluents from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device).

(3) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the owner or operator shall report the results from the CMS used to meet the monitoring requirements of this part. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the owner or operator shall report the results from each CMS for the relevant compliance period.

(c) *Operation and maintenance of continuous monitoring systems.* (1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices. (i) The owner or operator of an affected source must maintain and operate each CMS as specified in §63.6(e)(1).

(ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

(iii) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan for CMS as specified in §63.6(e)(3).

(2)(i) All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).

(ii) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

(3) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under §63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(4) Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(i) All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(ii) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(5) Unless otherwise approved by the Administrator, minimum procedures for COMS shall include a method for producing a simulated zero opacity condition and an upscale (high-level) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of all the analyzer's internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity.

(6) The owner or operator of a CMS that is not a CPMS, which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity. The CPMS must be calibrated prior to use for the purposes of

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

complying with this section. The CPMS must be checked daily for indication that the system is responding. If the CPMS system includes an internal system check, results must be recorded and checked daily for proper operation.

(7)(i) A CMS is out of control if—

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or

(B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

(C) The COMS CD exceeds two times the limit in the applicable performance specification in the relevant standard.

(ii) When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

(8) The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in §63.10(e)(3).

(d) *Quality control program.* (1) The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

(2) The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

(i) Initial and any subsequent calibration of the CMS;

(ii) Determination and adjustment of the calibration drift of the CMS;

(iii) Preventive maintenance of the CMS, including spare parts inventory;

(iv) Data recording, calculations, and reporting;

(v) Accuracy audit procedures, including sampling and analysis methods; and

(vi) Program of corrective action for a malfunctioning CMS.

(3) The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts.

(e) *Performance evaluation of continuous monitoring systems—*(1) *General.* When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(2) *Notification of performance evaluation.* The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under §63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

(3)(i) *Submission of site-specific performance evaluation test plan.* Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iii) The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).

(iv) The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

(v) In the event that the Administrator fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified in §63.7(c)(3), the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the monitoring method(s) specified in the relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this subpart using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance evaluation until the Administrator approves the use of the alternative method. If the Administrator does not approve the use of the alternative method within 30 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in paragraph (e)(4) of this section may be extended such that the owner or operator shall conduct the performance evaluation within 60 calendar days after the Administrator approves the use of the alternative method. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance evaluation as required in this section (without the Administrator's prior approval of the site-specific performance evaluation test plan) if he/she subsequently chooses to use the specified monitoring method(s) instead of an alternative.

(vi) Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) *Conduct of performance evaluation and performance evaluation dates.* The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under §63.7 in accordance with the applicable performance specification as specified in the relevant standard. Notwithstanding the requirement in the previous sentence, if the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under §63.6(h)(7), he/she shall conduct a performance evaluation of the COMS as specified in the relevant standard, before the performance test required under §63.7 is conducted in time to submit the results of the performance evaluation as specified in paragraph (e)(5)(ii) of this section. If a performance test is not required, or the requirement for a performance test has been waived under §63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in §63.7(a), or as otherwise specified in the relevant standard.



**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(5) *Reporting performance evaluation results.* (i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation simultaneously with the results of the performance test required under §63.7 or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard. The Administrator may request that the owner or operator submit the raw data from a performance evaluation in the report of the performance evaluation results.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation under this paragraph. The copies shall be provided at least 15 calendar days before the performance test required under §63.7 is conducted.

(f) *Use of an alternative monitoring method—*(1) *General.* Until permission to use an alternative monitoring procedure (minor, intermediate, or major changes; see definition in §63.90(a)) has been granted by the Administrator under this paragraph (f)(1), the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:

(i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;

(ii) Alternative monitoring requirements when the affected source is infrequently operated;

(iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;

(iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;

(v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;

(vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;

(vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;

(viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or

(ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.

(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.

(4)(i) *Request to use alternative monitoring procedure.* An owner or operator who wishes to use an alternative monitoring procedure must submit an application to the Administrator as described in paragraph (f)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring procedure is not the performance test method used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring procedure will serve as the performance test method that is to be used to demonstrate compliance with a relevant standard, the application must be submitted at least 60 days before the performance evaluation is scheduled to begin and must meet the requirements for an alternative test method under §63.7(f).

(ii) The application must contain a description of the proposed alternative monitoring system which addresses the four elements contained in the definition of monitoring in §63.2 and a performance evaluation test plan, if required, as specified in paragraph (e)(3) of this section. In addition, the application must include information justifying the owner or operator's

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (f)(4)(i) above to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

(iv) Application for minor changes to monitoring procedures, as specified in paragraph (b)(1) of this section, may be made in the site-specific performance evaluation plan.

(5) *Approval of request to use alternative monitoring procedure.* (i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. If a request for a minor change is made in conjunction with site-specific performance evaluation plan, then approval of the plan will constitute approval of the minor change. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with—

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.

(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by §63.8(f).

(6) *Alternative to the relative accuracy test.* An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:

(i) *Criteria for approval of alternative procedures.* An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in §63.7, or other tests performed following the criteria in §63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

(ii) *Petition to use alternative to relative accuracy test.* The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

(iii) *Rescission of approval to use alternative to relative accuracy test.* The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 8.4 of Performance Specification 2.

(g) *Reduction of monitoring data.* (1) The owner or operator of each CMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5) of this section.

(2) The owner or operator of each COMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in §63.2.

(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant).

(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(5) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under this part. For the owner or operator complying with the requirements of §63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16603, Apr. 5, 2002; 71 FR 20455, Apr. 20, 2006; 79 FR 11277, Feb. 27, 2014]

#### **§63.9 Notification requirements.**

(a) *Applicability and general information.* (1) The applicability of this section is set out in §63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(4)(i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).

(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

(b) *Initial notifications.* (1)(i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(ii) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements of this section.

(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under §63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph.

(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

(i) The name and address of the owner or operator;

(ii) The address (i.e., physical location) of the affected source;

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

(iv) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and

(v) A statement of whether the affected source is a major source or an area source.

(3) [Reserved]

(4) The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under §63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i); and

(ii)-(iv) [Reserved]

(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(5) The owner or operator of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required under §63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source, and

(ii) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(iii) Unless the owner or operator has requested and received prior permission from the Administrator to submit less than the information in §63.5(d), the notification must include the information required on the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i).

(c) *Request for extension of compliance.* If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with §63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §63.6(i)(4) through §63.6(i)(6).

(d) *Notification that source is subject to special compliance requirements.* An owner or operator of a new source that is subject to special compliance requirements as specified in §63.6(b)(3) and §63.6(b)(4) shall notify the Administrator of

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.

(e) *Notification of performance test.* The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under §63.7(c), if requested by the Administrator, and to have an observer present during the test.

(f) *Notification of opacity and visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in §63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, the owner or operator shall deliver or postmark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.

(g) *Additional notification requirements for sources with continuous monitoring systems.* The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:

(1) A notification of the date the CMS performance evaluation under §63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under §63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under §63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;

(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by §63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by §63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and

(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by §63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked not later than 10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.

(h) *Notification of compliance status.* (1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

(2)(i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list—

(A) The methods that were used to determine compliance;

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;

(E) If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);

(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

(ii) The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

(3) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

(4) [Reserved]

(5) If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in §63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of §63.5, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

(6) Advice on a notification of compliance status may be obtained from the Administrator.

(i) *Adjustment to time periods or postmark deadlines for submittal and review of required communications.* (1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (i)(2) and (i)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

(j) *Change in information already provided.* Any change in the information already provided under this section shall be provided to the Administrator in writing within 15 calendar days after the change.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16604, Apr. 5, 2002; 68 FR 32601, May 30, 2003]

**§63.10 Recordkeeping and reporting requirements.**

(a) *Applicability and general information.* (1) The applicability of this section is set out in §63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(4)(i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).

(ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any reports at its discretion.

(5) If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in §63.9(i).

(6) If an owner or operator supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in §63.9(i).

(7) If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this provision are specified in §63.9(i).

(b) *General recordkeeping requirements.* (1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of—

(i) The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards;

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(ii) The occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment;

(iii) All required maintenance performed on the air pollution control and monitoring equipment;

(iv)(A) Actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)); or

(B) Actions taken during periods of malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3));

(v) All information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)) when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

(vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);

(vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(x) All CMS calibration checks;

(xi) All adjustments and maintenance performed on CMS;

(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;

(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under §63.8(f)(6); and



**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(xiv) All documentation supporting initial notifications and notifications of compliance status under §63.9.

(3) *Recordkeeping requirement for applicability determinations.* If an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f), and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under this part) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any. The requirements to determine applicability of a standard under §63.1(b)(3) and to record the results of that determination under paragraph (b)(3) of this section shall not by themselves create an obligation for the owner or operator to obtain a title V permit.

(c) *Additional recordkeeping requirements for sources with continuous monitoring systems.* In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of—

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

(2)-(4) [Reserved]

(5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

(6) The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);

(7) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;

(8) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

(9) [Reserved]

(10) The nature and cause of any malfunction (if known);

(11) The corrective action taken or preventive measures adopted;

(12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

(13) The total process operating time during the reporting period; and

(14) All procedures that are part of a quality control program developed and implemented for CMS under §63.8(d).

(15) In order to satisfy the requirements of paragraphs (c)(10) through (c)(12) of this section and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in §63.6(e), provided that such plan and records adequately address the requirements of paragraphs (c)(10) through (c)(12).

(d) *General reporting requirements.* (1) Notwithstanding the requirements in this paragraph or paragraph (e) of this section, and except as provided in §63.16, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(2) *Reporting results of performance tests.* Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under §63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h).

(3) *Reporting results of opacity or visible emission observations.* The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the opacity or visible emission results (produced using Test Method 9 or Test Method 22, or an alternative to these test methods) along with the results of the performance test required under §63.7. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under §63.7, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.

(4) *Progress reports.* The owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(5)(i) *Periodic startup, shutdown, and malfunction reports.* If actions taken by an owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (see §63.6(e)(3)), the owner or operator shall state such information in a startup, shutdown, and malfunction report. Actions taken to minimize emissions during such startups, shutdowns, and malfunctions shall be summarized in the report and may be done in checklist form; if actions taken are the same for each event, only one checklist is necessary. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup or shutdown caused the source to exceed any applicable emission limitation in the relevant emission standards, or if a malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

(ii) *Immediate startup, shutdown, and malfunction reports.* Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup or shutdown that caused the source to exceed any applicable emission limitation in the relevant emission standards, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph (d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, describing all excess emissions and/or parameter monitoring exceedances which are

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions in conformance with §63.6(e)(1)(i). Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph (d)(5)(ii) are specified in §63.9(i).

(e) *Additional reporting requirements for sources with continuous monitoring systems*—(1) *General*. When more than one CEMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CEMS.

(2) *Reporting results of continuous monitoring system performance evaluations*. (i) The owner or operator of an affected source required to install a CMS by a relevant standard shall furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as required under §63.8(e), simultaneously with the results of the performance test required under §63.7, unless otherwise specified in the relevant standard.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation conducted under §63.8(e). The copies shall be furnished at least 15 calendar days before the performance test required under §63.7 is conducted.

(3) *Excess emissions and continuous monitoring system performance report and summary report*. (i) Excess emissions and parameter monitoring exceedances are defined in relevant standards. The owner or operator of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Administrator semiannually, except when—

(A) More frequent reporting is specifically required by a relevant standard;

(B) The Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(C) [Reserved]

(D) The affected source is complying with the Performance Track Provisions of §63.16, which allows less frequent reporting.

(ii) *Request to reduce frequency of excess emissions and continuous monitoring system performance reports*. Notwithstanding the frequency of reporting requirements specified in paragraph (e)(3)(i) of this section, an owner or operator who is required by a relevant standard to submit excess emissions and continuous monitoring system performance (and summary) reports on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(A) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected source's excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance with the relevant standard;

(B) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the relevant standard; and

(C) The Administrator does not object to a reduced frequency of reporting for the affected source, as provided in paragraph (e)(3)(iii) of this section.

(iii) The frequency of reporting of excess emissions and continuous monitoring system performance (and summary) reports required to comply with a relevant standard may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the 5-year recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(iv) As soon as CMS data indicate that the source is not in compliance with any emission limitation or operating parameter specified in the relevant standard, the frequency of reporting shall revert to the frequency specified in the relevant standard, and the owner or operator shall submit an excess emissions and continuous monitoring system performance (and summary) report for the noncomplying emission points at the next appropriate reporting period following the noncomplying event. After demonstrating ongoing compliance with the relevant standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard, as provided for in paragraphs (e)(3)(ii) and (e)(3)(iii) of this section.

(v) *Content and submittal dates for excess emissions and monitoring system performance reports.* All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of this section, in §§63.8(c)(7) and 63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

(vi) *Summary report.* As required under paragraphs (e)(3)(vii) and (e)(3)(viii) of this section, one summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). The summary report shall be entitled “Summary Report—Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance” and shall contain the following information:

- (A) The company name and address of the affected source;
- (B) An identification of each hazardous air pollutant monitored at the affected source;
- (C) The beginning and ending dates of the reporting period;
- (D) A brief description of the process units;
- (E) The emission and operating parameter limitations specified in the relevant standard(s);
- (F) The monitoring equipment manufacturer(s) and model number(s);
- (G) The date of the latest CMS certification or audit;
- (H) The total operating time of the affected source during the reporting period;

(I) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;

(J) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

- (K) A description of any changes in CMS, processes, or controls since the last reporting period;
- (L) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and
- (M) The date of the report.

(vii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator.

(viii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.

(4) *Reporting continuous opacity monitoring system data produced during a performance test.* The owner or operator of an affected source required to use a COMS shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results. The report of COMS data shall be submitted simultaneously with the report of the performance test results required in paragraph (d)(2) of this section.

(f) *Waiver of recordkeeping or reporting requirements.* (1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under §63.6(i), any required compliance progress report or compliance status report required under this part (such as under §§63.6(i) and 63.9(h)) or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.

(4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she—

(i) Approves or denies an extension of compliance; or

(ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.

(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16604, Apr. 5, 2002; 68 FR 32601, May 30, 2003; 69 FR 21752, Apr. 22, 2004; 71 FR 20455, Apr. 20, 2006]

**§63.11 Control device and work practice requirements.**

(a) *Applicability.* (1) The applicability of this section is set out in §63.1(a)(4).

(2) This section contains requirements for control devices used to comply with applicable subparts of this part. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(3) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(b) *Flares.* (1) Owners or operators using flares to comply with the provisions of this part shall monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators using flares shall monitor these control devices.

(2) Flares shall be steam-assisted, air-assisted, or non-assisted.

(3) Flares shall be operated at all times when emissions may be vented to them.

(4) Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in appendix A of part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.

(5) Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(6) An owner/operator has the choice of adhering to the heat content specifications in paragraph (b)(6)(ii) of this section, and the maximum tip velocity specifications in paragraph (b)(7) or (b)(8) of this section, or adhering to the requirements in paragraph (b)(6)(i) of this section.

(i)(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume) or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity  $V_{\max}$ , as determined by the following equation:

$$V_{\max} = (X_{H_2} - K_1) * K_2$$

Where:

$V_{\max}$  = Maximum permitted velocity, m/sec.

$K_1$  = Constant, 6.0 volume-percent hydrogen.

$K_2$  = Constant, 3.9(m/sec)/volume-percent hydrogen.

$X_{H_2}$  = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §63.14).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (b)(7)(i) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 MJ/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

Where:

$H_T$  = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

$K$  = Constant =

$$1.740 \times 10^{-7} \left( \frac{1}{ppmv} \right) \left( \frac{g\text{-mole}}{scm} \right) \left( \frac{MJ}{kcal} \right)$$

where the standard temperature for (g-mole/scm) is 20 °C.

$C_i$  = Concentration of sample component  $i$  in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in §63.14).

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

$H_i$  = Net heat of combustion of sample component  $i$ , kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §63.14) if published values are not available or cannot be calculated.

$n$  = Number of sample components.

(7)(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(7)(ii) and (b)(7)(iii) of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60 of this chapter, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, less than the velocity  $V_{max}$ , as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity,  $V_{max}$ , for flares complying with this paragraph shall be determined by the following equation:

$$\text{Log}_{10}(V_{max}) = (H_T + 28.8)/31.7$$

Where:

$V_{max}$  = Maximum permitted velocity, m/sec.

28.8 = Constant.

31.7 = Constant.

$H_T$  = The net heating value as determined in paragraph (b)(6) of this section.

(8) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity  $V_{max}$ . The maximum permitted velocity,  $V_{max}$ , for air-assisted flares shall be determined by the following equation:

$$V_{max} = 8.71 + 0.708(H_T)$$

Where:

$V_{max}$  = Maximum permitted velocity, m/sec.

8.71 = Constant.

0.708 = Constant.

$H_T$  = The net heating value as determined in paragraph (b)(6)(ii) of this section.

(c) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (c), (d), and (e) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, appendix A-7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (c), (d), and (e) of this section continue to apply. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (c)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (c), (d), and (e) of this section.

(1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, and 65 that requires monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.

(4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.

(5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.

(6) *Leak* means:

(i) Any emissions imaged by the optical gas instrument;

(ii) Indications of liquids dripping;

(iii) Indications by a sensor that a seal or barrier fluid system has failed; or

(iv) Screening results using a 40 CFR part 60, appendix A-7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.

(d) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(1) An owner or operator of an affected source subject to 40 CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (e) of this section instead of using the 40 CFR part 60, appendix A-7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.

(2) Any leak detected when following the leak survey procedure in paragraph (e)(3) of this section must be identified for repair as required in the applicable subpart.

(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subparts to which the equipment is subject.

(4) The schedule for repair is as required in the applicable subpart.

(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.

(6) When this alternative work practice is used for detecting leaking equipment, the following are not applicable for the equipment being monitored:

(i) Skip period leak detection and repair;

(ii) Quality improvement plans; or

(iii) Complying with standards for allowable percentage of valves and pumps to leak.

(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (d)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.

(e) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (e)(1) through (e)(5) of this section.

(1) *Instrument specifications.* The optical gas imaging instrument must comply with the requirements specified in paragraphs (e)(1)(i) and (e)(1)(ii) of this section.



**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (e)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.

(ii) Provide a date and time stamp for video records of every monitoring event.

(2) *Daily instrument check.* On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (e)(2)(i) of this section in accordance with the procedure specified in paragraphs (e)(2)(ii) through (e)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (e)(2)(v) of this section.

(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (e)(2)(i)(A) and (e)(2)(i)(B) of this section.

(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (e)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.

(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (e)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

$$E_{dic} = (E_{sds}) \sum_{i=1}^k x_i$$

Where:

$E_{dic}$  = Mass flow rate for the daily instrument check, grams per hour

$x_i$  = Mass fraction of detectable chemical(s)  $i$  seen by the optical gas imaging instrument, within the distance to be used in paragraph (e)(2)(iv)(B) of this section, at or below the standard detection sensitivity level,  $E_{sds}$ .

$E_{sds}$  = Standard detection sensitivity level from Table 1 to subpart A, grams per hour

$k$  = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.

(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.

(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.

(iv) Establish a mass flow rate by using the following procedures:

(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.

(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.

(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate calculated in paragraph (e)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.

(v) Repeat the procedures specified in paragraphs (e)(2)(ii) through (e)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.

(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under §63.177 or §63.178, whichever is applicable.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(3) *Leak survey procedure.* Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.

(4) *Recordkeeping.* Keep the records described in paragraphs (e)(4)(i) through (e)(4)(vii) of this section:

(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.

(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.

(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (e)(2)(i)(A) of this section.

(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (e)(2)(i)(B) of this section.

(v) The daily instrument check. Record the distance, per paragraph (e)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (e)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.

(vi) *Recordkeeping requirements in the applicable subpart.* A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.

(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subparts.

(5) *Reporting.* Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to *CCG-AWP@EPA.GOV*.

[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 24444, May 4, 1998; 65 FR 62215, Oct. 17, 2000; 67 FR 16605, Apr. 5, 2002; 73 FR 78211, Dec. 22, 2008]

**§63.12 State authority and delegations.**

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from—

(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;

(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or

(3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

(b)(1) Section 112(l) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards and other requirements pursuant to section 112 for stationary sources located in that State. Because of the unique nature of radioactive material, delegation of authority to implement and enforce standards that control radionuclides may require separate approval.

(2) Subpart E of this part establishes procedures consistent with section 112(l) for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. Subpart E also

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

establishes procedures for the review and withdrawal of section 112 implementation and enforcement authorities granted through a section 112(l) approval.

(c) All information required to be submitted to the EPA under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain Federal or State reporting requirement. The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to the EPA and the State agency.

**§63.13 Addresses of State air pollution control agencies and EPA Regional Offices.**

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated in the following list of EPA Regional Offices.

EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Office of Ecosystem Protection, 5 Post Office Square—Suite 100, Boston, MA 02109-3912.

EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, 26 Federal Plaza, New York, NY 10278.

EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, 1650 Arch Street, Philadelphia, PA 19103.

EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Director, Air, Pesticides and Toxics Management Division, Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303-3104.

EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas), Director, Air, Pesticides and Toxics, 1445 Ross Avenue, Dallas, TX 75202-2733.

EPA Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air and Waste Management Division, 11201 Renner Boulevard, Lenexa, Kansas 66219.

EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, CO 80202-1129.

EPA Region IX (Arizona, California, Hawaii, Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau), Director, Air Division, 75 Hawthorne Street, San Francisco, CA 94105.

EPA Region X (Alaska, Idaho, Oregon, Washington), Director, Office of Air Quality, 1200 Sixth Avenue (OAQ-107), Seattle, WA 98101.

(b) All information required to be submitted to the Administrator under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act. The owner or operator of an affected source may contact the appropriate EPA Regional Office for the mailing addresses for those States whose delegation requests have been approved.

(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 66061, Dec. 1, 1998; 67 FR 4184, Jan. 29, 2002; 68 FR 32601, May 30, 2003; 68 FR 35792, June 17, 2003; 73 FR 24871, May 6, 2008; 75 FR 69532, Nov. 12, 2010; 76 FR 49673, Aug. 11, 2011; 78 FR 37977, June 25, 2013]

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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**§63.14 Incorporations by reference.**

[Link to an amendment published at 83 FR 9218, Mar. 5, 2018.](#)

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the EPA must publish notice of change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M St. SW., Washington, DC, telephone number 202-566, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030 or go to [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(b) American Conference of Governmental Industrial Hygienists (ACGIH), Customer Service Department, 1330 Kemper Meadow Drive, Cincinnati, Ohio 45240, telephone number (513) 742-2020.

(1) Industrial Ventilation: A Manual of Recommended Practice, 22nd Edition, 1995, Chapter 3, “Local Exhaust Hoods” and Chapter 5, “Exhaust System Design Procedure.” IBR approved for §§63.843(b) and 63.844(b).

(2) Industrial Ventilation: A Manual of Recommended Practice, 23rd Edition, 1998, Chapter 3, “Local Exhaust Hoods” and Chapter 5, “Exhaust System Design Procedure.” IBR approved for §§63.1503, 63.1506(c), 63.1512(e), Table 2 to Subpart RRR, Table 3 to Subpart RRR, and Appendix A to Subpart RRR.

(3) Industrial Ventilation: A Manual of Recommended Practice for Design, 27th Edition, 2010. IBR approved for §§63.1503, 63.1506(c), 63.1512(e), Table 2 to Subpart RRR, Table 3 to Subpart RRR, and Appendix A to Subpart RRR.

(c) The Association of Florida Phosphate Chemists, P.O. Box 1645, Bartow, Florida 33830.

(1) Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists, Seventh Edition 1991:

(i) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample, IBR approved for §63.606(f), §63.626(f).

(ii) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P<sub>2</sub>O<sub>5</sub> or Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>, Method A—Volumetric Method, IBR approved for §63.606(f), §63.626(f).

(iii) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P<sub>2</sub>O<sub>5</sub> or Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>, Method B—Gravimetric Quimociac Method, IBR approved for §63.606(f), §63.626(f).

(iv) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P<sub>2</sub>O<sub>5</sub> or Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>, Method C—Spectrophotometric Method, IBR approved for §63.606(f), §63.626(f).

(v) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method A—Volumetric Method, IBR approved for §63.606(f), §63.626(f), and (g).

(vi) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method B—Gravimetric Quimociac Method, IBR approved for §63.606(f), §63.626(f), and (g).

(vii) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method C—Spectrophotometric Method, IBR approved for §63.606(f), §63.626(f), and (g).

(2) [Reserved]

(d) Association of Official Analytical Chemists (AOAC) International, Customer Services, Suite 400, 2200 Wilson Boulevard, Arlington, Virginia 22201-3301, Telephone (703) 522-3032, Fax (703) 522-5468.

(1) AOAC Official Method 929.01 Sampling of Solid Fertilizers, Sixteenth edition, 1995, IBR approved for §63.626(g).

(2) AOAC Official Method 929.02 Preparation of Fertilizer Sample, Sixteenth edition, 1995, IBR approved for §63.626(g).

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(3) AOAC Official Method 957.02 Phosphorus (Total) in Fertilizers, Preparation of Sample Solution, Sixteenth edition, 1995, IBR approved for §63.626(g).

(4) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizers, Spectrophotometric Molybdovanadophosphate Method, Sixteenth edition, 1995, IBR approved for §63.626(g).

(5) AOAC Official Method 962.02 Phosphorus (Total) in Fertilizers, Gravimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for §63.626(g).

(6) AOAC Official Method 969.02 Phosphorus (Total) in Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for §63.626(g).

(7) AOAC Official Method 978.01 Phosphorus (Total) in Fertilizers, Automated Method, Sixteenth edition, 1995, IBR approved for §63.626(g).

(e) American Petroleum Institute (API), 1220 L Street NW., Washington, DC 20005.

(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989, IBR approved for §§63.111 and 63.2406.

(2) API Publication 2518, Evaporative Loss from Fixed-roof Tanks, Second Edition, October 1991, IBR approved for §63.150(g).

(3) API Manual of Petroleum Measurement Specifications (MPMS) Chapter 19.2 (API MPMS 19.2), Evaporative Loss From Floating-Roof Tanks, First Edition, April 1997, IBR approved for §§63.1251 and 63.12005.

(f) American Society of Heating, Refrigerating, and Air-Conditioning Engineers at 1791 Tullie Circle, NE., Atlanta, GA 30329 [orders@ashrae.org](mailto:orders@ashrae.org).

(1) American Society of Heating, Refrigerating, and Air Conditioning Engineers Method 52.1, “Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter, June 4, 1992,” IBR approved for §§63.11173(e) and 63.11516(d).

(2) [Reserved]

(g) American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016-5990, Telephone (800) 843-2763, <http://www.asme.org>; also available from HIS, Incorporated, 15 Inverness Way East, Englewood, CO 80112, Telephone (877) 413-5184, <http://global.ihs.com>.

(1) ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981, IBR approved for §§63.309(k), 63.457(k), 63.772(e) and (h), 63.865(b), 63.1282(d) and (g), 63.1625(b), 63.3166(a), 63.3360(e), 63.3545(a), 63.3555(a), 63.4166(a), 63.4362(a), 63.4766(a), 63.4965(a), 63.5160(d), table 4 to subpart UUUU, 63.9307(c), 63.9323(a), 63.11148(e), 63.11155(e), 63.11162(f), 63.11163(g), 63.11410(j), 63.11551(a), 63.11646(a), and 63.11945, table 5 to subpart DDDDD, table 4 to subpart JJJJJ, table 4 to subpart KKKKK, tables 4 and 5 of subpart UUUUU, table 1 to subpart ZZZZZ, and table 4 to subpart JJJJJ.

(2) [Reserved]

(h) American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959, Telephone (610) 832-9585, <http://www.astm.org>; also available from ProQuest, 789 East Eisenhower Parkway, Ann Arbor, MI 48106-1346, Telephone (734) 761-4700, <http://www.proquest.com>.

(1) ASTM D95-05 (Reapproved 2010), Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation, approved May 1, 2010, IBR approved for §63.10005(i) and table 6 to subpart DDDDD.

(2) ASTM D240-09 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, approved July 1, 2009, IBR approved for table 6 to subpart DDDDD.

(3) ASTM Method D388-05, Standard Classification of Coals by Rank, approved September 15, 2005, IBR approved for §§63.7575, 63.10042, and 63.11237.

(4) ASTM Method D396-10, Standard Specification for Fuel Oils, including Appendix X1, approved October 1, 2010, IBR approved for §63.10042.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(5) ASTM D396-10, Standard Specification for Fuel Oils, approved October 1, 2010, IBR approved for §§63.7575 and 63.11237.

(6) ASTM D523-89, Standard Test Method for Specular Gloss, IBR approved for §63.782.

(7) ASTM D975-11b, Standard Specification for Diesel Fuel Oils, approved December 1, 2011, IBR approved for §63.7575.

(8) ASTM D1193-77, Standard Specification for Reagent Water, IBR approved for appendix A to part 63: Method 306, Sections 7.1.1 and 7.4.2.

(9) ASTM D1193-91, Standard Specification for Reagent Water, IBR approved for appendix A to part 63: Method 306, Sections 7.1.1 and 7.4.2.

(10) ASTM D1331-89, Standard Test Methods for Surface and Interfacial Tension of Solutions of Surface Active Agents, IBR approved for appendix A to part 63: Method 306B, Sections 6.2, 11.1, and 12.2.2.

(11) ASTM D1475-90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for appendix A to subpart II.

(12) ASTM D1475-98 (Reapproved 2003), “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products,” IBR approved for §§63.3151(b), 63.3941(b) and (c), 63.3951(c), 63.4141(b) and (c), and 63.4551(c).

(13) ASTM Method D1835-05, Standard Specification for Liquefied Petroleum (LP) Gases, approved April 1, 2005, IBR approved for §§63.7575 and 63.11237.

(14) ASTM D1945-03 (Reapproved 2010), Standard Test Method for Analysis of Natural Gas by Gas Chromatography, Approved January 1, 2010, IBR approved for §§63.670(j), 63.772(h), and 63.1282(g).

(15) ASTM D1945-14, Standard Test Method for Analysis of Natural Gas by Gas Chromatography, Approved November 1, 2014, IBR approved for §63.670(j).

(16) ASTM D1946-77, Standard Method for Analysis of Reformulated Gas by Gas Chromatography, IBR approved for §63.11(b).

(17) ASTM D1946-90 (Reapproved 1994), Standard Method for Analysis of Reformulated Gas by Gas Chromatography, IBR approved for §63.11(b).

(18) ASTM D2013/D2013M-09, Standard Practice for Preparing Coal Samples for Analysis, (Approved November 1, 2009), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.

(19) ASTM D2099-00, Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Maeser Water Penetration Tester, IBR approved for §63.5350.

(20) ASTM D2216-05, Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass, IBR approved for the definition of “Free organic liquids” in §63.10692.

(21) ASTM D2234/D2234M-10, Standard Practice for Collection of a Gross Sample of Coal, approved January 1, 2010, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ .

(22) ASTM D2369-93, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A to subpart II.

(23) ASTM D2369-95, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A to subpart II.

(24) ASTM D2382-76, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §63.11(b).

(25) ASTM D2382-88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §63.11(b).

(26) ASTM D2697-86 (Reapproved 1998), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, IBR approved for §§63.3161(f), 63.3521(b), 63.3941(b), 63.4141(b), 63.4741(b), 63.4941(b), and 63.5160(c).

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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- (27) ASTM D2879-83, Standard Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§63.111, 63.2406, and 63.12005.
- (28) ASTM D2879-96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, (Approved 1996), IBR approved for §§63.111, 63.2406, and 63.12005.
- (29) ASTM D2908-74, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved June 27, 1974, IBR approved for §63.1329(c).
- (30) ASTM D2908-91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved December 15, 1991, IBR approved for §63.1329(c).
- (31) ASTM D2908-91(Reapproved 2001), Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved December 15, 1991, IBR approved for §63.1329(c).
- (32) ASTM D2908-91(Reapproved 2005), Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved December 1, 2005, IBR approved for §63.1329(c).
- (33) ASTM D2908-91(Reapproved 2011), Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved May 1, 2011, IBR approved for §63.1329(c).
- (34) ASTM D2986-95A, “Standard Practice for Evaluation of Air Assay Media by the Monodisperse DOP (Diocetyl Phthalate) Smoke Test,” approved September 10, 1995, IBR approved for section 7.1.1 of Method 315 in appendix A to this part.
- (35) ASTM D3173-03 (Reapproved 2008), Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, (Approved February 1, 2008), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.
- (36) ASTM D3257-93, Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography, IBR approved for §63.786(b).
- (37) ASTM D3370-76, Standard Practices for Sampling Water, Approved August 27, 1976, IBR approved for §63.1329(c).
- (38) ASTM D3370-95a, Standard Practices for Sampling Water from Closed Conduits, Approved September 10, 1995, IBR approved for §63.1329(c).
- (39) ASTM D3370-07, Standard Practices for Sampling Water from Closed Conduits, Approved December 1, 2007, IBR approved for §63.1329(c).
- (40) ASTM D3370-08, Standard Practices for Sampling Water from Closed Conduits, Approved October 1, 2008, IBR approved for §63.1329(c).
- (41) ASTM D3370-10, Standard Practices for Sampling Water from Closed Conduits, Approved December 1, 2010, IBR approved for §63.1329(c).
- (42) ASTM D3588-98 (Reapproved 2003), Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels, (Approved May 10, 2003), IBR approved for §§63.772(h) and 63.1282(g).
- (43) ASTM D3695-88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography, IBR approved for §63.365(e).
- (44) ASTM D3792-91, Standard Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A to subpart II.
- (45) ASTM D3912-80, Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for §63.782.
- (46) ASTM D4006-11, Standard Test Method for Water in Crude Oil by Distillation, including Annex A1 and Appendix X1, (Approved June 1, 2011), IBR approved for §63.10005(i) and table 6 to subpart DDDDD.
- (47) ASTM D4017-81, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A to subpart II.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(48) ASTM D4017-90, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A to subpart II.

(49) ASTM D4017-96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A to subpart II.

(50) ASTM D4057-06 (Reapproved 2011), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, including Annex A1, (Approved June 1, 2011), IBR approved for §63.10005(i) and table 6 to subpart DDDDD.

(51) ASTM D4082-89, Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants, IBR approved for §63.782.

(52) ASTM D4084-07, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), (Approved June 1, 2007), IBR approved for table 6 to subpart DDDDD.

(53) ASTM D4177-95 (Reapproved 2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, including Annexes A1 through A6 and Appendices X1 and X2, (Approved May 1, 2010), IBR approved for §63.10005(i) and table 6 to subpart DDDDD.

(54) ASTM D4208-02 (Reapproved 2007), Standard Test Method for Total Chlorine in Coal by the Oxygen Bomb Combustion/Ion Selective Electrode Method, approved May 1, 2007, IBR approved for table 6 to subpart DDDDD.

(55) ASTM D4239-14e1, “Standard Test Method for Sulfur in the Analysis Sample of Coal and Coke Using High-Temperature Tube Furnace Combustion,” approved March 1, 2014, IBR approved for §63.849(f).

(56) ASTM D4256-89, Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for §63.782.

(57) ASTM D4256-89 (Reapproved 94), Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for §63.782.

(58) ASTM D4606-03 (Reapproved 2007), Standard Test Method for Determination of Arsenic and Selenium in Coal by the Hydride Generation/Atomic Absorption Method, (Approved October 1, 2007), IBR approved for table 6 to subpart DDDDD.

(59) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §63.11(b).

(60) ASTM D4891-89 (Reapproved 2006), Standard Test Method for Heating Value of Gases in Natural Gas Range by Stoichiometric Combustion, (Approved June 1, 2006), IBR approved for §§63.772(h) and 63.1282(g).

(61) ASTM D5066-91 (Reapproved 2001), Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis, IBR approved for §63.3161(g).

(62) ASTM D5087-02, Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement), IBR approved for §63.3165(e) and appendix A to subpart III.

(63) ASTM D5192-09, Standard Practice for Collection of Coal Samples from Core, (Approved June 1, 2009), IBR approved for table 6 to subpart DDDDD.

(64) ASTM D5198-09, Standard Practice for Nitric Acid Digestion of Solid Waste, (Approved February 1, 2009), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.

(65) ASTM D5228-92, Standard Test Method for Determination of Butane Working Capacity of Activated Carbon, (Reapproved 2005), IBR approved for §63.11092(b).

(66) ASTM D5291-02, Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Petroleum Products and Lubricants, IBR approved for appendix A to subpart MMMM.

(67) ASTM D5790-95, Standard Test Method for Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry, IBR approved for Table 4 to subpart UUUU.



**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(68) ASTM D5864-11, Standard Test Method for Determining Aerobic Aquatic Biodegradation of Lubricants or Their Components, (Approved March 1, 2011), IBR approved for table 6 to subpart DDDDD.

(69) ASTM D5865-10a, Standard Test Method for Gross Calorific Value of Coal and Coke, (Approved May 1, 2010), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.

(70) ASTM D5954-98 (Reapproved 2006), Test Method for Mercury Sampling and Measurement in Natural Gas by Atomic Absorption Spectroscopy, (Approved December 1, 2006), IBR approved for table 6 to subpart DDDDD.

(71) ASTM D5965-02, Standard Test Methods for Specific Gravity of Coating Powders, IBR approved for §§63.3151(b) and 63.3951(c).

(72) ASTM D6053-00, Standard Test Method for Determination of Volatile Organic Compound (VOC) Content of Electrical Insulating Varnishes, IBR approved for appendix A to subpart MMMM.

(73) ASTM D6093-97 (Reapproved 2003), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, IBR approved for §§63.3161, 63.3521, 63.3941, 63.4141, 63.4741(b), 63.4941(b), and 63.5160(c).

(74) ASTM D6196-03 (Reapproved 2009), Standard Practice for Selection of Sorbents, Sampling, and Thermal Desorption Analysis Procedures for Volatile Organic Compounds in Air, Approved March 1, 2009, IBR approved for appendix A to this part: Method 325A and Method 325B.

(75) ASTM D6266-00a, Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released from Waterborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement), IBR approved for §63.3165(e).

(76) ASTM D6323-98 (Reapproved 2003), Standard Guide for Laboratory Subsampling of Media Related to Waste Management Activities, (Approved August 10, 2003), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.

(77) ASTM D6348-03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, IBR approved for §§63.457(b) and 63.1349, table 4 to subpart DDDD, table 4 to subpart ZZZZ, and table 8 to subpart HHHHHH.

(78) ASTM D6348-03 (Reapproved 2010), Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, including Annexes A1 through A8, Approved October 1, 2010, IBR approved for §63.1571(a), tables 4 and 5 to subpart JJJJJ, tables 4 and 6 to subpart KKKKK, tables 1, 2, and 5 to subpart UUUUU and appendix B to subpart UUUUU.

(79) ASTM D6348-12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, IBR approved for §63.1571(a).

(80) ASTM D6350-98 (Reapproved 2003), Standard Test Method for Mercury Sampling and Analysis in Natural Gas by Atomic Fluorescence Spectroscopy, (Approved May 10, 2003), IBR approved for table 6 to subpart DDDDD.

(81) ASTM D6357-11, Test Methods for Determination of Trace Elements in Coal, Coke, and Combustion Residues from Coal Utilization Processes by Inductively Coupled Plasma Atomic Emission Spectrometry, (Approved April 1, 2011), IBR approved for table 6 to subpart DDDDD.

(82) ASTM D6376-10, “Standard Test Method for Determination of Trace Metals in Petroleum Coke by Wavelength Dispersive X-Ray Fluorescence Spectroscopy,” Approved July 1, 2010, IBR approved for §63.849(f).

(83) ASTM D6420-99, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for §§63.5799, 63.5850, and Table 4 of Subpart UUUU.

(84) ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, (Approved October 1, 2004), IBR approved for §§63.457(b), 63.485(g), 60.485a(g), 63.772(a), 63.772(e), 63.1282(a) and (d), 63.2351(b), and 63.2354(b), and table 8 to subpart HHHHHH.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(85) ASTM D6420-99 (Reapproved 2010), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, Approved October 1, 2010, IBR approved for §63.670(j) and appendix A to this part: Method 325B.

(86) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for §63.9307(c).

(87) ASTM D6522-00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, (Approved October 1, 2005), IBR approved for table 4 to subpart ZZZZ, table 5 to subpart DDDDDD, table 4 to subpart JJJJJ, and §§63.772(e) and (h)) and 63.1282(d) and (g).

(88) ASTM D6721-01 (Reapproved 2006), Standard Test Method for Determination of Chlorine in Coal by Oxidative Hydrolysis Microcoulometry, (Approved April 1, 2006), IBR approved for table 6 to subpart DDDDD.

(89) ASTM D6722-01 (Reapproved 2006), Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by the Direct Combustion Analysis, (Approved April 1, 2006), IBR approved for Table 6 to subpart DDDDD and Table 5 to subpart JJJJJ.

(90) ASTM D6735-01 (Reapproved 2009), Standard Test Method for Measurement of Gaseous Chlorides and Fluorides from Mineral Calcining Exhaust Sources—Impinger Method, IBR approved for tables 4 and 5 to subpart JJJJJ and tables 4 and 6 to subpart KKKKK.

(91) ASTM D6751-11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, (Approved July 15, 2011), IBR approved for §§63.7575 and 63.11237.

(92) ASTM D6784-02 (Reapproved 2008), Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), (Approved April 1, 2008), IBR approved for §§63.11646(a), 63.11647(a) and (d), tables 1, 2, 5, 11, 12t, and 13 to subpart DDDDD, tables 4 and 5 to subpart JJJJJ, tables 4 and 6 to subpart KKKKK, table 4 to subpart JJJJJ, table 5 to subpart UUUUU, and appendix A to subpart UUUUU.

(93) ASTM D6883-04, Standard Practice for Manual Sampling of Stationary Coal from Railroad Cars, Barges, Trucks, or Stockpiles, (Approved June 1, 2004), IBR approved for table 6 to subpart DDDDD.

(94) ASTM D7430-11ae1, Standard Practice for Mechanical Sampling of Coal, (Approved October 1, 2011), IBR approved for table 6 to subpart DDDDD.

(95) ASTM D7520-13, Standard Test Method for Determining the Opacity of a Plume in an Outdoor Ambient Atmosphere, approved December 1, 2013. IBR approved for §§63.1510(f), 63.1511(d), 63.1512(a), 63.1517(b) and 63.1625(b).

(96) ASTM D7520-16, Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere, approved April 1, 2016, IBR approved for §§63.1625(b).

(97) ASTM E145-94 (Reapproved 2001), Standard Specification for Gravity-Convection and Forced-Ventilation Ovens, IBR approved for appendix A to subpart PPPP.

(98) ASTM E180-93, Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals, IBR approved for §63.786(b).

(99) ASTM E260-91, General Practice for Packed Column Gas Chromatography, IBR approved for §§63.750(b) and 63.786(b).

(100) ASTM E260-96, General Practice for Packed Column Gas Chromatography, IBR approved for §§63.750(b) and 63.786(b).

(101) ASTM E515-95 (Reapproved 2000), Standard Test Method for Leaks Using Bubble Emission Techniques, IBR approved for §63.425(i).

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(102) ASTM E711-87 (Reapproved 2004), Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter, (Approved August 28, 1987), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.

(103) ASTM E776-87 (Reapproved 2009), Standard Test Method for Forms of Chlorine in Refuse-Derived Fuel, (Approved July 1, 2009), IBR approved for table 6 to subpart DDDDD.

(104) ASTM E871-82 (Reapproved 2006), Standard Test Method for Moisture Analysis of Particulate Wood Fuels, (Approved November 1, 2006), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.

(105) ASTM UOP539-12, Refinery Gas Analysis by GC, Copyright 2012 (to UOP), IBR approved for §63.670(j).

(i) Bay Area Air Quality Management District (BAAQMD), 939 Ellis Street, San Francisco, California 94109, <http://www.arb.ca.gov/DRDB/BA/CURHTML/ST/st30.pdf>.

(1) “BAAQMD Source Test Procedure ST-30—Static Pressure Integrity Test, Underground Storage Tanks,” adopted November 30, 1983, and amended December 21, 1994, IBR approved for §63.11120(a).

(2) [Reserved]

(j) British Standards Institute, 389 Chiswick High Road, London W4 4AL, United Kingdom.

(1) BS EN 1593:1999, Non-destructive Testing: Leak Testing—Bubble Emission Techniques, IBR approved for §63.425(i).

(2) BS EN 14662-4:2005, Ambient air quality standard method for the measurement of benzene concentrations—Part 4: Diffusive sampling followed by thermal desorption and gas chromatography, Published June 27, 2005, IBR approved for appendix A to this part: Method 325A and Method 325B.

(k) California Air Resources Board (CARB), 1001 I Street, P.O. Box 2815, Sacramento, CA 95812-2815, Telephone (916) 327-0900, <http://www.arb.ca.gov/>.

(1) Method 428, “Determination Of Polychlorinated Dibenzo-P-Dioxin (PCDD), Polychlorinated Dibenzofuran (PCDF), and Polychlorinated Biphenyle Emissions from Stationary Sources,” amended September 12, 1990, IBR approved for §63.849(a)(13) and (14).

(2) Method 429, Determination of Polycyclic Aromatic Hydrocarbon (PAH) Emissions from Stationary Sources, Adopted September 12, 1989, Amended July 28, 1997, IBR approved for §63.1625(b).

(3) California Air Resources Board Vapor Recovery Test Procedure TP-201.1—“Volumetric Efficiency for Phase I Vapor Recovery Systems,” adopted April 12, 1996, and amended February 1, 2001 and October 8, 2003, IBR approved for §63.11120(b).

(4) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E—“Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves,” adopted October 8, 2003, IBR approved for §63.11120(a).

(5) California Air Resources Board Vapor Recovery Test Procedure TP-201.3—“Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities,” adopted April 12, 1996 and amended March 17, 1999, IBR approved for §63.11120(a).

(l) Environmental Protection Agency. Air and Radiation Docket and Information Center, 1200 Pennsylvania Avenue NW., Washington, DC 20460, telephone number (202) 566-1745.

(1) *California Regulatory Requirements Applicable to the Air Toxics Program*, November 16, 2010, IBR approved for §63.99(a).

(2) *New Jersey's Toxic Catastrophe Prevention Act Program*, (July 20, 1998), IBR approved for §63.99(a).

(3) Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management, Accidental Release Prevention Regulation, sections 1 through 5 and sections 7 through 14, effective January 11, 1999, IBR approved for §63.99(a).

(4) State of Delaware Regulations Governing the Control of Air Pollution (October 2000), IBR approved for §63.99(a).

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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- (5) Massachusetts Department of Environmental Protection regulations at 310 CMR 7.26(10)-(16), Air Pollution Control, effective as of September 5, 2008, corrected March 6, 2009, and 310 CMR 70.00, Environmental Results Program Certification, effective as of December 28, 2007. IBR approved for §63.99(a).
- (6)(i) New Hampshire Regulations Applicable to Hazardous Air Pollutants, March, 2003. IBR approved for §63.99(a).
- (ii) New Hampshire Regulations Applicable to Hazardous Air Pollutants, September 2006. IBR approved for §63.99(a).
- (7) Maine Department of Environmental Protection regulations at Chapter 125, Perchloroethylene Dry Cleaner Regulation, effective as of June 2, 1991, last amended on June 24, 2009. IBR approved for §63.99(a).
- (8) California South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989," IBR approved for §§63.11173(e) and 63.11516(d).
- (9) California South Coast Air Quality Management District's "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002," Revision 0, IBR approved for §§63.11173(e) and 63.11516(d).
- (10) Rhode Island Department of Environmental Management regulations at Air Pollution Control Regulation No. 36, Control of Emissions from Organic Solvent Cleaning, effective April 8, 1996, last amended October 9, 2008, IBR approved for §63.99(a).
- (11) Rhode Island Air Pollution Control, General Definitions Regulation, effective July 19, 2007, last amended October 9, 2008. IBR approved for §63.99(a).
- (12) Alaska Statute 42.45.045. Renewable energy grant fund and recommendation program, available at <http://www.legis.state.ak.us/basis/folio.asp>, IBR approved for §63.6675.
- (m) U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460, (202) 272-0167, <http://www.epa.gov>.
- (1) EPA-453/R-01-005, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants—Background Information for Proposed Standards, Final Report, January 2001, IBR approved for §63.7491(g).
- (2) EPA-454/B-08-002, Office of Air Quality Planning and Standards (OAQPS), Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements, Version 2.0 (Final), March 24, 2008, IBR approved for §63.658(d) and appendix A to this part: Method 325A.
- (3) EPA-454/R-98-015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=2000D5T6.PDF>, IBR approved for §§63.548(e), 63.864(e), 63.7525(j), 63.8450(e), 63.8600(e), and 63.11224(f).
- (4) EPA-454/R-99-005, Office of Air Quality Planning and Standards (OAQPS), Meteorological Monitoring Guidance for Regulatory Modeling Applications, February 2000, IBR approved for appendix A to this part: Method 325A.
- (5) EPA/600/R-12/531, EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, May 2012, IBR approved for §63.2163(b).
- (6) EPA-625/3-89-016, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989. IBR approved for §63.1513(d).
- (7) SW-846-3020A, Acid Digestion of Aqueous Samples And Extracts For Total Metals For Analysis By GFAA Spectroscopy, Revision 1, July 1992, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.
- (8) SW-846-3050B, Acid Digestion of Sediments, Sludges, and Soils, Revision 2, December 1996, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.
- (9) SW-846-7470A, Mercury In Liquid Waste (Manual Cold-Vapor Technique), Revision 1, September 1994, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(10) SW-846-7471B, Mercury In Solid Or Semisolid Waste (Manual Cold-Vapor Technique), Revision 2, February 2007, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJ.

(11) SW-846-8015C, Nonhalogenated Organics by Gas Chromatography, Revision 3, February 2007, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§63.11960, 63.11980, and table 10 to subpart HHHHHH.

(12) SW-846-8260B, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 2, December 1996, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§63.11960, 63.11980, and table 10 to subpart HHHHHH.

(13) SW-846-8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4, February 2007, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§63.11960, 63.11980, and table 10 to subpart HHHHHH.

(14) SW-846-8315A, Determination of Carbonyl Compounds by High Performance Liquid Chromatography (HPLC), Revision 1, December 1996, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for §§63.11960 and 63.11980, and table 10 to subpart HHHHHH.

(15) SW-846-5050, Bomb Preparation Method for Solid Waste, Revision 0, September 1994, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition IBR approved for table 6 to subpart DDDDD.

(16) SW-846-6010C, Inductively Coupled Plasma-Atomic Emission Spectrometry, Revision 3, February 2007, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(17) SW-846-6020A, Inductively Coupled Plasma-Mass Spectrometry, Revision 1, February 2007, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(18) SW-846-7060A, Arsenic (Atomic Absorption, Furnace Technique), Revision 1, September 1994, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(19) SW-846-7740, Selenium (Atomic Absorption, Furnace Technique), Revision 0, September 1986, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(20) SW-846-9056, Determination of Inorganic Anions by Ion Chromatography, Revision 1, February 2007, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(21) SW-846-9076, Test Method for Total Chlorine in New and Used Petroleum Products by Oxidative Combustion and Microcoulometry, Revision 0, September 1994, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(22) SW-846-9250, Chloride (Colorimetric, Automated Ferricyanide AAI), Revision 0, September 1986, in EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, Third Edition, IBR approved for table 6 to subpart DDDDD.

(23) Method 200.8, Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma—Mass Spectrometry, Revision 5.4, 1994, IBR approved for table 6 to subpart DDDDD.

(24) Method 1631 Revision E, Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Absorption Fluorescence Spectrometry, Revision E, EPA-821-R-02-019, August 2002, IBR approved for table 6 to subpart DDDDD.

(n) International Standards Organization (ISO), 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, + 41 22 749 01 11, <http://www.iso.org/iso/home.htm>.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(1) ISO 6978-1:2003(E), Natural Gas—Determination of Mercury—Part 1: Sampling of Mercury by Chemisorption on Iodine, First edition, October 15, 2003, IBR approved for table 6 to subpart DDDDD.

(2) ISO 6978-2:2003(E), Natural gas—Determination of Mercury—Part 2: Sampling of Mercury by Amalgamation on Gold/Platinum Alloy, First edition, October 15, 2003, IBR approved for table 6 to subpart DDDDD.

(3) ISO 16017-2:2003(E): Indoor, ambient and workplace air—sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography—Part 2: Diffusive sampling, May 15, 2003, IBR approved for appendix A to this part: Method 325A and Method 325B.

(o) National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P.O. Box 133318, Research Triangle Park, NC 27709-3318 or at <http://www.ncasi.org>.

(1) NCASI Method DI/MEOH-94.03, Methanol in Process Liquids and Wastewaters by GC/FID, Issued May 2000, IBR approved for §§63.457 and 63.459.

(2) NCASI Method CI/WP-98.01, Chilled Impinger Method For Use At Wood Products Mills to Measure Formaldehyde, Methanol, and Phenol, 1998, Methods Manual, IBR approved for table 4 to subpart DDDD.

(3) NCASI Method DI/HAPS-99.01, Selected HAPs In Condensates by GC/FID, Issued February 2000, IBR approved for §63.459(b).

(4) NCASI Method IM/CAN/WP-99.02, Impinger/Canister Source Sampling Method for Selected HAPs and Other Compounds at Wood Products Facilities, January 2004, Methods Manual, IBR approved for table 4 to subpart DDDD.

(5) NCASI Method ISS/FP A105.01, Impinger Source Sampling Method for Selected Aldehydes, Ketones, and Polar Compounds, December 2005, Methods Manual, IBR approved for table 4 to subpart DDDD.

(p) National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 605-6000 or (800) 553-6847; or for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800.

(1) Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998, IBR approved for §63.1303(e).

(2) “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication SW-846, Third Edition. (A suffix of “A” in the method number indicates revision one (the method has been revised once). A suffix of “B” in the method number indicates revision two (the method has been revised twice).

(i) Method 0023A, “Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofuran Emissions from Stationary Sources,” dated December 1996, IBR approved for §63.1208(b).

(ii) Method 9071B, “n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples,” dated April 1998, IBR approved for §63.7824(e).

(iii) Method 9095A, “Paint Filter Liquids Test,” dated December 1996, IBR approved for §§63.7700(b) and 63.7765.

(iv) Method 9095B, “Paint Filter Liquids Test,” (revision 2), dated November 2004, IBR approved for the definition of “Free organic liquids” in §§63.10692, 63.10885(a), and the definition of “Free liquids” in §63.10906.

(v) SW-846 74741B, Revision 2, “Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique),” February 2007, IBR approved for §63.11647(f).

(3) National Institute of Occupational Safety and Health (NIOSH) test method compendium, “NIOSH Manual of Analytical Methods,” NIOSH publication no. 94-113, Fourth Edition, August 15, 1994.

(i) NIOSH Method 2010, “Amines, Aliphatic,” Issue 2, August 15, 1994, IBR approved for §63.7732(g).

(ii) [Reserved]

(q) North American Electric Reliability Corporation, 1325 G Street, NW., Suite 600, Washington, DC 20005-3801, <http://www.nerc.com>, [http://www.nerc.com/files/EOP0002-3\\_1.pdf](http://www.nerc.com/files/EOP0002-3_1.pdf).

(1) North American Electric Reliability Corporation Reliability Standard EOP-002-3, Capacity and Energy Emergencies, adopted August 5, 2010, IBR approved for §63.6640(f).

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**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(2)[Reserved]

(r) Technical Association of the Pulp and Paper Industry (TAPPI), 15 Technology Parkway South, Norcross, GA 30092, (800) 332-8686, <http://www.tappi.org>.

(1) TAPPI T 266, Determination of Sodium, Calcium, Copper, Iron, and Manganese in Pulp and Paper by Atomic Absorption Spectroscopy (Reaffirmation of T 266 om-02), Draft No. 2, July 2006, IBR approved for table 6 to subpart DDDDD.

(2) [Reserved]

(s) Texas Commission on Environmental Quality (TCEQ) Library, Post Office Box 13087, Austin, Texas 78711-3087, telephone number (512) 239-0028, [http://www.tceq.state.tx.us/assets/public/implementation/air/sip/sipdocs/2002-12-HGB/02046sipapp\\_ado.pdf](http://www.tceq.state.tx.us/assets/public/implementation/air/sip/sipdocs/2002-12-HGB/02046sipapp_ado.pdf).

(1) “Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources,” Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, January 31, 2003, IBR approved for §§63.654(c) and (g), 63.655(i), and 63.11920.

(2) [Reserved]

[79 FR 11277, Feb. 27, 2014, as amended at 79 FR 17363, Mar. 27, 2014; 80 FR 37389, June 30, 2015; 80 FR 50436, Aug. 19, 2015; 80 FR 56738, Sept. 18, 2015; 80 FR 62414, Oct. 15, 2015; 80 FR 65520, Oct. 26, 2015; 80 FR 75817, Dec. 4, 2015; 80 FR 75236, Dec. 1, 2015; 82 FR 47347, Oct. 11, 2017; 82 FR 48178, Oct. 16, 2017]

**§63.15 Availability of information and confidentiality.**

(a) *Availability of information.* (1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.

(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) *Confidentiality.* (1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.

(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

**§63.16 Performance Track Provisions.**

(a) Notwithstanding any other requirements in this part, an affected source at any major source or any area source at a Performance Track member facility, which is subject to regular periodic reporting under any subpart of this part, may submit such periodic reports at an interval that is twice the length of the regular period specified in the applicable subparts; provided, that for sources subject to permits under 40 CFR part 70 or 71 no interval so calculated for any report of the results of any required monitoring may be less frequent than once in every six months.

(b) Notwithstanding any other requirements in this part, the modifications of reporting requirements in paragraph (c) of this section apply to any major source at a Performance Track member facility which is subject to requirements under any of the subparts of this part and which has:

(1) Reduced its total HAP emissions to less than 25 tons per year;

(2) Reduced its emissions of each individual HAP to less than 10 tons per year; and

(3) Reduced emissions of all HAPs covered by each MACT standard to at least the level required for full compliance with the applicable emission standard.

**APPENDIX 40 CFR 63, NESHAP SUBPART A**  
**40 CFR 63, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(c) For affected sources at any area source at a Performance Track member facility and which meet the requirements of paragraph (b)(3) of this section, or for affected sources at any major source that meet the requirements of paragraph (b) of this section:

(1) If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using add-on control technology, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is meeting the emission standard by continuing to use that control technology. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(2) If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using pollution prevention, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions to levels at or below those required by the applicable emission standard. The affected source must maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(3) If the emission standard to which the affected source is subject is based on pollution prevention, and the affected source complies by using pollution prevention and reduces emissions by an additional 50 percent or greater than required by the applicable emission standard, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions by an additional 50 percent or greater than required by the applicable emission standard. The affected source must maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(4) Notwithstanding the provisions of paragraphs (c)(1) through (3), of this section, for sources subject to permits under 40 CFR part 70 or 71, the results of any required monitoring and recordkeeping must be reported not less frequently than once in every six months.

[69 FR 21753, Apr. 22, 2004]

**Table 1 to Subpart A of Part 63—Detection Sensitivity Levels (grams per hour)**

<b>Monitoring frequency per subpart<sup>a</sup></b>	<b>Detection sensitivity level</b>
Bi-Monthly	60
Semi-Quarterly	85
Monthly	100

<sup>a</sup>When this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table, in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.

[73 FR 78213, Dec. 22, 2008]

[Table of Contents](#)



40 CFR 63, NESHAP SUBPART AAAAA – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR  
POLLUTANTS: MUNICIPAL SOLID WASTE LANDFILLS.

Electronic Code of Federal Regulations

e-CFR data is current as of June 1, 2018

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE  
CATEGORIES (CONTINUED)

Subpart AAAAA—National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

Contents

WHAT THIS SUBPART COVERS

- §63.1930 What is the purpose of this subpart?
- §63.1935 Am I subject to this subpart?
- §63.1940 What is the affected source of this subpart?
- §63.1945 When do I have to comply with this subpart?
- §63.1947 When do I have to comply with this subpart if I own or operate a bioreactor?
- §63.1950 When am I no longer required to comply with this subpart?
- §63.1952 When am I no longer required to comply with the requirements of this subpart if I own or operate a bioreactor?

STANDARDS

- §63.1955 What requirements must I meet?

GENERAL AND CONTINUING COMPLIANCE REQUIREMENTS

- §63.1960 How is compliance determined?
- §63.1965 What is a deviation?
- §63.1975 How do I calculate the 3-hour block average used to demonstrate compliance?

NOTIFICATIONS, RECORDS, AND REPORTS

- §63.1980 What records and reports must I keep and submit?

OTHER REQUIREMENTS AND INFORMATION

- §63.1985 Who enforces this subpart?
- §63.1990 What definitions apply to this subpart?
- Table 1 to Subpart AAAAA of Part 63—Applicability of NESHAP General Provisions to Subpart AAAAA

SOURCE: 68 FR 2238, Jan. 16, 2003, unless otherwise noted.

WHAT THIS SUBPART COVERS

**§63.1930 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart requires all landfills described in §63.1935 to meet the requirements of 40 CFR part 60, subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.

**§63.1935 Am I subject to this subpart?**

You are subject to this subpart if you meet the criteria in paragraph (a) or (b) of this section.

**40 CFR 63, NESHAP SUBPART AAAAA – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MUNICIPAL SOLID WASTE LANDFILLS.**

(a) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:

- (1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.
- (2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.

(3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m<sup>3</sup>) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to §60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill.

(b) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in §63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section:

- (1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.
- (2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.

(3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m<sup>3</sup> and that is not permanently closed as of January 16, 2003.

§63.1940 What is the affected source of this subpart?

(a) An affected source of this subpart is a MSW landfill, as defined in §63.1990, that meets the criteria in §63.1935(a) or (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor.

(b) A new affected source of this subpart is an affected source that commenced construction or reconstruction after November 7, 2000. An affected source is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of subpart A.

(c) An affected source of this subpart is existing if it is not new.

**§63.1945 When do I have to comply with this subpart?**

(a) If your landfill is a new affected source, you must comply with this subpart by January 16, 2003 or at the time you begin operating, whichever is last.

(b) If your landfill is an existing affected source, you must comply with this subpart by January 16, 2004.

(c) If your landfill is a new affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.

(d) If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 13, 2004, whichever occurs later.

(e) If your landfill is a new affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements of §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.

(f) If your landfill is an existing affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.

**40 CFR 63, NESHAP SUBPART AAAAA – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MUNICIPAL SOLID WASTE LANDFILLS.**

**§63.1947 When do I have to comply with this subpart if I own or operate a bioreactor?**

You must comply with this subpart by the dates specified in §63.1945(a) or (b) of this subpart. If you own or operate a bioreactor located at a landfill that is not permanently closed as of January 16, 2003 and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m<sup>3</sup>, then you must install and operate a collection and control system that meets the criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan according to the schedule specified in paragraph (a), (b), or (c) of this section.

(a) If your bioreactor is at a new affected source, then you must meet the requirements in paragraphs (a)(1) and (2) of this section:

(1) Install the gas collection and control system for the bioreactor before initiating liquids addition.

(2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in §63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.

(b) If your bioreactor is at an existing affected source, then you must install and begin operating the gas collection and control system for the bioreactor by January 17, 2006 or by the date your bioreactor is required to install a gas collection and control system under 40 CFR part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan or tribal plan that applies to your landfill, whichever is earlier.

(c) If your bioreactor is at an existing affected source and you do not initiate liquids addition to your bioreactor until later than January 17, 2006, then you must meet the requirements in paragraphs (c)(1) and (2) of this section:

(1) Install the gas collection and control system for the bioreactor before initiating liquids addition.

(2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in §63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.

**§63.1950 When am I no longer required to comply with this subpart?**

You are no longer required to comply with the requirements of this subpart when you are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) of subpart WWW, or the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill.

**§63.1952 When am I no longer required to comply with the requirements of this subpart if I own or operate a bioreactor?**

If you own or operate a landfill that includes a bioreactor, you are no longer required to comply with the requirements of this subpart for the bioreactor provided you meet the conditions of either paragraphs (a) or (b).

(a) Your affected source meets the control system removal criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW or the bioreactor meets the criteria for a nonproductive area of the landfill in 40 CFR 60.759(a)(3)(ii) of part 60, subpart WWW.

(b) The bioreactor portion of the landfill is a closed landfill as defined in 40 CFR 60.751, subpart WWW, you have permanently ceased adding liquids to the bioreactor, and you have not added liquids to the bioreactor for at least 1 year. A closure report for the bioreactor must be submitted to the Administrator as provided in 40 CFR 60.757(d) of subpart WWW.

(c) Compliance with the bioreactor control removal provisions in this section constitutes compliance with 40 CFR part 60, subpart WWW or the Federal plan, whichever applies to your bioreactor.

**STANDARDS**

**§63.1955 What requirements must I meet?**

(a) You must fulfill one of the requirements in paragraph (a)(1) or (2) of this section, whichever is applicable:

(1) Comply with the requirements of 40 CFR part 60, subpart WWW.

**40 CFR 63, NESHAP SUBPART AAAAA – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MUNICIPAL SOLID WASTE LANDFILLS.**

(2) Comply with the requirements of the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc.

(b) If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.

(c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart and all affected sources must submit compliance reports every 6 months as specified in §63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.

(d) If you own or operate a bioreactor that is located at a MSW landfill that is not permanently closed and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m<sup>3</sup>, then you must meet the requirements of paragraph (a) and the additional requirements in paragraphs (d)(1) and (2) of this section.

(1) You must comply with the general provisions specified in Table 1 of this subpart and §§63.1960 through 63.1985 starting on the date you are required to install the gas collection and control system.

(2) You must extend the collection and control system into each new cell or area of the bioreactor prior to initiating liquids addition in that area, instead of the schedule in 40 CFR 60.752(b)(2)(ii)(A)(2).

**GENERAL AND CONTINUING COMPLIANCE REQUIREMENTS**

**§63.1960 How is compliance determined?**

Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]

**§63.1965 What is a deviation?**

A deviation is defined in §63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this section.

(a) A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded.

(b) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.

(c) A deviation occurs when a SSM plan is not developed or maintained on site.

[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]

**§63.1975 How do I calculate the 3-hour block average used to demonstrate compliance?**

Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart:

**40 CFR 63, NESHAP SUBPART AAAAA – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MUNICIPAL SOLID WASTE LANDFILLS.**

- (a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
- (b) Startups.
- (c) Shutdowns.
- (d) Malfunctions.

**NOTIFICATIONS, RECORDS, AND REPORTS**

**§63.1980 What records and reports must I keep and submit?**

(a) Keep records and reports as specified in 40 CFR part 60, subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.

(b) You must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

(c) For bioreactors at new affected sources you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(a)(2) of this subpart.

(d) For bioreactors at existing affected sources, you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the compliance date specified in §63.1947(b) of this subpart, unless you have previously submitted a compliance report for the bioreactor required by 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State plan or tribal plan.

(e) For bioreactors that are located at existing affected sources, but do not initiate liquids addition until later than the compliance date in §63.1947(b) of this subpart, you must submit the initial semiannual compliance report and performance tests results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(c) of this subpart.

(f) If you must submit a semiannual compliance report for a bioreactor as well as a semiannual compliance report for a conventional portion of the same landfill, you may delay submittal of a subsequent semiannual compliance report for the bioreactor according to paragraphs (f)(1) through (3) of this section so that the reports may be submitted on the same schedule.

(1) After submittal of your initial semiannual compliance report and performance test results for the bioreactor, you may delay submittal of the subsequent semiannual compliance report for the bioreactor until the date the initial or subsequent semiannual compliance report is due for the conventional portion of your landfill.

(2) You may delay submittal of your subsequent semiannual compliance report by no more than 12 months after the due date for submitting the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) for the bioreactor. The report shall cover the time period since the previous semiannual report for the bioreactor, which would be a period of at least 6 months and no more than 12 months.

(3) After the delayed semiannual report, all subsequent semiannual reports for the bioreactor must be submitted every 6 months on the same date the semiannual report for the conventional portion of the landfill is due.

(g) If you add any liquids other than leachate in a controlled fashion to the waste mass and do not comply with the bioreactor requirements in §§63.1947, 63.1955(c) and 63.1980(c) through (f) of this subpart, you must keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. You must document the calculations and the basis of any assumptions. Keep the record of the calculations until you cease liquids addition.

(h) If you calculate moisture content to establish the date your bioreactor is required to begin operating the collection and control system under §63.1947(a)(2) or (c)(2), keep a record of the calculations including the information specified in

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**40 CFR 63, NESHAP SUBPART AAAAA – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MUNICIPAL SOLID WASTE LANDFILLS.**

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paragraph (g) of this section for 5 years. Within 90 days after the bioreactor achieves 40 percent moisture content, report the results of the calculation, the date the bioreactor achieved 40 percent moisture content by weight, and the date you plan to begin collection and control system operation.

**OTHER REQUIREMENTS AND INFORMATION****§63.1985 Who enforces this subpart?**

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency as well as the U.S. EPA has the authority to implement and enforce this subpart. Contact the applicable EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the 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 follows. Approval of alternatives to the standards in §63.1955. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

**§63.1990 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act, 40 CFR part 60, subparts A, Cc, and WWW; 40 CFR part 62, subpart GGG, and subpart A of this part, and this section that follows:

*Bioreactor* means a MSW landfill or portion of a MSW landfill where any liquid other than leachate (leachate includes landfill gas condensate) is added in a controlled fashion into the waste mass (often in combination with recirculating leachate) to reach a minimum average moisture content of at least 40 percent by weight to accelerate or enhance the anaerobic (without oxygen) biodegradation of the waste.

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.

*Emissions limitation* means any emission limit, opacity limit, operating limit, or visible emissions limit.

*EPA approved State plan* means a State plan that EPA has approved based on the requirements in 40 CFR part 60, subpart B to implement and enforce 40 CFR part 60, subpart Cc. An approved State plan becomes effective on the date specified in the notice published in the FEDERAL REGISTER announcing EPA's approval.

*Federal plan* means the EPA plan to implement 40 CFR part 60, subpart Cc for existing MSW landfills located in States and Indian country where State plans or tribal plans are not currently in effect. On the effective date of an EPA approved State or tribal plan, the Federal plan no longer applies. The Federal plan is found at 40 CFR part 62, subpart GGG.

*Municipal solid waste landfill or MSW landfill* means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. A municipal solid waste landfill may also receive other types of RCRA Subtitle D wastes (see §257.2 of this chapter) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill may be separated by access roads. A municipal solid waste landfill may be publicly or privately owned. A municipal solid waste landfill may be a new municipal solid waste landfill, an existing municipal solid waste landfill, or a lateral expansion.

*Tribal plan* means a plan submitted by a tribal authority pursuant to 40 CFR parts 9, 35, 49, 50, and 81 to implement and enforce 40 CFR part 60, subpart Cc.

**APPENDIX 40 CFR 63, NESHAP SUBPART AAAAA**

**40 CFR 63, NESHAP SUBPART AAAAA – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: MUNICIPAL SOLID WASTE LANDFILLS.**

*Work practice standard* means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

As stated in §§63.1955 and 63.1980, you must meet each requirement in the following table that applies to you.

**Table 1 to Subpart AAAAA of Part 63—Applicability of NESHAP General Provisions to Subpart AAAAA**

<b>Part 63 Citation</b>	<b>Description</b>	<b>Explanation</b>
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, part 60 subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, part 60 subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions	
63.6(f)	Compliance with nonopacity emission standards	Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR, part 60 subpart A.
63.10(b)(2)(i)-(b)(2)(v)	General recordkeeping requirements	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	
63.15	Availability of information and confidentiality	

[Table of Contents](#)

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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

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e-CFR data is current as of May 24, 2018

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES (CONTINUED)**

**Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

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**Contents**

**WHAT THIS SUBPART COVERS**

- §63.6580 What is the purpose of subpart ZZZZ?
- §63.6585 Am I subject to this subpart?
- §63.6590 What parts of my plant does this subpart cover?
- §63.6595 When do I have to comply with this subpart?

**EMISSION AND OPERATING LIMITATIONS**

- §63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?
- §63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?
- §63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?
- §63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
- §63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?

**GENERAL COMPLIANCE REQUIREMENTS**

- §63.6605 What are my general requirements for complying with this subpart?

**TESTING AND INITIAL COMPLIANCE REQUIREMENTS**

- §63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?
- §63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?
- §63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?
- §63.6615 When must I conduct subsequent performance tests?
- §63.6620 What performance tests and other procedures must I use?
- §63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?
- §63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

**CONTINUOUS COMPLIANCE REQUIREMENTS**

- §63.6635 How do I monitor and collect data to demonstrate continuous compliance?
- §63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

**NOTIFICATIONS, REPORTS, AND RECORDS**



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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

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- §63.6645 What notifications must I submit and when?  
§63.6650 What reports must I submit and when?  
§63.6655 What records must I keep?  
§63.6660 In what form and how long must I keep my records?

**OTHER REQUIREMENTS AND INFORMATION**

- §63.6665 What parts of the General Provisions apply to me?  
§63.6670 Who implements and enforces this subpart?  
§63.6675 What definitions apply to this subpart?  
Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions  
Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions  
Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions  
Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP  
Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions  
Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions  
Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests  
Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests  
Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements  
Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements  
Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports  
Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.  
Appendix A to Subpart ZZZZ of Part 63—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines

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SOURCE: 69 FR 33506, June 15, 2004, unless otherwise noted.

**WHAT THIS SUBPART COVERS**

**§63.6580 What is the purpose of subpart ZZZZ?**

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

**§63.6585 Am I subject to this subpart?**

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

(f) The emergency stationary RICE listed in paragraphs (f)(1) through (3) of this section are not subject to this subpart. The stationary RICE must meet the definition of an emergency stationary RICE in §63.6675, which includes operating according to the provisions specified in §63.6640(f).

(1) Existing residential emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(2) Existing commercial emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

(3) Existing institutional emergency stationary RICE located at an area source of HAP emissions that do not operate or are not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) and that do not operate for the purpose specified in §63.6640(f)(4)(ii).

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

**§63.6590 What parts of my plant does this subpart cover?**

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

*(1) Existing stationary RICE.*

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.

(ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

*(2) New stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.

(3) *Reconstructed stationary RICE.* (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraphs (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(f) and the requirements of §§63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements:

(i) Existing spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(ii) Existing spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(iii) Existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions;

(v) Existing stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(c) *Stationary RICE subject to Regulations under 40 CFR Part 60.* An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

(1) A new or reconstructed stationary RICE located at an area source;

(2) A new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(3) A new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake HP located at a major source of HAP emissions;

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(4) A new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(5) A new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis;

(6) A new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions;

(7) A new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9674, Mar. 3, 2010; 75 FR 37733, June 30, 2010; 75 FR 51588, Aug. 20, 2010; 78 FR 6700, Jan. 30, 2013]

**§63.6595 When do I have to comply with this subpart?**

(a) *Affected sources.* (1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

(2) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(4) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(5) If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(6) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

(7) If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with the provisions of this subpart that are applicable to RICE located at major sources within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in §63.6645 and in 40 CFR part 63, subpart A.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008; 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 78 FR 6701, Jan. 30, 2013]

**EMISSION AND OPERATING LIMITATIONS**

**§63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing, new, or reconstructed spark ignition 4SRB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a to this subpart and the operating limitations in Table 1b to this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, a new or reconstructed 4SLB stationary RICE with a site rating of more than 500 brake HP located at major source of HAP emissions, or a new or reconstructed CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

(c) If you own or operate any of the following stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the emission limitations in Tables 1a, 2a, 2c, and 2d to this subpart or operating limitations in Tables 1b and 2b to this subpart: an existing 2SLB stationary RICE; an existing 4SLB stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE.

(d) If you own or operate an existing non-emergency stationary CI RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010]

**§63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 9675, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010]

**§63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?**

If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations and other requirements in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**


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[78 FR 6701, Jan. 30, 2013]

**§63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

(b) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meets either paragraph (b)(1) or (2) of this section, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. Existing stationary non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP that meet either paragraph (b)(1) or (2) of this section must meet the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart.

(1) The area source is located in an area of Alaska that is not accessible by the Federal Aid Highway System (FAHS).

(2) The stationary RICE is located at an area source that meets paragraphs (b)(2)(i), (ii), and (iii) of this section.

(i) The only connection to the FAHS is through the Alaska Marine Highway System (AMHS), or the stationary RICE operation is within an isolated grid in Alaska that is not connected to the statewide electrical grid referred to as the Alaska Railbelt Grid.

(ii) At least 10 percent of the power generated by the stationary RICE on an annual basis is used for residential purposes.

(iii) The generating capacity of the area source is less than 12 megawatts, or the stationary RICE is used exclusively for backup power for renewable energy.

(c) If you own or operate an existing stationary non-emergency CI RICE with a site rating of more than 300 HP located on an offshore vessel that is an area source of HAP and is a nonroad vehicle that is an Outer Continental Shelf (OCS) source as defined in 40 CFR 55.2, you do not have to meet the numerical CO emission limitations specified in Table 2d of this subpart. You must meet all of the following management practices:

(1) Change oil every 1,000 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement.

(2) Inspect and clean air filters every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(3) Inspect fuel filters and belts, if installed, every 750 hours of operation or annually, whichever comes first, and replace as necessary.

(4) Inspect all flexible hoses every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.

(d) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and that is subject to an enforceable state or local standard that requires the engine to be replaced no later than June 1, 2018, you may until January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018, choose to comply with the management practices that are shown for stationary non-emergency CI RICE with a site rating of less than or equal to 300 HP in Table 2d of this subpart instead of the applicable emission limitations in Table 2d, operating limitations in Table 2b, and crankcase ventilation system requirements in §63.6625(g). You must comply with the emission limitations in Table 2d and operating limitations in Table 2b that apply for non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018. You must also comply with the crankcase ventilation system requirements in §63.6625(g) by January 1, 2015, or 12 years after the installation date of the engine (whichever is later), but not later than June 1, 2018.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(e) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 3 (Tier 2 for engines above 560 kilowatt (kW)) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under this part by meeting the requirements for Tier 3 engines (Tier 2 for engines above 560 kW) in 40 CFR part 60 subpart IIII instead of the emission limitations and other requirements that would otherwise apply under this part for existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions.

(f) An existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP must meet the definition of remote stationary RICE in §63.6675 on the initial compliance date for the engine, October 19, 2013, in order to be considered a remote stationary RICE under this subpart. Owners and operators of existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that meet the definition of remote stationary RICE in §63.6675 of this subpart as of October 19, 2013 must evaluate the status of their stationary RICE every 12 months. Owners and operators must keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in §63.6675 of this subpart, the owner or operator must comply with all of the requirements for existing non-emergency SI 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within 1 year of the evaluation.

[75 FR 9675, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6701, Jan. 30, 2013]

**§63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?**

(a) If you own or operate an existing non-emergency, non-black start CI stationary RICE with a site rating of more than 300 brake HP with a displacement of less than 30 liters per cylinder that uses diesel fuel, you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.

(b) Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(c) Beginning January 1, 2015, if you own or operate a new emergency CI stationary RICE with a site rating of more than 500 brake HP and a displacement of less than 30 liters per cylinder located at a major source of HAP that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

(d) Existing CI stationary RICE located in Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2), or are on offshore vessels that meet §63.6603(c) are exempt from the requirements of this section.

[78 FR 6702, Jan. 30, 2013]

**GENERAL COMPLIANCE REQUIREMENTS**

**§63.6605 What are my general requirements for complying with this subpart?**

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited

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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

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to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

**TESTING AND INITIAL COMPLIANCE REQUIREMENTS**

**§63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

If you own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004 and own or operate stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3605, Jan. 18, 2008]

**§63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?**

If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.

[73 FR 3605, Jan. 18, 2008, as amended at 75 FR 51589, Aug. 20, 2010]



**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

**§63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?**

If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of this section.

(a) You must conduct any initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

[75 FR 9676, Mar. 3, 2010, as amended at 75 FR 51589, Aug. 20, 2010]

**§63.6615 When must I conduct subsequent performance tests?**

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

**§63.6620 What performance tests and other procedures must I use?**

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load for the stationary RICE listed in paragraphs (b)(1) through (4) of this section.

(1) Non-emergency 4SRB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(2) New non-emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP located at a major source of HAP emissions.

(3) New non-emergency 2SLB stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(4) New non-emergency CI stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions.

(c) [Reserved]

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified in this subpart.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$$

Where:

$C_i$  = concentration of carbon monoxide (CO), total hydrocarbons (THC), or formaldehyde at the control device inlet,

$C_o$  = concentration of CO, THC, or formaldehyde at the control device outlet, and

R = percent reduction of CO, THC, or formaldehyde emissions.

(2) You must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO<sub>2</sub>). If pollutant concentrations are to be corrected to 15 percent oxygen and CO<sub>2</sub> concentration is measured in lieu of oxygen concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific  $F_o$  value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$$

Where:

$F_o$  = Fuel factor based on the ratio of oxygen volume to the ultimate CO<sub>2</sub> volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

$F_d$  = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu).

$F_c$  = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup>/J (dscf/10<sup>6</sup> Btu)

(ii) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent O<sub>2</sub>, as follows:

$$X_{CO2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$$

Where:

$X_{CO2}$  = CO<sub>2</sub> correction factor, percent.

5.9 = 20.9 percent O<sub>2</sub>—15 percent O<sub>2</sub>, the defined O<sub>2</sub> correction value, percent.

(iii) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \quad (\text{Eq. 4})$$

Where:

$C_{adj}$  = Calculated concentration of CO, THC, or formaldehyde adjusted to 15 percent O<sub>2</sub>.

$C_d$  = Measured concentration of CO, THC, or formaldehyde, uncorrected.

$X_{CO2}$  = CO<sub>2</sub> correction factor, percent.

%CO<sub>2</sub> = Measured CO<sub>2</sub> concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, etc.) or unintentionally (*e.g.*, wear and tear, error, etc.) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accuracy in percentage of true value must be provided.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9676, Mar. 3, 2010; 78 FR 6702, Jan. 30, 2013]

**§63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?**

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either O<sub>2</sub> or CO<sub>2</sub> according to the requirements in paragraphs (a)(1) through (4) of this section. If you are meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and outlet of the control device. If you are meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in §63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO<sub>2</sub> concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in paragraphs (b)(1) through (6) of this section. For an affected source that is complying with the emission limitations and operating limitations on March 9, 2011, the requirements in paragraph (b) of this section are applicable September 6, 2011.

(1) You must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (b)(1)(i) through (v) of this section and in §63.8(d). As specified in §63.8(f)(4), you may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (b)(1) through (5) of this section in your site-specific monitoring plan.

(i) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;

(ii) Sampling interface (*e.g.*, thermocouple) location such that the monitoring system will provide representative measurements;

(iii) Equipment performance evaluations, system accuracy audits, or other audit procedures;

(iv) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and

(v) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).

(2) You must install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.

(3) The CPMS must collect data at least once every 15 minutes (see also §63.6635).

(4) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.

(5) You must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

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

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

(d) If you are operating a new or reconstructed emergency 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must install a non-resettable hour meter prior to the startup of the engine.

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

- (1) An existing stationary RICE with a site rating of less than 100 HP located at a major source of HAP emissions;
  - (2) An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;
  - (3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;
  - (4) An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;
  - (5) An existing non-emergency, non-black start 2SLB stationary RICE located at an area source of HAP emissions;
  - (6) An existing non-emergency, non-black start stationary RICE located at an area source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.
  - (7) An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;
  - (8) An existing non-emergency, non-black start 4SRB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;
  - (9) An existing, non-emergency, non-black start 4SLB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year; and
  - (10) An existing, non-emergency, non-black start 4SRB stationary RICE with a site rating greater than 500 HP located at an area source of HAP emissions that is operated 24 hours or less per calendar year.
- (f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.
- (g) If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (g)(1) or paragraph (2) of this section. Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. Existing CI engines located at area sources in areas of Alaska that meet either §63.6603(b)(1) or §63.6603(b)(2) do not have to meet the requirements of this paragraph (g). Existing CI engines located on offshore vessels that meet §63.6603(c) do not have to meet the requirements of this paragraph (g).
- (1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or
  - (2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates and metals.
- (h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.
- (i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis

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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

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are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

**§63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?**

(a) You must demonstrate initial compliance with each emission limitation, operating limitation, and other requirement that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

(d) Non-emergency 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more can demonstrate initial compliance with the formaldehyde emission limit by testing for THC instead of formaldehyde. The testing must be conducted according to the requirements in Table 4 of this subpart. The average reduction of emissions of THC determined from the performance test must be equal to or greater than 30 percent.

(e) The initial compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least three test runs.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of this subpart. Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO or THC concentration.

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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

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(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device.

[69 FR 33506, June 15, 2004, as amended at 78 FR 6704, Jan. 30, 2013]

**CONTINUOUS COMPLIANCE REQUIREMENTS**

**§63.6635 How do I monitor and collect data to demonstrate continuous compliance?**

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

[69 FR 33506, June 15, 2004, as amended at 76 FR 12867, Mar. 9, 2011]

**§63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) The annual compliance demonstration required for existing non-emergency 4SLB and 4SRB stationary RICE with a site rating of more than 500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year must be conducted according to the following requirements:

(1) The compliance demonstration must consist of at least one test run.

(2) Each test run must be of at least 15 minute duration, except that each test conducted using the method in appendix A to this subpart must consist of at least one measurement cycle and include at least 2 minutes of test data phase measurement.

(3) If you are demonstrating compliance with the CO concentration or CO percent reduction requirement, you must measure CO emissions using one of the CO measurement methods specified in Table 4 of this subpart, or using appendix A to this subpart.

(4) If you are demonstrating compliance with the THC percent reduction requirement, you must measure THC emissions using Method 25A, reported as propane, of 40 CFR part 60, appendix A.

(5) You must measure O<sub>2</sub> using one of the O<sub>2</sub> measurement methods specified in Table 4 of this subpart. Measurements to determine O<sub>2</sub> concentration must be made at the same time as the measurements for CO or THC concentration.

(6) If you are demonstrating compliance with the CO or THC percent reduction requirement, you must measure CO or THC emissions and O<sub>2</sub> emissions simultaneously at the inlet and outlet of the control device.

(7) If the results of the annual compliance demonstration show that the emissions exceed the levels specified in Table 6 of this subpart, the stationary RICE must be shut down as soon as safely possible, and appropriate corrective action must be

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

taken (e.g., repairs, catalyst cleaning, catalyst replacement). The stationary RICE must be retested within 7 days of being restarted and the emissions must meet the levels specified in Table 6 of this subpart. If the retest shows that the emissions continue to exceed the specified levels, the stationary RICE must again be shut down as soon as safely possible, and the stationary RICE may not operate, except for purposes of startup and testing, until the owner/operator demonstrates through testing that the emissions do not exceed the levels specified in Table 6 of this subpart.

(d) For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in Table 8 to this subpart, except for the initial notification requirements: a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or reconstructed limited use stationary RICE.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to



**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

**NOTIFICATIONS, REPORTS, AND RECORDS**

**§63.6645 What notifications must I submit and when?**

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

(1) An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.

(2) An existing stationary RICE located at an area source of HAP emissions.

(3) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.

(4) A new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 HP located at a major source of HAP emissions.

(5) This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(d) As specified in §63.9(b)(2), if you start up your stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions before the effective date of this subpart and you are required to submit an initial notification, you must submit an Initial Notification not later than July 16, 2008.

(e) If you start up your new or reconstructed stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions on or after March 18, 2008 and you are required to submit an initial notification, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(f) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

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

(h) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

(i) If you own or operate an existing non-emergency CI RICE with a site rating of more than 300 HP located at an area source of HAP emissions that is certified to the Tier 1 or Tier 2 emission standards in Table 1 of 40 CFR 89.112 and subject to an enforceable state or local standard requiring engine replacement and you intend to meet management practices rather than emission limits, as specified in §63.6603(d), you must submit a notification by March 3, 2013, stating that you intend to use the provision in §63.6603(d) and identifying the state or local regulation that the engine is subject to.

[73 FR 3606, Jan. 18, 2008, as amended at 75 FR 9677, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6705, Jan. 30, 2013]

**§63.6650 What reports must I submit and when?**

(a) You must submit each report in Table 7 of this subpart that applies to you.

(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 in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.

(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) For semiannual Compliance reports, each subsequent 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.

(4) For semiannual Compliance reports, each subsequent 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.

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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

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(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 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 Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.

(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.

(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.

(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.

(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

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

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

(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

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

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration 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 malfunction or during another period.

(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.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) 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 operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

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

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

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

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9677, Mar. 3, 2010; 78 FR 6705, Jan. 30, 2013]

**§63.6655 What records must I keep?**

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

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

(2) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

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

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

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

(2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) An existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions.

(2) An existing stationary emergency RICE.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

**§63.6660 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 readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

**OTHER REQUIREMENTS AND INFORMATION**

**§63.6665 What parts of the General Provisions apply to me?**

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. If you own or operate a new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions (except new or reconstructed 4SLB engines greater than or equal to 250 and less than or equal to 500 brake HP), a new or reconstructed stationary RICE located at an area source of HAP emissions, or any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with any of the requirements of the General Provisions specified in Table 8: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing stationary RICE that combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE. If you own or operate any of the following RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, you do not need to comply with the requirements in the General Provisions specified in Table 8 except for the initial notification requirements: A new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE.

[75 FR 9678, Mar. 3, 2010]

**§63.6670 Who implements and enforces this subpart?**

(a) This subpart is implemented and enforced by the U.S. 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 (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether 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 Administrator of the U.S. EPA 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:

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 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.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

**§63.6675 What definitions apply to this subpart?**

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

*Alaska Railbelt Grid* means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

*Area source* means any stationary source of HAP that is not a major source as defined in part 63.

*Associated equipment* as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

*Backup power for renewable energy* means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(1)(5) (incorporated by reference, see §63.14).

*Black start engine* means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Public Law 101-549, 104 Stat. 2399).

*Commercial emergency stationary RICE* means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

*Compression ignition* means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

*Custody transfer* means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to satisfy the general duty to minimize emissions established by §63.6(e)(1)(i).

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

*Diesel engine* means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

*Diesel fuel* means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties (e.g. biodiesel) that is suitable for use in compression ignition engines.

*Digester gas* means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO<sub>2</sub>.

*Dual-fuel engine* means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

*Emergency stationary RICE* means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in §63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in §63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

(1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.

(2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §63.6640(f).

(3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §63.6640(f)(2)(ii) or (iii) and §63.6640(f)(4)(i) or (ii).

*Engine startup* means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

*Four-stroke engine* means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

*Gaseous fuel* means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

*Gasoline* means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

*Glycol dehydration unit* means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes “rich” glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The “lean” glycol is then recycled.

*Hazardous air pollutants (HAP)* means any air pollutants listed in or pursuant to section 112(b) of the CAA.

*Institutional emergency stationary RICE* means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

*ISO standard day conditions* means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

*Landfill gas* means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO<sub>2</sub>.



**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

*Lean burn engine* means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

*Limited use stationary RICE* means any stationary RICE that operates less than 100 hours per year.

*Liquefied petroleum gas* means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

*Liquid fuel* means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

*Major Source*, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

*Natural gas* means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

*Non-selective catalytic reduction (NSCR)* means an add-on catalytic nitrogen oxides (NO<sub>x</sub>) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO<sub>x</sub>, CO, and volatile organic compounds (VOC) into CO<sub>2</sub>, nitrogen, and water.

*Oil and gas production facility* as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.*, remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

*Oxidation catalyst* means an add-on catalytic control device that controls CO and VOC by oxidation.

*Peaking unit or engine* means any standby engine intended for use during periods of high demand that are not emergencies.

*Percent load* means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

*Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

*Production field facility* means those oil and gas production facilities located prior to the point of custody transfer.

*Production well* means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

*Propane* means a colorless gas derived from petroleum and natural gas, with the molecular structure C<sub>3</sub>H<sub>8</sub>.

*Remote stationary RICE* means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

*Residential emergency stationary RICE* means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

*Responsible official* means responsible official as defined in 40 CFR 70.2.

*Rich burn engine* means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO<sub>x</sub> (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

*Site-rated HP* means the maximum manufacturer's design capacity at engine site conditions.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

*Spark ignition* means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

*Stationary reciprocating internal combustion engine (RICE)* means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

*Stationary RICE test cell/stand* means an engine test cell/stand, as defined in subpart P of this part, that tests stationary RICE.

*Stoichiometric* means the theoretical air-to-fuel ratio required for complete combustion.

*Storage vessel with the potential for flash emissions* means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

*Subpart* means 40 CFR part 63, subpart ZZZZ.

*Surface site* means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

*Two-stroke engine* means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]

**Table 1a to Subpart ZZZZ of Part 63—Emission Limitations for Existing, New, and Reconstructed Spark Ignition, 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions**

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations at 100 percent load plus or minus 10 percent for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

<b>For each . . .</b>	<b>You must meet the following emission limitation, except during periods of startup . . .</b>	<b>During periods of startup you must . . .</b>
1. 4SRB stationary RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007 or	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
	b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>1</sup> Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9679, Mar. 3, 2010, as amended at 75 FR 51592, Aug. 20, 2010]

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

**Table 1b to Subpart ZZZZ of Part 63—Operating Limitations for Existing, New, and Reconstructed SI 4SRB Stationary RICE >500 HP Located at a Major Source of HAP Emissions**

As stated in §§63.6600, 63.6603, 63.6630 and 63.6640, you must comply with the following operating limitations for existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions:

<b>For each . . .</b>	<b>You must meet the following operating limitation, except during periods of startup . . .</b>
1. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and using NSCR;	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750 °F and less than or equal to 1250 °F. <sup>1</sup>
2. existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and not using NSCR; or	Comply with any operating limitations approved by the Administrator.
existing, new and reconstructed 4SRB stationary RICE >500 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O <sub>2</sub> and not using NSCR.	

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6706, Jan. 30, 2013]

**Table 2a to Subpart ZZZZ of Part 63—Emission Limitations for New and Reconstructed 2SLB and Compression Ignition Stationary RICE >500 HP and New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions**

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

<b>For each . . .</b>	<b>You must meet the following emission limitation, except during periods of startup . . .</b>	<b>During periods of startup you must . . .</b>
1. 2SLB stationary RICE	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O <sub>2</sub> . If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O <sub>2</sub> until June 15, 2007	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>1</sup>
2. 4SLB stationary RICE	a. Reduce CO emissions by 93 percent or more; or	
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O <sub>2</sub>	
3. CI	a. Reduce CO emissions by 70 percent or more; or	

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

stationary RICE		
	b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O <sub>2</sub>	

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 9680, Mar. 3, 2010]

**Table 2b to Subpart ZZZZ of Part 63—Operating Limitations for New and Reconstructed 2SLB and CI Stationary RICE >500 HP Located at a Major Source of HAP Emissions, New and Reconstructed 4SLB Stationary RICE ≥250 HP Located at a Major Source of HAP Emissions, Existing CI Stationary RICE >500 HP**

As stated in §§63.6600, 63.6601, 63.6603, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions; new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions; and existing CI stationary RICE >500 HP:

<b>For each . . .</b>	<b>You must meet the following operating limitation, except during periods of startup . . .</b>
1. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and using an oxidation catalyst; and New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. <sup>1</sup>
2. Existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and using an oxidation catalyst	a. maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
	b. maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. <sup>1</sup>
3. New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to reduce CO emissions and not using an oxidation catalyst; and	Comply with any operating limitations approved by the Administrator.
New and reconstructed 2SLB and CI stationary RICE >500 HP located at a major source of HAP emissions and new and reconstructed 4SLB stationary RICE ≥250 HP located at a major source of HAP emissions complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst; and	
existing CI stationary RICE >500 HP complying with the requirement to limit or reduce the concentration of CO in the stationary RICE exhaust and not using an oxidation catalyst.	

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

<sup>1</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.8(f) for a different temperature range.

[78 FR 6707, Jan. 30, 2013]

**Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions and Existing Spark Ignition Stationary RICE ≤500 HP Located at a Major Source of HAP Emissions**

As stated in §§63.6600, 63.6602, and 63.6640, you must comply with the following requirements for existing compression ignition stationary RICE located at a major source of HAP emissions and existing spark ignition stationary RICE ≤500 HP located at a major source of HAP emissions:

<b>For each . . .</b>	<b>You must meet the following requirement, except during periods of startup . . .</b>	<b>During periods of startup you must . . .</b>
1. Emergency stationary CI RICE and black start stationary CI RICE <sup>1</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first. <sup>2</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. <sup>3</sup>
2. Non-Emergency, non-black start stationary CI RICE <100 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first. <sup>2</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
3. Non-Emergency, non-black start CI stationary RICE 100≤HP≤300 HP	Limit concentration of CO in the stationary RICE exhaust to 230 ppmvd or less at 15 percent O <sub>2</sub> .	
4. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd or less at 15 percent O <sub>2</sub> ; or b. Reduce CO emissions by 70 percent or more.	
5. Non-Emergency, non-black start stationary CI RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd or less at 15 percent O <sub>2</sub> ; or b. Reduce CO emissions by 70 percent or more.	
6. Emergency stationary SI RICE and black start stationary SI RICE. <sup>1</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
7. Non-Emergency, non-black start stationary SI RICE <100 HP that are not 2SLB stationary RICE	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>2</sup> b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
8. Non-Emergency, non-	a. Change oil and filter every 4,320 hours of operation or annually,	

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

black start 2SLB stationary SI RICE <100 HP	whichever comes first; <sup>2</sup> b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary;	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary. <sup>3</sup>	
9. Non-emergency, non-black start 2SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 225 ppmvd or less at 15 percent O <sub>2</sub> .	
10. Non-emergency, non-black start 4SLB stationary RICE 100≤HP≤500	Limit concentration of CO in the stationary RICE exhaust to 47 ppmvd or less at 15 percent O <sub>2</sub> .	
11. Non-emergency, non-black start 4SRB stationary RICE 100≤HP≤500	Limit concentration of formaldehyde in the stationary RICE exhaust to 10.3 ppmvd or less at 15 percent O <sub>2</sub> .	
12. Non-emergency, non-black start stationary RICE 100≤HP≤500 which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Limit concentration of CO in the stationary RICE exhaust to 177 ppmvd or less at 15 percent O <sub>2</sub> .	

<sup>1</sup>If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

<sup>2</sup>Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2c of this subpart.

<sup>3</sup>Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. [78 FR 6708, Jan. 30, 2013, as amended at 78 FR 14457, Mar. 6, 2013]

**Table 2d to Subpart ZZZZ of Part 63—Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions**

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

<b>For each . . .</b>	<b>You must meet the following requirement, except during periods of startup . . .</b>	<b>During periods of startup you must . . .</b>
1. Non-Emergency, non-black start CI stationary RICE ≤300 HP	a. Change oil and filter every 1,000 hours of operation or annually, whichever comes first; <sup>1</sup> b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

2. Non-Emergency, non-black start CI stationary RICE 300<HP≤500	a. Limit concentration of CO in the stationary RICE exhaust to 49 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
3. Non-Emergency, non-black start CI stationary RICE >500 HP	a. Limit concentration of CO in the stationary RICE exhaust to 23 ppmvd at 15 percent O <sub>2</sub> ; or	
	b. Reduce CO emissions by 70 percent or more.	
4. Emergency stationary CI RICE and black start stationary CI RICE. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
5. Emergency stationary SI RICE; black start stationary SI RICE; non-emergency, non-black start 4SLB stationary RICE >500 HP that operate 24 hours or less per calendar year; non-emergency, non-black start 4SRB stationary RICE >500 HP that operate 24 hours or less per calendar year. <sup>2</sup>	a. Change oil and filter every 500 hours of operation or annually, whichever comes first; <sup>1</sup> ; b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.	
6. Non-emergency, non-black start 2SLB stationary RICE	a. Change oil and filter every 4,320 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 4,320 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first, and replace as necessary.	
7. Non-emergency, non-black start 4SLB stationary RICE ≤500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
8. Non-emergency, non-black start 4SLB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
9. Non-emergency, non-black start 4SLB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install an oxidation catalyst to reduce HAP emissions from the stationary RICE.	



**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

10. Non-emergency, non-black start 4SRB stationary RICE $\leq$ 500 HP	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	
11. Non-emergency, non-black start 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; <sup>1</sup>	
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.	
12. Non-emergency, non-black start 4SRB stationary RICE >500 HP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Install NSCR to reduce HAP emissions from the stationary RICE.	
13. Non-emergency, non-black start stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	a. Change oil and filter every 1,440 hours of operation or annually, whichever comes first; <sup>1</sup> b. Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and	
	c. Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.	

<sup>1</sup>Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

<sup>2</sup>If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[78 FR 6709, Jan. 30, 2013]

**Table 3 to Subpart ZZZZ of Part 63—Subsequent Performance Tests**

As stated in §§63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You must . . .</b>
1. New or reconstructed 2SLB stationary RICE >500 HP located at major sources; new or reconstructed 4SLB stationary RICE $\geq$ 250 HP located at major sources; and new or reconstructed CI stationary RICE >500 HP located at major sources	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semiannually. <sup>1</sup>
2. 4SRB stationary RICE $\geq$ 5,000 HP located at major	Reduce formaldehyde	Conduct subsequent performance

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

sources	emissions	tests semiannually. <sup>1</sup>
3. Stationary RICE >500 HP located at major sources and new or reconstructed 4SLB stationary RICE 250≤HP≤500 located at major sources	Limit the concentration of formaldehyde in the stationary RICE exhaust	Conduct subsequent performance tests semiannually. <sup>1</sup>
4. Existing non-emergency, non-black start CI stationary RICE >500 HP that are not limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
5. Existing non-emergency, non-black start CI stationary RICE >500 HP that are limited use stationary RICE	Limit or reduce CO emissions and not using a CEMS	Conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.

<sup>1</sup>After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6711, Jan. 30, 2013]

**Table 4 to Subpart ZZZZ of Part 63—Requirements for Performance Tests**

As stated in §§63.6610, 63.6611, 63.6620, and 63.6640, you must comply with the following requirements for performance tests for stationary RICE:

For each . . .	Complying with the requirement to . . .	You must . . .	Using . . .	According to the following requirements . . .
1. 2SLB, 4SLB, and CI stationary RICE	a. reduce CO emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For CO and O <sub>2</sub> measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
		ii. Measure the O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005) <sup>abc</sup> (heated probe not necessary)	(b) Measurements to determine O <sub>2</sub> must be made at the same time as the measurements for CO concentration.
		iii. Measure the CO at the inlet and the outlet	(1) ASTM D6522-00 (Reapproved 2005) <sup>abc</sup> (heated	(c) The CO concentration must be at 15 percent O <sub>2</sub> , dry basis.

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

		of the control device	probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4	
2. 4SRB stationary RICE	a. reduce formaldehyde emissions	i. Select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device; and		(a) For formaldehyde, O <sub>2</sub> , and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A.
		ii. Measure O <sub>2</sub> at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005) <sup>a</sup> (heated probe not necessary)	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time as the measurements for formaldehyde or THC concentration.
		iii. Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 <sup>a</sup>	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or THC concentration.
		iv. If demonstrating compliance with the formaldehyde percent reduction requirement, measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 <sup>a</sup> , provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. If demonstrating compliance with the THC percent reduction requirement, measure THC at the inlet and the outlet of the control device	(1) Method 25A, reported as propane, of 40 CFR part 60, appendix A-7	(a) THC concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3.	a. limit the	i. Select the sampling		(a) For formaldehyde, CO, O <sub>2</sub> ,

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

Stationary RICE	concentration of formaldehyde or CO in the stationary RICE exhaust	port location and the number/location of traverse points at the exhaust of the stationary RICE; and		and moisture measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter <i>and</i> the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O <sub>2</sub> concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005) <sup>a</sup> (heated probe not necessary)	(a) Measurements to determine O <sub>2</sub> concentration must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iii. Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A-3, or Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348-03 <sup>a</sup>	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde or CO concentration.
		iv. Measure formaldehyde at the exhaust of the stationary RICE; or	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 <sup>a</sup> , provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130	(a) Formaldehyde concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
		v. measure CO at the exhaust of the stationary RICE	(1) Method 10 of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (2005) <sup>ac</sup> , Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03 <sup>a</sup>	(a) CO concentration must be at 15 percent O <sub>2</sub> , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

<sup>a</sup>You may also use Methods 3A and 10 as options to ASTM-D6522-00 (2005). You may obtain a copy of ASTM-D6522-00 (2005) from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

<sup>b</sup>You may obtain a copy of ASTM-D6348-03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[79 FR 11290, Feb. 27, 2014]

**Table 5 to Subpart ZZZZ of Part 63—Initial Compliance With Emission Limitations, Operating Limitations, and Other Requirements**

As stated in §§63.6612, 63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You have demonstrated initial compliance if . . .</b>
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, using oxidation catalyst, and using a CPMS	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and  ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and  iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions and not using oxidation catalyst	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
4. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and not using oxidation catalyst	i. The average CO concentration determined from the initial performance test is less than or equal to the CO emission limitation; and ii. You have installed a CPMS to

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

		continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
5. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
6. Non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP located at an area source of HAP	a. Limit the concentration of CO, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O <sub>2</sub> or CO <sub>2</sub> at the outlet of the oxidation catalyst according to the requirements in §63.6625(a); and
		ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and
		iii. The average concentration of CO calculated using §63.6620 is less than or equal to the CO emission limitation. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average concentration measured during the 4-hour period.
7. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction, or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

		the initial performance test.
8. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction or the average reduction of emissions of THC determined from the initial performance test is equal to or greater than 30 percent; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
9. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and
		iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
10. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE $250 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR	i. The average formaldehyde concentration, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and
		ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and
		iii. You have recorded the approved operating parameters (if any) during the initial performance test.
11. Existing non-emergency stationary RICE $100 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency stationary CI RICE $300 < \text{HP} \leq 500$ located at an area source of HAP	a. Reduce CO emissions	i. The average reduction of emissions of CO or formaldehyde, as applicable determined from the initial performance test is equal to or greater than the required CO or formaldehyde, as applicable, percent reduction.
12. Existing non-emergency stationary RICE $100 \leq \text{HP} \leq 500$ located at a major source of HAP, and existing non-emergency stationary CI RICE $300 < \text{HP} \leq 500$ located at an area source of HAP	a. Limit the concentration of formaldehyde or CO in the stationary RICE exhaust	i. The average formaldehyde or CO concentration, as applicable, corrected to 15 percent O <sub>2</sub> , dry basis, from the three test runs is less than or equal to the formaldehyde or CO emission limitation, as applicable.
13. Existing non-emergency 4SLB stationary	a. Install an oxidation	i. You have conducted an initial compliance

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	catalyst	demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O <sub>2</sub> ;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F.
14. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. You have conducted an initial compliance demonstration as specified in §63.6630(e) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more;
		ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b), or you have installed equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1250 °F.

[78 FR 6712, Jan. 30, 2013]

**Table 6 to Subpart ZZZZ of Part 63—Continuous Compliance With Emission Limitations, and Other Requirements**

As stated in §63.6640, you must continuously comply with the emissions and operating limitations and work or management practices as required by the following:

<b>For each . . .</b>	<b>Complying with the requirement to . . .</b>	<b>You must demonstrate continuous compliance by . . .</b>
1. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved <sup>a</sup> ; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250	a. Reduce CO emissions and not using	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved <sup>a</sup> ; and
		ii. Collecting the approved operating parameter (if any) data



**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

HP located at a major source of HAP, and new or reconstructed non-emergency CI stationary RICE >500 HP located at a major source of HAP	an oxidation catalyst, and using a CPMS	according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. New or reconstructed non-emergency 2SLB stationary RICE >500 HP located at a major source of HAP, new or reconstructed non-emergency 4SLB stationary RICE ≥250 HP located at a major source of HAP, new or reconstructed non-emergency stationary CI RICE >500 HP located at a major source of HAP, and existing non-emergency stationary CI RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction or concentration of CO emissions according to §63.6620; and
		ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period, or that the emission remain at or below the CO concentration limit; and
4. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and using NSCR	iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
		i. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
		iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
5. Non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP	a. Reduce formaldehyde emissions and not using NSCR	iv. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
		i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and
		ii. Reducing these data to 4-hour rolling averages; and
6. Non-emergency 4SRB stationary RICE with a brake HP ≥5,000 located at a major source of HAP	a. Reduce formaldehyde emissions	iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
		Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved, or to demonstrate that the average reduction of emissions of THC determined from the performance test is equal to or greater than 30 percent. <sup>a</sup>
7. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup> ; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. New or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP and new or reconstructed non-emergency 4SLB stationary RICE	a. Limit the concentration of formaldehyde	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit <sup>a</sup> ; and
		ii. Collecting the approved operating parameter (if any) data

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

250≤HP≤500 located at a major source of HAP	in the stationary RICE exhaust and not using oxidation catalyst or NSCR	according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
9. Existing emergency and black start stationary RICE ≤500 HP located at a major source of HAP, existing non-emergency stationary RICE <100 HP located at a major source of HAP, existing emergency and black start stationary RICE located at an area source of HAP, existing non-emergency stationary CI RICE ≤300 HP located at an area source of HAP, existing non-emergency 2SLB stationary RICE located at an area source of HAP, existing non-emergency stationary SI RICE located at an area source of HAP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, existing non-emergency 4SLB and 4SRB stationary RICE ≤500 HP located at an area source of HAP, existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that operate 24 hours or less per calendar year, and existing non-emergency 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are remote stationary RICE	a. Work or Management practices	i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
10. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the stationary RICE exhaust, and using oxidation catalyst	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and
		ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and
		iii. Reducing these data to 4-hour rolling averages; and
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and
		v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
11. Existing stationary CI RICE >500 HP that are not limited use stationary RICE	a. Reduce CO emissions, or limit the concentration of CO in the	i. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

	stationary RICE exhaust, and not using oxidation catalyst	ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
12. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
13. Existing limited use CI stationary RICE >500 HP	a. Reduce CO emissions or limit the concentration of CO in the stationary RICE exhaust, and not using an oxidation catalyst	i. Conducting performance tests every 8,760 hours or 5 years, whichever comes first, for CO or formaldehyde, as appropriate, to demonstrate that the required CO or formaldehyde, as appropriate, percent reduction is achieved or that your emissions remain at or below the CO or formaldehyde concentration limit; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
14. Existing non-emergency 4SLB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install an oxidation catalyst	i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O <sub>2</sub> ; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages; and maintaining the 4-hour rolling averages within the limitation of greater than 450 °F and less than or equal to 1350 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1350 °F.
15. Existing non-emergency 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that are operated more than 24 hours per calendar year	a. Install NSCR	i. Conducting annual compliance demonstrations as specified in §63.6640(c) to show that the average reduction of emissions of CO is 75 percent or more, the average CO concentration is less than or equal to 270 ppmvd at 15 percent O <sub>2</sub> , or the average reduction of emissions of THC is 30 percent or more; and either ii. Collecting the catalyst inlet temperature data according to §63.6625(b), reducing these data to 4-hour rolling averages;

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

		and maintaining the 4-hour rolling averages within the limitation of greater than or equal to 750 °F and less than or equal to 1250 °F for the catalyst inlet temperature; or iii. Immediately shutting down the engine if the catalyst inlet temperature exceeds 1250 °F.
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<sup>a</sup>After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

[78 FR 6715, Jan. 30, 2013]

**Table 7 to Subpart ZZZZ of Part 63—Requirements for Reports**

As stated in §63.6650, you must comply with the following requirements for reports:

<b>For each . . .</b>	<b>You must submit a . . .</b>	<b>The report must contain . . .</b>	<b>You must submit the report . . .</b>
1. Existing non-emergency, non-black start stationary RICE 100≤HP≤500 located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >500 HP located at a major source of HAP; existing non-emergency 4SRB stationary RICE >500 HP located at a major source of HAP; existing non-emergency, non-black start stationary CI RICE >300 HP located at an area source of HAP; new or reconstructed non-emergency stationary RICE >500 HP located at a major source of HAP; and new or reconstructed non-emergency 4SLB stationary RICE 250≤HP≤500 located at a major source of HAP	Compliance report	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b)(1)-(5) for engines that are not limited use stationary RICE subject to numerical emission limitations; and ii. Annually according to the requirements in §63.6650(b)(6)-(9) for engines that are limited use stationary RICE subject to numerical emission limitations.
		b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements in §63.6650(b).
		c. If you had a malfunction during the reporting period, the information in §63.6650(c)(4).	i. Semiannually according to the requirements in §63.6650(b).
2. New or reconstructed non-emergency stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis	Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input	i. Annually, according to the requirements in §63.6650.

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

		on an annual basis; and	
		b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 2.a.i.
		c. Any problems or errors suspected with the meters.	i. See item 2.a.i.
3. Existing non-emergency, non-black start 4SLB and 4SRB stationary RICE >500 HP located at an area source of HAP that are not remote stationary RICE and that operate more than 24 hours per calendar year	Compliance report	a. The results of the annual compliance demonstration, if conducted during the reporting period.	i. Semiannually according to the requirements in §63.6650(b)(1)-(5).
4. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in §63.6640(f)(4)(ii)	Report	a. The information in §63.6650(h)(1)	i. annually according to the requirements in §63.6650(h)(2)-(3).

[78 FR 6719, Jan. 30, 2013]

**Table 8 to Subpart ZZZZ of Part 63—Applicability of General Provisions to Subpart ZZZZ.**

As stated in §63.6665, you must comply with the following applicable general provisions.

<b>General provisions citation</b>	<b>Subject of citation</b>	<b>Applies to subpart</b>	<b>Explanation</b>
§63.1	General applicability of the General Provisions	Yes.	
§63.2	Definitions	Yes	Additional terms defined in §63.6675.
§63.3	Units and abbreviations	Yes.	
§63.4	Prohibited activities and circumvention	Yes.	
§63.5	Construction and reconstruction	Yes.	
§63.6(a)	Applicability	Yes.	
§63.6(b)(1)-(4)	Compliance dates for new and reconstructed sources	Yes.	
§63.6(b)(5)	Notification	Yes.	
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§63.6(c)(1)-(2)	Compliance dates for existing sources	Yes.	
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance dates for existing area sources that become major sources	Yes.	
§63.6(d)	[Reserved]		
§63.6(e)	Operation and maintenance	No.	
§63.6(f)(1)	Applicability of standards	No.	
§63.6(f)(2)	Methods for determining compliance	Yes.	
§63.6(f)(3)	Finding of compliance	Yes.	
§63.6(g)(1)-(3)	Use of alternate standard	Yes.	
§63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

§63.6(i)	Compliance extension procedures and criteria	Yes.	
§63.6(j)	Presidential compliance exemption	Yes.	
§63.7(a)(1)-(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §§63.6610, 63.6611, and 63.6612.
§63.7(a)(3)	CAA section 114 authority	Yes.	
§63.7(b)(1)	Notification of performance test	Yes	Except that §63.7(b)(1) only applies as specified in §63.6645.
§63.7(b)(2)	Notification of rescheduling	Yes	Except that §63.7(b)(2) only applies as specified in §63.6645.
§63.7(c)	Quality assurance/test plan	Yes	Except that §63.7(c) only applies as specified in §63.6645.
§63.7(d)	Testing facilities	Yes.	
§63.7(e)(1)	Conditions for conducting performance tests	No.	Subpart ZZZZ specifies conditions for conducting performance tests at §63.6620.
§63.7(e)(2)	Conduct of performance tests and reduction of data	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§63.7(e)(3)	Test run duration	Yes.	
§63.7(e)(4)	Administrator may require other testing under section 114 of the CAA	Yes.	
§63.7(f)	Alternative test method provisions	Yes.	
§63.7(g)	Performance test data analysis, recordkeeping, and reporting	Yes.	
§63.7(h)	Waiver of tests	Yes.	
§63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§63.8(a)(2)	Performance specifications	Yes.	
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring for control devices	No.	
§63.8(b)(1)	Monitoring	Yes.	
§63.8(b)(2)-(3)	Multiple effluents and multiple monitoring systems	Yes.	
§63.8(c)(1)	Monitoring system operation and maintenance	Yes.	
§63.8(c)(1)(i)	Routine and predictable SSM	No	
§63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan	Yes.	
§63.8(c)(1)(iii)	Compliance with operation and maintenance requirements	No	
§63.8(c)(2)-(3)	Monitoring system installation	Yes.	
§63.8(c)(4)	Continuous monitoring system (CMS) requirements	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§63.8(c)(6)-(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§63.8(d)	CMS quality control	Yes.	

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

§63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
		Except that §63.8(e) only applies as specified in §63.6645.	
§63.8(f)(1)-(5)	Alternative monitoring method	Yes	Except that §63.8(f)(4) only applies as specified in §63.6645.
§63.8(f)(6)	Alternative to relative accuracy test	Yes	Except that §63.8(f)(6) only applies as specified in §63.6645.
§63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§63.6635 and 63.6640.
§63.9(a)	Applicability and State delegation of notification requirements	Yes.	
§63.9(b)(1)-(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
		Except that §63.9(b) only applies as specified in §63.6645.	
§63.9(c)	Request for compliance extension	Yes	Except that §63.9(c) only applies as specified in §63.6645.
§63.9(d)	Notification of special compliance requirements for new sources	Yes	Except that §63.9(d) only applies as specified in §63.6645.
§63.9(e)	Notification of performance test	Yes	Except that §63.9(e) only applies as specified in §63.6645.
§63.9(f)	Notification of visible emission (VE)/opacity test	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(1)	Notification of performance evaluation	Yes	Except that §63.9(g) only applies as specified in §63.6645.
§63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded	Yes	If alternative is in use.
		Except that §63.9(g) only applies as specified in §63.6645.	
§63.9(h)(1)-(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

			30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
			Except that §63.9(h) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines	Yes.	
§63.9(j)	Change in previous information	Yes.	
§63.10(a)	Administrative provisions for recordkeeping/reporting	Yes.	
§63.10(b)(1)	Record retention	Yes	Except that the most recent 2 years of data do not have to be retained on site.
§63.10(b)(2)(i)-(v)	Records related to SSM	No.	
§63.10(b)(2)(vi)-(xi)	Records	Yes.	
§63.10(b)(2)(xii)	Record when under waiver	Yes.	
§63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative.
§63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§63.10(b)(3)	Records of applicability determination	Yes.	
§63.10(c)	Additional records for sources using CEMS	Yes	Except that §63.10(c)(2)-(4) and (9) are reserved.
§63.10(d)(1)	General reporting requirements	Yes.	
§63.10(d)(2)	Report of performance test results	Yes.	
§63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§63.10(d)(4)	Progress reports	Yes.	
§63.10(d)(5)	Startup, shutdown, and malfunction reports	No.	
§63.10(e)(1) and (2)(i)	Additional CMS Reports	Yes.	
§63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§63.10(e)(3)	Excess emission and parameter exceedances reports	Yes.	Except that §63.10(e)(3)(i) (C) is reserved.
§63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§63.11	Flares	No.	
§63.12	State authority and delegations	Yes.	
§63.13	Addresses	Yes.	
§63.14	Incorporation by reference	Yes.	
§63.15	Availability of information	Yes.	

[75 FR 9688, Mar. 3, 2010, as amended at 78 FR 6720, Jan. 30, 2013]

**Appendix A to Subpart ZZZZ of Part 63—Protocol for Using an Electrochemical Analyzer to Determine Oxygen and Carbon Monoxide Concentrations From Certain Engines**

**1.0 SCOPE AND APPLICATION. WHAT IS THIS PROTOCOL?**

This protocol is a procedure for using portable electrochemical (EC) cells for measuring carbon monoxide (CO) and oxygen (O<sub>2</sub>) concentrations in controlled and uncontrolled emissions from existing stationary 4-stroke lean burn and 4-stroke rich burn reciprocating internal combustion engines as specified in the applicable rule.



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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**


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**1.1 Analytes. What does this protocol determine?**

This protocol measures the engine exhaust gas concentrations of carbon monoxide (CO) and oxygen (O<sub>2</sub>).

Analyte	CAS No.	Sensitivity
Carbon monoxide (CO)	630-08-0	Minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.
Oxygen (O <sub>2</sub> )	7782-44-7	

**1.2 Applicability. When is this protocol acceptable?**

This protocol is applicable to 40 CFR part 63, subpart ZZZZ. Because of inherent cross sensitivities of EC cells, you must not apply this protocol to other emissions sources without specific instruction to that effect.

**1.3 Data Quality Objectives. How good must my collected data be?**

Refer to Section 13 to verify and document acceptable analyzer performance.

**1.4 Range. What is the targeted analytical range for this protocol?**

The measurement system and EC cell design(s) conforming to this protocol will determine the analytical range for each gas component. The nominal ranges are defined by choosing up-scale calibration gas concentrations near the maximum anticipated flue gas concentrations for CO and O<sub>2</sub>, or no more than twice the permitted CO level.

**1.5 Sensitivity. What minimum detectable limit will this protocol yield for a particular gas component?**

The minimum detectable limit depends on the nominal range and resolution of the specific EC cell used, and the signal to noise ratio of the measurement system. The minimum detectable limit should be 2 percent of the nominal range or 1 ppm, whichever is less restrictive.

**2.0 SUMMARY OF PROTOCOL**

In this protocol, a gas sample is extracted from an engine exhaust system and then conveyed to a portable EC analyzer for measurement of CO and O<sub>2</sub> gas concentrations. This method provides measurement system performance specifications and sampling protocols to ensure reliable data. You may use additions to, or modifications of vendor supplied measurement systems (e.g., heated or unheated sample lines, thermocouples, flow meters, selective gas scrubbers, etc.) to meet the design specifications of this protocol. Do not make changes to the measurement system from the as-verified configuration (Section 3.12).

**3.0 DEFINITIONS**

**3.1 Measurement System.** The total equipment required for the measurement of CO and O<sub>2</sub> concentrations. The measurement system consists of the following major subsystems:

**3.1.1 Data Recorder.** A strip chart recorder, computer or digital recorder for logging measurement data from the analyzer output. You may record measurement data from the digital data display manually or electronically.

**3.1.2 Electrochemical (EC) Cell.** A device, similar to a fuel cell, used to sense the presence of a specific analyte and generate an electrical current output proportional to the analyte concentration.

**3.1.3 Interference Gas Scrubber.** A device used to remove or neutralize chemical compounds that may interfere with the selective operation of an EC cell.

**3.1.4 Moisture Removal System.** Any device used to reduce the concentration of moisture in the sample stream so as to protect the EC cells from the damaging effects of condensation and to minimize errors in measurements caused by the scrubbing of soluble gases.

**3.1.5 Sample Interface.** The portion of the system used for one or more of the following: sample acquisition; sample transport; sample conditioning or protection of the EC cell from any degrading effects of the engine exhaust effluent; removal of particulate matter and condensed moisture.

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

**3.2 Nominal Range.** The range of analyte concentrations over which each EC cell is operated (normally 25 percent to 150 percent of up-scale calibration gas value). Several nominal ranges can be used for any given cell so long as the calibration and repeatability checks for that range remain within specifications.

**3.3 Calibration Gas.** A vendor certified concentration of a specific analyte in an appropriate balance gas.

**3.4 Zero Calibration Error.** The analyte concentration output exhibited by the EC cell in response to zero-level calibration gas.

**3.5 Up-Scale Calibration Error.** The mean of the difference between the analyte concentration exhibited by the EC cell and the certified concentration of the up-scale calibration gas.

**3.6 Interference Check.** A procedure for quantifying analytical interference from components in the engine exhaust gas other than the targeted analytes.

**3.7 Repeatability Check.** A protocol for demonstrating that an EC cell operated over a given nominal analyte concentration range provides a stable and consistent response and is not significantly affected by repeated exposure to that gas.

**3.8 Sample Flow Rate.** The flow rate of the gas sample as it passes through the EC cell. In some situations, EC cells can experience drift with changes in flow rate. The flow rate must be monitored and documented during all phases of a sampling run.

**3.9 Sampling Run.** A timed three-phase event whereby an EC cell's response rises and plateaus in a sample conditioning phase, remains relatively constant during a measurement data phase, then declines during a refresh phase. The sample conditioning phase exposes the EC cell to the gas sample for a length of time sufficient to reach a constant response. The measurement data phase is the time interval during which gas sample measurements can be made that meet the acceptance criteria of this protocol. The refresh phase then purges the EC cells with CO-free air. The refresh phase replenishes requisite O<sub>2</sub> and moisture in the electrolyte reserve and provides a mechanism to de-gas or desorb any interference gas scrubbers or filters so as to enable a stable CO EC cell response. There are four primary types of sampling runs: pre-sampling calibrations; stack gas sampling; post-sampling calibration checks; and measurement system repeatability checks. Stack gas sampling runs can be chained together for extended evaluations, providing all other procedural specifications are met.

**3.10 Sampling Day.** A time not to exceed twelve hours from the time of the pre-sampling calibration to the post-sampling calibration check. During this time, stack gas sampling runs can be repeated without repeated recalibrations, providing all other sampling specifications have been met.

**3.11 Pre-Sampling Calibration/Post-Sampling Calibration Check.** The protocols executed at the beginning and end of each sampling day to bracket measurement readings with controlled performance checks.

**3.12 Performance-Established Configuration.** The EC cell and sampling system configuration that existed at the time that it initially met the performance requirements of this protocol.

#### **4.0 INTERFERENCES.**

When present in sufficient concentrations, NO and NO<sub>2</sub> are two gas species that have been reported to interfere with CO concentration measurements. In the likelihood of this occurrence, it is the protocol user's responsibility to employ and properly maintain an appropriate CO EC cell filter or scrubber for removal of these gases, as described in Section 6.2.12.

#### **5.0 SAFETY. [RESERVED]**

#### **6.0 EQUIPMENT AND SUPPLIES.**

##### **6.1 What equipment do I need for the measurement system?**

The system must maintain the gas sample at conditions that will prevent moisture condensation in the sample transport lines, both before and as the sample gas contacts the EC cells. The essential components of the measurement system are described below.

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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

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**6.2 Measurement System Components.**

**6.2.1 Sample Probe.** A single extraction-point probe constructed of glass, stainless steel or other non-reactive material, and of length sufficient to reach any designated sampling point. The sample probe must be designed to prevent plugging due to condensation or particulate matter.

**6.2.2 Sample Line.** Non-reactive tubing to transport the effluent from the sample probe to the EC cell.

**6.2.3 Calibration Assembly (optional).** A three-way valve assembly or equivalent to introduce calibration gases at ambient pressure at the exit end of the sample probe during calibration checks. The assembly must be designed such that only stack gas or calibration gas flows in the sample line and all gases flow through any gas path filters.

**6.2.4 Particulate Filter (optional).** Filters before the inlet of the EC cell to prevent accumulation of particulate material in the measurement system and extend the useful life of the components. All filters must be fabricated of materials that are non-reactive to the gas mixtures being sampled.

**6.2.5 Sample Pump.** A leak-free pump to provide undiluted sample gas to the system at a flow rate sufficient to minimize the response time of the measurement system. If located upstream of the EC cells, the pump must be constructed of a material that is non-reactive to the gas mixtures being sampled.

**6.2.8 Sample Flow Rate Monitoring.** An adjustable rotameter or equivalent device used to adjust and maintain the sample flow rate through the analyzer as prescribed.

**6.2.9 Sample Gas Manifold (optional).** A manifold to divert a portion of the sample gas stream to the analyzer and the remainder to a by-pass discharge vent. The sample gas manifold may also include provisions for introducing calibration gases directly to the analyzer. The manifold must be constructed of a material that is non-reactive to the gas mixtures being sampled.

**6.2.10 EC cell.** A device containing one or more EC cells to determine the CO and O<sub>2</sub> concentrations in the sample gas stream. The EC cell(s) must meet the applicable performance specifications of Section 13 of this protocol.

**6.2.11 Data Recorder.** A strip chart recorder, computer or digital recorder to make a record of analyzer output data. The data recorder resolution (i.e., readability) must be no greater than 1 ppm for CO; 0.1 percent for O<sub>2</sub>; and one degree (either °C or °F) for temperature. Alternatively, you may use a digital or analog meter having the same resolution to observe and manually record the analyzer responses.

**6.2.12 Interference Gas Filter or Scrubber.** A device to remove interfering compounds upstream of the CO EC cell. Specific interference gas filters or scrubbers used in the performance-established configuration of the analyzer must continue to be used. Such a filter or scrubber must have a means to determine when the removal agent is exhausted. Periodically replace or replenish it in accordance with the manufacturer's recommendations.

**7.0 REAGENTS AND STANDARDS. WHAT CALIBRATION GASES ARE NEEDED?**

**7.1 Calibration Gases.** CO calibration gases for the EC cell must be CO in nitrogen or CO in a mixture of nitrogen and O<sub>2</sub>. Use CO calibration gases with labeled concentration values certified by the manufacturer to be within ±5 percent of the label value. Dry ambient air (20.9 percent O<sub>2</sub>) is acceptable for calibration of the O<sub>2</sub> cell. If needed, any lower percentage O<sub>2</sub> calibration gas must be a mixture of O<sub>2</sub> in nitrogen.

**7.1.1 Up-Scale CO Calibration Gas Concentration.** Choose one or more up-scale gas concentrations such that the average of the stack gas measurements for each stack gas sampling run are between 25 and 150 percent of those concentrations. Alternatively, choose an up-scale gas that does not exceed twice the concentration of the applicable outlet standard. If a measured gas value exceeds 150 percent of the up-scale CO calibration gas value at any time during the stack gas sampling run, the run must be discarded and repeated.

**7.1.2 Up-Scale O<sub>2</sub> Calibration Gas Concentration.**

Select an O<sub>2</sub> gas concentration such that the difference between the gas concentration and the average stack gas measurement or reading for each sample run is less than 15 percent O<sub>2</sub>. When the average exhaust gas O<sub>2</sub> readings are above 6 percent, you may use dry ambient air (20.9 percent O<sub>2</sub>) for the up-scale O<sub>2</sub> calibration gas.

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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

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*7.1.3 Zero Gas.* Use an inert gas that contains less than 0.25 percent of the up-scale CO calibration gas concentration. You may use dry air that is free from ambient CO and other combustion gas products (e.g., CO<sub>2</sub>).

**8.0 SAMPLE COLLECTION AND ANALYSIS***8.1 Selection of Sampling Sites.*

*8.1.1 Control Device Inlet.* Select a sampling site sufficiently downstream of the engine so that the combustion gases should be well mixed. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

*8.1.2 Exhaust Gas Outlet.* Select a sampling site located at least two stack diameters downstream of any disturbance (e.g., turbocharger exhaust, crossover junction or recirculation take-off) and at least one-half stack diameter upstream of the gas discharge to the atmosphere. Use a single sampling extraction point near the center of the duct (e.g., within the 10 percent centroidal area), unless instructed otherwise.

*8.2 Stack Gas Collection and Analysis.* Prior to the first stack gas sampling run, conduct that the pre-sampling calibration in accordance with Section 10.1. Use Figure 1 to record all data. Zero the analyzer with zero gas. Confirm and record that the scrubber media color is correct and not exhausted. Then position the probe at the sampling point and begin the sampling run at the same flow rate used during the up-scale calibration. Record the start time. Record all EC cell output responses and the flow rate during the “sample conditioning phase” once per minute until constant readings are obtained. Then begin the “measurement data phase” and record readings every 15 seconds for at least two minutes (or eight readings), or as otherwise required to achieve two continuous minutes of data that meet the specification given in Section 13.1. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until several minute-to-minute readings of consistent value have been obtained. For each run use the “measurement data phase” readings to calculate the average stack gas CO and O<sub>2</sub> concentrations.

*8.3 EC Cell Rate.* Maintain the EC cell sample flow rate so that it does not vary by more than  $\pm 10$  percent throughout the pre-sampling calibration, stack gas sampling and post-sampling calibration check. Alternatively, the EC cell sample flow rate can be maintained within a tolerance range that does not affect the gas concentration readings by more than  $\pm 3$  percent, as instructed by the EC cell manufacturer.

**9.0 QUALITY CONTROL (RESERVED)****10.0 CALIBRATION AND STANDARDIZATION**

*10.1 Pre-Sampling Calibration.* Conduct the following protocol once for each nominal range to be used on each EC cell before performing a stack gas sampling run on each field sampling day. Repeat the calibration if you replace an EC cell before completing all of the sampling runs. There is no prescribed order for calibration of the EC cells; however, each cell must complete the measurement data phase during calibration. Assemble the measurement system by following the manufacturer's recommended protocols including for preparing and preconditioning the EC cell. Assure the measurement system has no leaks and verify the gas scrubbing agent is not depleted. Use Figure 1 to record all data.

*10.1.1 Zero Calibration.* For both the O<sub>2</sub> and CO cells, introduce zero gas to the measurement system (e.g., at the calibration assembly) and record the concentration reading every minute until readings are constant for at least two consecutive minutes. Include the time and sample flow rate. Repeat the steps in this section at least once to verify the zero calibration for each component gas.

*10.1.2 Zero Calibration Tolerance.* For each zero gas introduction, the zero level output must be less than or equal to  $\pm 3$  percent of the up-scale gas value or  $\pm 1$  ppm, whichever is less restrictive, for the CO channel and less than or equal to  $\pm 0.3$  percent O<sub>2</sub> for the O<sub>2</sub> channel.

*10.1.3 Up-Scale Calibration.* Individually introduce each calibration gas to the measurement system (e.g., at the calibration assembly) and record the start time. Record all EC cell output responses and the flow rate during this “sample conditioning phase” once per minute until readings are constant for at least two minutes. Then begin the “measurement data phase” and record readings every 15 seconds for a total of two minutes, or as otherwise required. Finally, perform the “refresh phase” by introducing dry air, free from CO and other combustion gases, until readings are constant for at least two consecutive minutes. Then repeat the steps in this section at least once to verify the calibration for each component gas.

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**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

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Introduce all gases to flow through the entire sample handling system (i.e., at the exit end of the sampling probe or the calibration assembly).

**10.1.4 Up-Scale Calibration Error.** The mean of the difference of the “measurement data phase” readings from the reported standard gas value must be less than or equal to  $\pm 5$  percent or  $\pm 1$  ppm for CO or  $\pm 0.5$  percent O<sub>2</sub>, whichever is less restrictive, respectively. The maximum allowable deviation from the mean measured value of any single “measurement data phase” reading must be less than or equal to  $\pm 2$  percent or  $\pm 1$  ppm for CO or  $\pm 0.5$  percent O<sub>2</sub>, whichever is less restrictive, respectively.

**10.2 Post-Sampling Calibration Check.** Conduct a stack gas post-sampling calibration check after the stack gas sampling run or set of runs and within 12 hours of the initial calibration. Conduct up-scale and zero calibration checks using the protocol in Section 10.1. Make no changes to the sampling system or EC cell calibration until all post-sampling calibration checks have been recorded. If either the zero or up-scale calibration error exceeds the respective specification in Sections 10.1.2 and 10.1.4 then all measurement data collected since the previous successful calibrations are invalid and re-calibration and re-sampling are required. If the sampling system is disassembled or the EC cell calibration is adjusted, repeat the calibration check before conducting the next analyzer sampling run.

### **11.0 ANALYTICAL PROCEDURE**

The analytical procedure is fully discussed in Section 8.

### **12.0 CALCULATIONS AND DATA ANALYSIS**

Determine the CO and O<sub>2</sub> concentrations for each stack gas sampling run by calculating the mean gas concentrations of the data recorded during the “measurement data phase”.

### **13.0 PROTOCOL PERFORMANCE**

Use the following protocols to verify consistent analyzer performance during each field sampling day.

**13.1 Measurement Data Phase Performance Check.** Calculate the mean of the readings from the “measurement data phase”. The maximum allowable deviation from the mean for each of the individual readings is  $\pm 2$  percent, or  $\pm 1$  ppm, whichever is less restrictive. Record the mean value and maximum deviation for each gas monitored. Data must conform to Section 10.1.4. The EC cell flow rate must conform to the specification in Section 8.3.

*Example:* A measurement data phase is invalid if the maximum deviation of any single reading comprising that mean is greater than  $\pm 2$  percent or  $\pm 1$  ppm (the default criteria). For example, if the mean = 30 ppm, single readings of below 29 ppm and above 31 ppm are disallowed).

**13.2 Interference Check.** Before the initial use of the EC cell and interference gas scrubber in the field, and semi-annually thereafter, challenge the interference gas scrubber with NO and NO<sub>2</sub> gas standards that are generally recognized as representative of diesel-fueled engine NO and NO<sub>2</sub> emission values. Record the responses displayed by the CO EC cell and other pertinent data on Figure 1 or a similar form.

**13.2.1 Interference Response.** The combined NO and NO<sub>2</sub> interference response should be less than or equal to  $\pm 5$  percent of the up-scale CO calibration gas concentration.

**13.3 Repeatability Check.** Conduct the following check once for each nominal range that is to be used on the CO EC cell within 5 days prior to each field sampling program. If a field sampling program lasts longer than 5 days, repeat this check every 5 days. Immediately repeat the check if the EC cell is replaced or if the EC cell is exposed to gas concentrations greater than 150 percent of the highest up-scale gas concentration.

**13.3.1 Repeatability Check Procedure.** Perform a complete EC cell sampling run (all three phases) by introducing the CO calibration gas to the measurement system and record the response. Follow Section 10.1.3. Use Figure 1 to record all data. Repeat the run three times for a total of four complete runs. During the four repeatability check runs, do not adjust the system except where necessary to achieve the correct calibration gas flow rate at the analyzer.

**13.3.2 Repeatability Check Calculations.** Determine the highest and lowest average “measurement data phase” CO concentrations from the four repeatability check runs and record the results on Figure 1 or a similar form. The absolute value of the difference between the maximum and minimum average values recorded must not vary more than  $\pm 3$  percent or  $\pm 1$  ppm of the up-scale gas value, whichever is less restrictive.

**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.**

**14.0 POLLUTION PREVENTION (RESERVED)**

**15.0 WASTE MANAGEMENT (RESERVED)**

**16.0 ALTERNATIVE PROCEDURES (RESERVED)**

**17.0 REFERENCES**

(1) "Development of an Electrochemical Cell Emission Analyzer Test Protocol", Topical Report, Phil Juneau, Emission Monitoring, Inc., July 1997.

(2) "Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Emissions from Natural Gas-Fired Engines, Boilers, and Process Heaters Using Portable Analyzers", EMC Conditional Test Protocol 30 (CTM-30), Gas Research Institute Protocol GRI-96/0008, Revision 7, October 13, 1997.

(3) "ICAC Test Protocol for Periodic Monitoring", EMC Conditional Test Protocol 34 (CTM-034), The Institute of Clean Air Companies, September 8, 1999.

(4) "Code of Federal Regulations", Protection of Environment, 40 CFR, Part 60, Appendix A, Methods 1-4; 10.

**TABLE 1: APPENDIX A—SAMPLING RUN DATA.**

Facility _____ Engine I.D. _____ Date _____											
Run Type:	( )		( )		( )		( )		( )		
(X)	Pre-Sample Calibration		Stack Gas Sample				Post-Sample Cal. Check			Repeatability Check	
Run #	1	1	2	2	3	3	4	4	Time	Scrub. OK	Flow- Rate
Gas	O <sub>2</sub>	CO	O <sub>2</sub>	CO	O <sub>2</sub>	CO	O <sub>2</sub>	CO			
Sample Cond. Phase											
"											
"											
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"											
Measurement Data Phase											
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**APPENDIX 40 CFR 63, NESHAP SUBPART ZZZZ**

**40 CFR 63, NESHAP SUBPART ZZZZ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR  
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[78 FR 6721, Jan. 30, 2013]

[Table of Contents](#)

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

**Electronic Code of Federal Regulations**

**e-CFR data is current as of June 7, 2018**

Subpart CCCCCC—National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

**Contents**

**WHAT THIS SUBPART COVERS**

- §63.11110 What is the purpose of this subpart?
- §63.11111 Am I subject to the requirements in this subpart?
- §63.11112 What parts of my affected source does this subpart cover?
- §63.11113 When do I have to comply with this subpart?

**EMISSION LIMITATIONS AND MANAGEMENT PRACTICES**

- §63.11115 What are my general duties to minimize emissions?
- §63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.
- §63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.
- §63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.

**TESTING AND MONITORING REQUIREMENTS**

- §63.11120 What testing and monitoring requirements must I meet?

**NOTIFICATIONS, RECORDS, AND REPORTS**

- §63.11124 What notifications must I submit and when?
- §63.11125 What are my recordkeeping requirements?
- §63.11126 What are my reporting requirements?

**OTHER REQUIREMENTS AND INFORMATION**

- §63.11130 What parts of the General Provisions apply to me?
- §63.11131 Who implements and enforces this subpart?
- §63.11132 What definitions apply to this subpart?

Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

SOURCE: 73 FR 1945, Jan. 10, 2008, unless otherwise noted.

**WHAT THIS SUBPART COVERS**

**§63.11110 What is the purpose of this subpart?**

This subpart establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF). This subpart also establishes requirements to demonstrate compliance with the emission limitations and management practices.

**§63.11111 Am I subject to the requirements in this subpart?**

(a) The affected source to which this subpart applies is each GDF that is located at an area source. The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank.



**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

(b) If your GDF has a monthly throughput of less than 10,000 gallons of gasoline, you must comply with the requirements in §63.11116.

(c) If your GDF has a monthly throughput of 10,000 gallons of gasoline or more, you must comply with the requirements in §63.11117.

(d) If your GDF has a monthly throughput of 100,000 gallons of gasoline or more, you must comply with the requirements in §63.11118.

(e) An affected source shall, upon request by the Administrator, demonstrate that their monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. For new or reconstructed affected sources, as specified in §63.11112(b) and (c), recordkeeping to document monthly throughput must begin upon startup of the affected source. For existing sources, as specified in §63.11112(d), recordkeeping to document monthly throughput must begin on January 10, 2008. For existing sources that are subject to this subpart only because they load gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, recordkeeping to document monthly throughput must begin on January 24, 2011. Records required under this paragraph shall be kept for a period of 5 years.

(f) If you are an owner or operator of affected sources, as defined in paragraph (a) of this section, you are not required to obtain a permit under 40 CFR part 70 or 40 CFR part 71 as a result of being subject to this subpart. However, you must still apply for and obtain a permit under 40 CFR part 70 or 40 CFR part 71 if you meet one or more of the applicability criteria found in 40 CFR 70.3(a) and (b) or 40 CFR 71.3(a) and (b).

(g) The loading of aviation gasoline into storage tanks at airports, and the subsequent transfer of aviation gasoline within the airport, is not subject to this subpart.

(h) Monthly throughput is the total volume of gasoline loaded into, or dispensed from, all the gasoline storage tanks located at a single affected GDF. If an area source has two or more GDF at separate locations within the area source, each GDF is treated as a separate affected source.

(i) If your affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable throughput threshold.

(j) The dispensing of gasoline from a fixed gasoline storage tank at a GDF into a portable gasoline tank for the on-site delivery and subsequent dispensing of the gasoline into the fuel tank of a motor vehicle or other gasoline-fueled engine or equipment used within the area source is only subject to §63.11116 of this subpart.

(k) For any affected source subject to the provisions of this subpart and another Federal rule, you may elect to comply only with the more stringent provisions of the applicable subparts. You must consider all provisions of the rules, including monitoring, recordkeeping, and reporting. You must identify the affected source and provisions with which you will comply in your Notification of Compliance Status required under §63.11124. You also must demonstrate in your Notification of Compliance Status that each provision with which you will comply is at least as stringent as the otherwise applicable requirements in this subpart. You are responsible for making accurate determinations concerning the more stringent provisions, and noncompliance with this rule is not excused if it is later determined that your determination was in error, and, as a result, you are violating this subpart. Compliance with this rule is your responsibility and the Notification of Compliance Status does not alter or affect that responsibility.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4181, Jan. 24, 2011]

**§63.11112 What parts of my affected source does this subpart cover?**

(a) The emission sources to which this subpart applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in §63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by this subpart.

(b) An affected source is a new affected source if you commenced construction on the affected source after November 9, 2006, and you meet the applicability criteria in §63.11111 at the time you commenced operation.

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**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

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(c) An affected source is reconstructed if you meet the criteria for reconstruction as defined in §63.2.

(d) An affected source is an existing affected source if it is not new or reconstructed.

**§63.11113 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, except as specified in paragraph (d) of this section.

(1) If you start up your affected source before January 10, 2008, you must comply with the standards in this subpart no later than January 10, 2008.

(2) If you start up your affected source after January 10, 2008, you must comply with the standards in this subpart upon startup of your affected source.

(b) If you have an existing affected source, you must comply with the standards in this subpart no later than January 10, 2011.

(c) If you have an existing affected source that becomes subject to the control requirements in this subpart because of an increase in the monthly throughput, as specified in §63.11111(c) or §63.11111(d), you must comply with the standards in this subpart no later than 3 years after the affected source becomes subject to the control requirements in this subpart.

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

(1) If you start up your affected source from November 9, 2006 to September 23, 2008, you must comply no later than September 23, 2008.

(2) If you start up your affected source after September 23, 2008, you must comply upon startup of your affected source.

(e) The initial compliance demonstration test required under §63.11120(a)(1) and (2) must be conducted as specified in paragraphs (e)(1) and (2) of this section.

(1) If you have a new or reconstructed affected source, you must conduct the initial compliance test upon installation of the complete vapor balance system.

(2) If you have an existing affected source, you must conduct the initial compliance test as specified in paragraphs (e)(2)(i) or (e)(2)(ii) of this section.

(i) For vapor balance systems installed on or before December 15, 2009, you must test no later than 180 days after the applicable compliance date specified in paragraphs (b) or (c) of this section.

(ii) For vapor balance systems installed after December 15, 2009, you must test upon installation of the complete vapor balance system.

(f) If your GDF is subject to the control requirements in this subpart only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must comply with the standards in this subpart as specified in paragraphs (f)(1) or (f)(2) of this section.

(1) If your GDF is an existing facility, you must comply by January 24, 2014.

(2) If your GDF is a new or reconstructed facility, you must comply by the dates specified in paragraphs (f)(2)(i) and (ii) of this section.

(i) If you start up your GDF after December 15, 2009, but before January 24, 2011, you must comply no later than January 24, 2011.

(ii) If you start up your GDF after January 24, 2011, you must comply upon startup of your GDF.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4181, Jan. 24, 2011]

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

**EMISSION LIMITATIONS AND MANAGEMENT PRACTICES**

**§63.11115 What are my general duties to minimize emissions?**

Each owner or operator of an affected source under this subpart must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(b) You must keep applicable records and submit reports as specified in §63.11125(d) and §63.11126(b).

[76 FR 4182, Jan. 24, 2011]

**§63.11116 Requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.**

(a) You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- (1) Minimize gasoline spills;
- (2) Clean up spills as expeditiously as practicable;
- (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

(b) You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(c) You must comply with the requirements of this subpart by the applicable dates specified in §63.11113.

(d) Portable gasoline containers that meet the requirements of 40 CFR part 59, subpart F, are considered acceptable for compliance with paragraph (a)(3) of this section.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

**§63.11117 Requirements for facilities with monthly throughput of 10,000 gallons of gasoline or more.**

(a) You must comply with the requirements in section §63.11116(a).

(b) Except as specified in paragraph (c) of this section, you must only load gasoline into storage tanks at your facility by utilizing submerged filling, as defined in §63.11132, and as specified in paragraphs (b)(1), (b)(2), or (b)(3) of this section. The applicable distances in paragraphs (b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank.

(1) Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the tank.

(2) Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the tank.

(3) Submerged fill pipes not meeting the specifications of paragraphs (b)(1) or (b)(2) of this section are allowed if the owner or operator can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe. Documentation providing such demonstration must be made available for inspection by the Administrator's delegated representative during the course of a site visit.

(c) Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in paragraph (b) of this section, but must comply only with all of the requirements in §63.11116.

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

(d) You must have records available within 24 hours of a request by the Administrator to document your gasoline throughput.

(e) You must submit the applicable notifications as required under §63.11124(a).

(f) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

**§63.11118 Requirements for facilities with monthly throughput of 100,000 gallons of gasoline or more.**

(a) You must comply with the requirements in §§63.11116(a) and 63.11117(b).

(b) Except as provided in paragraph (c) of this section, you must meet the requirements in either paragraph (b)(1) or paragraph (b)(2) of this section.

(1) Each management practice in Table 1 to this subpart that applies to your GDF.

(2) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(2)(i) and (ii) of this section, you will be deemed in compliance with this subsection.

(i) You operate a vapor balance system at your GDF that meets the requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraph (b)(2)(i)(A) or paragraph (b)(2)(i)(B) of this section.

(c) The emission sources listed in paragraphs (c)(1) through (3) of this section are not required to comply with the control requirements in paragraph (b) of this section, but must comply with the requirements in §63.11117.

(1) Gasoline storage tanks with a capacity of less than 250 gallons that are constructed after January 10, 2008.

(2) Gasoline storage tanks with a capacity of less than 2,000 gallons that were constructed before January 10, 2008.

(3) Gasoline storage tanks equipped with floating roofs, or the equivalent.

(d) Cargo tanks unloading at GDF must comply with the management practices in Table 2 to this subpart.

(e) You must comply with the applicable testing requirements contained in §63.11120.

(f) You must submit the applicable notifications as required under §63.11124.

(g) You must keep records and submit reports as specified in §§63.11125 and 63.11126.

(h) You must comply with the requirements of this subpart by the applicable dates contained in §63.11113.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008]

**TESTING AND MONITORING REQUIREMENTS**

**§63.11120 What testing and monitoring requirements must I meet?**

(a) Each owner or operator, at the time of installation, as specified in §63.11113(e), of a vapor balance system required under §63.11118(b)(1), and every 3 years thereafter, must comply with the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must demonstrate compliance with the leak rate and cracking pressure requirements, specified in item 1(g) of Table 1 to this subpart, for pressure-vacuum vent valves installed on your gasoline storage tanks using the test methods identified in paragraph (a)(1)(i) or paragraph (a)(1)(ii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E,—Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves, adopted October 8, 2003 (incorporated by reference, see §63.14).

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(2) You must demonstrate compliance with the static pressure performance requirement specified in item 1(h) of Table 1 to this subpart for your vapor balance system by conducting a static pressure test on your gasoline storage tanks using the test methods identified in paragraphs (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section.

(i) California Air Resources Board Vapor Recovery Test Procedure TP-201.3,—Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, adopted April 12, 1996, and amended March 17, 1999 (incorporated by reference, see §63.14).

(ii) Use alternative test methods and procedures in accordance with the alternative test method requirements in §63.7(f).

(iii) Bay Area Air Quality Management District Source Test Procedure ST-30—Static Pressure Integrity Test—Underground Storage Tanks, adopted November 30, 1983, and amended December 21, 1994 (incorporated by reference, *see* §63.14).

(b) Each owner or operator choosing, under the provisions of §63.6(g), to use a vapor balance system other than that described in Table 1 to this subpart must demonstrate to the Administrator or delegated authority under paragraph §63.11131(a) of this subpart, the equivalency of their vapor balance system to that described in Table 1 to this subpart using the procedures specified in paragraphs (b)(1) through (3) of this section.

(1) You must demonstrate initial compliance by conducting an initial performance test on the vapor balance system to demonstrate that the vapor balance system achieves 95 percent reduction using the California Air Resources Board Vapor Recovery Test Procedure TP-201.1,—Volumetric Efficiency for Phase I Vapor Recovery Systems, adopted April 12, 1996, and amended February 1, 2001, and October 8, 2003, (incorporated by reference, *see* §63.14).

(2) You must, during the initial performance test required under paragraph (b)(1) of this section, determine and document alternative acceptable values for the leak rate and cracking pressure requirements specified in item 1(g) of Table 1 to this subpart and for the static pressure performance requirement in item 1(h) of Table 1 to this subpart.

(3) You must comply with the testing requirements specified in paragraph (a) of this section.

(c) Conduct of performance tests. Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (*i.e.*, performance based on normal operating conditions) of the affected source. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(d) Owners and operators of gasoline cargo tanks subject to the provisions of Table 2 to this subpart must conduct annual certification testing according to the vapor tightness testing requirements found in §63.11092(f).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4182, Jan. 24, 2011]

**NOTIFICATIONS, RECORDS, AND REPORTS**

**§63.11124 What notifications must I submit and when?**

(a) Each owner or operator subject to the control requirements in §63.11117 must comply with paragraphs (a)(1) through (3) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11117, unless you meet the requirements in paragraph (a)(3) of this section. If your affected source is subject to the control requirements in §63.11117 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (a)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (*i.e.*, physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11117 that apply to you.

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, within 60 days of the applicable compliance date specified in §63.11113, unless you meet the requirements in paragraph (a)(3) of this section. The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facilities' monthly throughput is calculated based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (a)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (a)(1) of this section.

(3) If, prior to January 10, 2008, you are operating in compliance with an enforceable State, local, or tribal rule or permit that requires submerged fill as specified in §63.11117(b), you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (a)(1) or paragraph (a)(2) of this section.

(b) Each owner or operator subject to the control requirements in §63.11118 must comply with paragraphs (b)(1) through (5) of this section.

(1) You must submit an Initial Notification that you are subject to this subpart by May 9, 2008, or at the time you become subject to the control requirements in §63.11118. If your affected source is subject to the control requirements in §63.11118 only because it loads gasoline into fuel tanks other than those in motor vehicles, as defined in §63.11132, you must submit the Initial Notification by May 24, 2011. The Initial Notification must contain the information specified in paragraphs (b)(1)(i) through (iii) of this section. The notification must be submitted to the applicable EPA Regional Office and delegated State authority as specified in §63.13.

(i) The name and address of the owner and the operator.

(ii) The address (i.e., physical location) of the GDF.

(iii) A statement that the notification is being submitted in response to this subpart and identifying the requirements in paragraphs (a) through (c) of §63.11118 that apply to you.

(2) You must submit a Notification of Compliance Status to the applicable EPA Regional Office and the delegated State authority, as specified in §63.13, in accordance with the schedule specified in §63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. If your facility is in compliance with the requirements of this subpart at the time the Initial Notification required under paragraph (b)(1) of this section is due, the Notification of Compliance Status may be submitted in lieu of the Initial Notification provided it contains the information required under paragraph (b)(1) of this section.

(3) If, prior to January 10, 2008, you satisfy the requirements in both paragraphs (b)(3)(i) and (ii) of this section, you are not required to submit an Initial Notification or a Notification of Compliance Status under paragraph (b)(1) or paragraph (b)(2) of this subsection.

(i) You operate a vapor balance system at your gasoline dispensing facility that meets the requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(A) Achieves emissions reduction of at least 90 percent.

(B) Operates using management practices at least as stringent as those in Table 1 to this subpart.

(ii) Your gasoline dispensing facility is in compliance with an enforceable State, local, or tribal rule or permit that contains requirements of either paragraphs (b)(3)(i)(A) or (b)(3)(i)(B) of this section.

(4) You must submit a Notification of Performance Test, as specified in §63.9(e), prior to initiating testing required by §63.11120(a) and (b).

(5) You must submit additional notifications specified in §63.9, as applicable.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 12276, Mar. 7, 2008; 76 FR 4182, Jan. 24, 2011]

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

**§63.11125 What are my recordkeeping requirements?**

(a) Each owner or operator subject to the management practices in §63.11118 must keep records of all tests performed under §63.11120(a) and (b).

(b) Records required under paragraph (a) of this section shall be kept for a period of 5 years and shall be made available for inspection by the Administrator's delegated representatives during the course of a site visit.

(c) Each owner or operator of a gasoline cargo tank subject to the management practices in Table 2 to this subpart must keep records documenting vapor tightness testing for a period of 5 years. Documentation must include each of the items specified in §63.11094(b)(2)(i) through (viii). Records of vapor tightness testing must be retained as specified in either paragraph (c)(1) or paragraph (c)(2) of this section.

(1) The owner or operator must keep all vapor tightness testing records with the cargo tank.

(2) As an alternative to keeping all records with the cargo tank, the owner or operator may comply with the requirements of paragraphs (c)(2)(i) and (ii) of this section.

(i) The owner or operator may keep records of only the most recent vapor tightness test with the cargo tank, and keep records for the previous 4 years at their office or another central location.

(ii) Vapor tightness testing records that are kept at a location other than with the cargo tank must be instantly available (*e.g.*, via e-mail or facsimile) to the Administrator's delegated representative during the course of a site visit or within a mutually agreeable time frame. Such records must be an exact duplicate image of the original paper copy record with certifying signatures.

(d) Each owner or operator of an affected source under this subpart shall keep records as specified in paragraphs (d)(1) and (2) of this section.

(1) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

**§63.11126 What are my reporting requirements?**

(a) Each owner or operator subject to the management practices in §63.11118 shall report to the Administrator the results of all volumetric efficiency tests required under §63.11120(b). Reports submitted under this paragraph must be submitted within 180 days of the completion of the performance testing.

(b) Each owner or operator of an affected source under this subpart shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.

[76 FR 4183, Jan. 24, 2011]

**OTHER REQUIREMENTS AND INFORMATION**

**§63.11130 What parts of the General Provisions apply to me?**

Table 3 to this subpart shows which parts of the General Provisions apply to you.

**§63.11131 Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as the applicable State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency, then

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to a State, local, or tribal agency.

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

(c) The authorities that cannot be delegated to State, local, or tribal agencies are as specified in paragraphs (c)(1) through (3) of this section.

(1) Approval of alternatives to the requirements in §§63.11116 through 63.11118 and 63.11120.

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

(3) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.

**§63.11132 What definitions apply to this subpart?**

As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (CAA), or in subparts A and BBBB of this part. For purposes of this subpart, definitions in this section supersede definitions in other parts or subparts.

*Dual-point vapor balance system* means a type of vapor balance system in which the storage tank is equipped with an entry port for a gasoline fill pipe and a separate exit port for a vapor connection.

*Gasoline* means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines.

*Gasoline cargo tank* means a delivery tank truck or railcar which is loading or unloading gasoline, or which has loaded or unloaded gasoline on the immediately previous load.

*Gasoline dispensing facility (GDF)* means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. These facilities include, but are not limited to, facilities that dispense gasoline into on- and off-road, street, or highway motor vehicles, lawn equipment, boats, test engines, landscaping equipment, generators, pumps, and other gasoline-fueled engines and equipment.

*Monthly throughput* means the total volume of gasoline that is loaded into, or dispensed from, all gasoline storage tanks at each GDF during a month. Monthly throughput is calculated by summing the volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the current day, plus the total volume of gasoline loaded into, or dispensed from, all gasoline storage tanks at each GDF during the previous 364 days, and then dividing that sum by 12.

*Motor vehicle* means any self-propelled vehicle designed for transporting persons or property on a street or highway.

*Nonroad engine* means an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 of this title or section 7521 of this title.

*Nonroad vehicle* means a vehicle that is powered by a nonroad engine, and that is not a motor vehicle or a vehicle used solely for competition.

*Submerged filling* means, for the purposes of this subpart, the filling of a gasoline storage tank through a submerged fill pipe whose discharge is no more than the applicable distance specified in §63.11117(b) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

*Vapor balance system* means a combination of pipes and hoses that create a closed system between the vapor spaces of an unloading gasoline cargo tank and a receiving storage tank such that vapors displaced from the storage tank are transferred to the gasoline cargo tank being unloaded.



**APPENDIX 40 CFR 63, NESHAP SUBPART CCCCCC**

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

*Vapor-tight* means equipment that allows no loss of vapors. Compliance with vapor-tight requirements can be determined by checking to ensure that the concentration at a potential leak source is not equal to or greater than 100 percent of the Lower Explosive Limit when measured with a combustible gas detector, calibrated with propane, at a distance of 1 inch from the source.

*Vapor-tight gasoline cargo tank* means a gasoline cargo tank which has demonstrated within the 12 preceding months that it meets the annual certification test requirements in §63.11092(f) of this part.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4183, Jan. 24, 2011]

Table 1 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More<sup>1</sup>

<b>If you own or operate</b>	<b>Then you must</b>
1. A new, reconstructed, or existing GDF subject to §63.11118	Install and operate a vapor balance system on your gasoline storage tanks that meets the design criteria in paragraphs (a) through (h).
	(a) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnect.
	(b) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor-tight, as defined in §63.11132.
	(c) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18 inches water pressure or 5.9 inches water vacuum during product transfer.
	(d) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations.
	(e) If a gauge well separate from the fill tube is used, it shall be provided with a submerged drop tube that extends the same distance from the bottom of the storage tank as specified in §63.11117(b).
	(f) Liquid fill connections for all systems shall be equipped with vapor-tight caps.
	(g) Pressure/vacuum (PV) vent valves shall be installed on the storage tank vent pipes. The pressure specifications for PV vent valves shall be: a positive pressure setting of 2.5 to 6.0 inches of water and a negative pressure setting of 6.0 to 10.0 inches of water. The total leak rate of all PV vent valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0 inches of water and 0.63 cubic foot per hour at a vacuum of 4 inches of water.
	(h) The vapor balance system shall be capable of meeting the static pressure performance requirement of the following equation: $P_f = 2e^{-500.887/v}$
	Where:
	$P_f$ = Minimum allowable final pressure, inches of water.
	$v$ = Total ullage affected by the test, gallons.
	$e$ = Dimensionless constant equal to approximately 2.718.
	$2$ = The initial pressure, inches water.
2. A new or reconstructed GDF, or any storage tank(s) constructed after November 9, 2006, at an existing affected facility subject to §63.11118	Equip your gasoline storage tanks with a dual-point vapor balance system, as defined in §63.11132, and comply with the requirements of item 1 in this Table.

<sup>1</sup>The management practices specified in this Table are not applicable if you are complying with the requirements in §63.11118(b)(2), except that if you are complying with the requirements in §63.11118(b)(2)(i)(B), you must operate using management practices at least as stringent as those listed in this Table.

[73 FR 1945, Jan. 10, 2008, as amended at 73 FR 35944, June 25, 2008; 76 FR 4184, Jan. 24, 2011]

**APPENDIX 40 CFR 63, NESHAP SUBPART CCCCCC**

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

Table 2 to Subpart CCCCCC of Part 63—Applicability Criteria and Management Practices for Gasoline Cargo Tanks Unloading at Gasoline Dispensing Facilities With Monthly Throughput of 100,000 Gallons of Gasoline or More

<b>If you own or operate</b>	<b>Then you must</b>
A gasoline cargo tank	Not unload gasoline into a storage tank at a GDF subject to the control requirements in this subpart unless the following conditions are met:
	(i) All hoses in the vapor balance system are properly connected,
	(ii) The adapters or couplers that attach to the vapor line on the storage tank have closures that seal upon disconnect,
	(iii) All vapor return hoses, couplers, and adapters used in the gasoline delivery are vapor-tight,
	(iv) All tank truck vapor return equipment is compatible in size and forms a vapor-tight connection with the vapor balance equipment on the GDF storage tank, and
	(v) All hatches on the tank truck are closed and securely fastened.
	(vi) The filling of storage tanks at GDF shall be limited to unloading from vapor-tight gasoline cargo tanks. Documentation that the cargo tank has met the specifications of EPA Method 27 shall be carried with the cargo tank, as specified in §63.11125(c).

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

Table 3 to Subpart CCCCCC of Part 63—Applicability of General Provisions

<b>Citation</b>	<b>Subject</b>	<b>Brief description</b>	<b>Applies to subpart CCCCCC</b>
§63.1	Applicability	Initial applicability determination; applicability after standard established; permit requirements; extensions, notifications	Yes, specific requirements given in §63.11111.
§63.1(c)(2)	Title V Permit	Requirements for obtaining a title V permit from the applicable permitting authority	Yes, §63.11111(f) of subpart CCCCCC exempts identified area sources from the obligation to obtain title V operating permits.
§63.2	Definitions	Definitions for part 63 standards	Yes, additional definitions in §63.11132.
§63.3	Units and Abbreviations	Units and abbreviations for part 63 standards	Yes.
§63.4	Prohibited Activities and Circumvention	Prohibited activities; Circumvention, severability	Yes.
§63.5	Construction/Reconstruction	Applicability; applications; approvals	Yes, except that these notifications are not required for facilities subject to §63.11116
§63.6(a)	Compliance with Standards/Operation & Maintenance—Applicability	General Provisions apply unless compliance extension; General Provisions apply to area sources that become major	Yes.
§63.6(b)(1)-(4)	Compliance Dates for New	Standards apply at effective date; 3 years after	Yes.

**APPENDIX 40 CFR 63, NESHAP SUBPART CCCCCC**

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

	and Reconstructed Sources	effective date; upon startup; 10 years after construction or reconstruction commences for CAA section 112(f)	
§63.6(b)(5)	Notification	Must notify if commenced construction or reconstruction after proposal	Yes.
§63.6(b)(6)	[Reserved]		
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source	No.
§63.6(c)(1)-(2)	Compliance Dates for Existing Sources	Comply according to date in this subpart, which must be no later than 3 years after effective date; for CAA section 112(f) standards, comply within 90 days of effective date unless compliance extension	No, §63.11113 specifies the compliance dates.
§63.6(c)(3)-(4)	[Reserved]		
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Area sources That become major must comply with major source standards by date indicated in this subpart or by equivalent time period (e.g., 3 years)	No.
§63.6(d)	[Reserved]		
63.6(e)(1)(i)	General duty to minimize emissions	Operate to minimize emissions at all times; information Administrator will use to determine if operation and maintenance requirements were met.	No. <i>See</i> §63.11115 for general duty requirement.
63.6(e)(1)(ii)	Requirement to correct malfunctions ASAP	Owner or operator must correct malfunctions as soon as possible.	No.
§63.6(e)(2)	[Reserved]		
§63.6(e)(3)	Startup, Shutdown, and Malfunction (SSM) Plan	Requirement for SSM plan; content of SSM plan; actions during SSM	No.
§63.6(f)(1)	Compliance Except During SSM	You must comply with emission standards at all times except during SSM	No.
§63.6(f)(2)-(3)	Methods for Determining Compliance	Compliance based on performance test, operation and maintenance plans, records, inspection	Yes.
§63.6(g)(1)-(3)	Alternative Standard	Procedures for getting an alternative standard	Yes.
§63.6(h)(1)	Compliance with Opacity/Visible Emission (VE) Standards	You must comply with opacity/VE standards at all times except during SSM	No.
§63.6(h)(2)(i)	Determining Compliance with Opacity/VE Standards	If standard does not State test method, use EPA Method 9 for opacity in appendix A of part 60 of this chapter and EPA Method 22 for VE in appendix A of part 60 of this chapter	No.
§63.6(h)(2)(ii)	[Reserved]		
§63.6(h)(2)(iii)	Using Previous Tests To Demonstrate Compliance With Opacity/VE Standards	Criteria for when previous opacity/VE testing can be used to show compliance with this subpart	No.
§63.6(h)(3)	[Reserved]		
§63.6(h)(4)	Notification of Opacity/VE Observation Date	Must notify Administrator of anticipated date of observation	No.
§63.6(h)(5)(i), (iii)-(v)	Conducting Opacity/VE Observations	Dates and schedule for conducting opacity/VE observations	No.
§63.6(h)(5)(ii)	Opacity Test Duration and Averaging Times	Must have at least 3 hours of observation with 30 6-minute averages	No.
§63.6(h)(6)	Records of Conditions During Opacity/VE	Must keep records available and allow Administrator to inspect	No.

**APPENDIX 40 CFR 63, NESHAP SUBPART CCCCCC**

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

	Observations		
§63.6(h)(7)(i)	Report Continuous Opacity Monitoring System (COMS) Monitoring Data From Performance Test	Must submit COMS data with other performance test data	No.
§63.6(h)(7)(ii)	Using COMS Instead of EPA Method 9	Can submit COMS data instead of EPA Method 9 results even if rule requires EPA Method 9 in appendix A of part 60 of this chapter, but must notify Administrator before performance test	No.
§63.6(h)(7)(iii)	Averaging Time for COMS During Performance Test	To determine compliance, must reduce COMS data to 6-minute averages	No.
§63.6(h)(7)(iv)	COMS Requirements	Owner/operator must demonstrate that COMS performance evaluations are conducted according to §63.8(e); COMS are properly maintained and operated according to §63.8(c) and data quality as §63.8(d)	No.
§63.6(h)(7)(v)	Determining Compliance with Opacity/VE Standards	COMS is probable but not conclusive evidence of compliance with opacity standard, even if EPA Method 9 observation shows otherwise. Requirements for COMS to be probable evidence-proper maintenance, meeting Performance Specification 1 in appendix B of part 60 of this chapter, and data have not been altered	No.
§63.6(h)(8)	Determining Compliance with Opacity/VE Standards	Administrator will use all COMS, EPA Method 9 (in appendix A of part 60 of this chapter), and EPA Method 22 (in appendix A of part 60 of this chapter) results, as well as information about operation and maintenance to determine compliance	No.
§63.6(h)(9)	Adjusted Opacity Standard	Procedures for Administrator to adjust an opacity standard	No.
§63.6(i)(1)-(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension	Yes.
§63.6(j)	Presidential Compliance Exemption	President may exempt any source from requirement to comply with this subpart	Yes.
§63.7(a)(2)	Performance Test Dates	Dates for conducting initial performance testing; must conduct 180 days after compliance date	Yes.
§63.7(a)(3)	CAA Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time	Yes.
§63.7(b)(1)	Notification of Performance Test	Must notify Administrator 60 days before the test	Yes.
§63.7(b)(2)	Notification of Re-scheduling	If have to reschedule performance test, must notify Administrator of rescheduled date as soon as practicable and without delay	Yes.
§63.7(c)	Quality Assurance (QA)/Test Plan	Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing	Yes.
§63.7(d)	Testing Facilities	Requirements for testing facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Performance test must be conducted under representative conditions	No, §63.11120(c) specifies conditions for

**APPENDIX 40 CFR 63, NESHAP SUBPART CCCCCC**

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

			conducting performance tests.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Must conduct according to this subpart and EPA test methods unless Administrator approves alternative	Yes.
§63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used	Yes.
§63.7(f)	Alternative Test Method	Procedures by which Administrator can grant approval to use an intermediate or major change, or alternative to a test method	Yes.
§63.7(g)	Performance Test Data Analysis	Must include raw data in performance test report; must submit performance test data 60 days after end of test with the Notification of Compliance Status; keep data for 5 years	Yes.
§63.7(h)	Waiver of Tests	Procedures for Administrator to waive performance test	Yes.
§63.8(a)(1)	Applicability of Monitoring Requirements	Subject to all monitoring requirements in standard	Yes.
§63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply	Yes.
§63.8(a)(3)	[Reserved]		
§63.8(a)(4)	Monitoring of Flares	Monitoring requirements for flares in §63.11 apply	Yes.
§63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative	Yes.
§63.8(b)(2)-(3)	Multiple Effluents and Multiple Monitoring Systems	Specific requirements for installing monitoring systems; must install on each affected source or after combined with another affected source before it is released to the atmosphere provided the monitoring is sufficient to demonstrate compliance with the standard; if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup	No.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Maintain monitoring system in a manner consistent with good air pollution control practices	No.
§63.8(c)(1)(i)-(iii)	Operation and Maintenance of Continuous Monitoring Systems (CMS)	Must maintain and operate each CMS as specified in §63.6(e)(1); must keep parts for routine repairs readily available; must develop a written SSM plan for CMS, as specified in §63.6(e)(3)	No.
§63.8(c)(2)-(8)	CMS Requirements	Must install to get representative emission or parameter measurements; must verify operational status before or at performance test	No.
§63.8(d)	CMS Quality Control	Requirements for CMS quality control, including calibration, etc.; must keep quality control plan on record for 5 years; keep old versions for 5 years after revisions	No.
§63.8(e)	CMS Performance Evaluation	Notification, performance evaluation test plan, reports	No.
§63.8(f)(1)-(5)	Alternative Monitoring Method	Procedures for Administrator to approve alternative monitoring	No.

**APPENDIX 40 CFR 63, NESHAP SUBPART CCCCCC**

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

§63.8(f)(6)	Alternative to Relative Accuracy Test	Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system (CEMS)	No.
§63.8(g)	Data Reduction	COMS 6-minute averages calculated over at least 36 evenly spaced data points; CEMS 1 hour averages computed over at least 4 equally spaced data points; data that cannot be used in average	No.
§63.9(a)	Notification Requirements	Applicability and State delegation	Yes.
§63.9(b)(1)-(2), (4)-(5)	Initial Notifications	Submit notification within 120 days after effective date; notification of intent to construct/reconstruct, notification of commencement of construction/reconstruction, notification of startup; contents of each	Yes.
§63.9(c)	Request for Compliance Extension	Can request if cannot comply by date or if installed best available control technology or lowest achievable emission rate	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Sources	For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date	Yes.
§63.9(e)	Notification of Performance Test	Notify Administrator 60 days prior	Yes.
§63.9(f)	Notification of VE/Opacity Test	Notify Administrator 30 days prior	No.
§63.9(g)	Additional Notifications when Using CMS	Notification of performance evaluation; notification about use of COMS data; notification that exceeded criterion for relative accuracy alternative	Yes, however, there are no opacity standards.
§63.9(h)(1)-(6)	Notification of Compliance Status	Contents due 60 days after end of performance test or other compliance demonstration, except for opacity/VE, which are due 30 days after; when to submit to Federal vs. State authority	Yes, however, there are no opacity standards.
§63.9(i)	Adjustment of Submittal Deadlines	Procedures for Administrator to approve change when notifications must be submitted	Yes.
§63.9(j)	Change in Previous Information	Must submit within 15 days after the change	Yes.
§63.10(a)	Recordkeeping/Reporting	Applies to all, unless compliance extension; when to submit to Federal vs. State authority; procedures for owners of more than one source	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	General requirements; keep all records readily available; keep for 5 years	Yes.
§63.10(b)(2)(i)	Records related to SSM	Recordkeeping of occurrence and duration of startups and shutdowns	No.
§63.10(b)(2)(ii)	Records related to SSM	Recordkeeping of malfunctions	No. <i>See</i> §63.11125(d) for recordkeeping of (1) occurrence and duration and (2) actions taken during malfunction.
§63.10(b)(2)(iii)	Maintenance records	Recordkeeping of maintenance on air pollution	Yes.

**APPENDIX 40 CFR 63, NESHAP SUBPART CCCCCC**

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

		control and monitoring equipment	
§63.10(b)(2)(iv)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§63.10(b)(2)(v)	Records Related to SSM	Actions taken to minimize emissions during SSM	No.
§63.10(b)(2)(vi)-(xi)	CMS Records	Malfunctions, inoperative, out-of-control periods	No.
§63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test	Yes.
§63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status	Yes.
§63.10(b)(3)	Records	Applicability determinations	Yes.
§63.10(c)	Records	Additional records for CMS	No.
§63.10(d)(1)	General Reporting Requirements	Requirement to report	Yes.
§63.10(d)(2)	Report of Performance Test Results	When to submit to Federal or State authority	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	What to report and when	No.
§63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension	Yes.
§63.10(d)(5)	SSM Reports	Contents and submission	No. <i>See</i> §63.11126(b) for malfunction reporting requirements.
§63.10(e)(1)-(2)	Additional CMS Reports	Must report results for each CEMS on a unit; written copy of CMS performance evaluation; two-three copies of COMS performance evaluation	No.
§63.10(e)(3)(i)-(iii)	Reports	Schedule for reporting excess emissions	No.
§63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No.
§63.10(e)(3)(iv)-(v)	Excess Emissions Reports	Requirement to revert to quarterly submission if there is an excess emissions and parameter monitor exceedances (now defined as deviations); provision to request semiannual reporting after compliance for 1 year; submit report by 30th day following end of quarter or calendar half; if there has not been an exceedance or excess emissions (now defined as deviations), report contents in a statement that there have been no deviations; must submit report containing all of the information in §§63.8(c)(7)-(8) and 63.10(c)(5)-(13)	No, §63.11130(K) specifies excess emission events for this subpart.
§63.10(e)(3)(vi)-	Excess Emissions Report	Requirements for reporting excess emissions for	No.

**APPENDIX 40 CFR 63, NESHAP SUBPART CCCCCC**

**40 CFR 63, NESHAP SUBPART CCCCCC – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORY: GASOLINE DISPENSING FACILITIES.**

(viii)	and Summary Report	CMS; requires all of the information in §§63.10(c)(5)-(13) and 63.8(c)(7)-(8)	
§63.10(e)(4)	Reporting COMS Data	Must submit COMS data with performance test data	No.
§63.10(f)	Waiver for Recordkeeping/Reporting	Procedures for Administrator to waive	Yes.
§63.11(b)	Flares	Requirements for flares	No.
§63.12	Delegation	State authority to enforce standards	Yes.
§63.13	Addresses	Addresses where reports, notifications, and requests are sent	Yes.
§63.14	Incorporations by Reference	Test methods incorporated by reference	Yes.
§63.15	Availability of Information	Public and confidential information	Yes.

[73 FR 1945, Jan. 10, 2008, as amended at 76 FR 4184, Jan. 24, 2011]

[Table of Contents](#)



**e-CFR data is current as of May 24, 2018**

**PART 61—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS**

**Subpart A—General Provisions**

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**Contents**

- §61.01 Lists of pollutants and applicability of part 61.
  - §61.02 Definitions.
  - §61.03 Units and abbreviations.
  - §61.04 Address.
  - §61.05 Prohibited activities.
  - §61.06 Determination of construction or modification.
  - §61.07 Application for approval of construction or modification.
  - §61.08 Approval of construction or modification.
  - §61.09 Notification of startup.
  - §61.10 Source reporting and waiver request.
  - §61.11 Waiver of compliance.
  - §61.12 Compliance with standards and maintenance requirements.
  - §61.13 Emission tests and waiver of emission tests.
  - §61.14 Monitoring requirements.
  - §61.15 Modification.
  - §61.16 Availability of information.
  - §61.17 State authority.
  - §61.18 Incorporations by reference.
  - §61.19 Circumvention.
- 

**§61.01 Lists of pollutants and applicability of part 61.**

(a) The following list presents the substances that, pursuant to section 112 of the Act, have been designated as hazardous air pollutants. The FEDERAL REGISTER citations and dates refer to the publication in which the listing decision was originally published.

Asbestos (36 FR 5931; Mar. 31, 1971)

Benzene (42 FR 29332; June 8, 1977)

Beryllium (36 FR 5931; Mar. 31, 1971)

Coke Oven Emissions (49 FR 36560; Sept. 18, 1984)

Inorganic Arsenic (45 FR 37886; June 5, 1980)

Mercury (36 FR 5931; Mar. 31, 1971)

Radionuclides (44 FR 76738; Dec. 27, 1979)

Vinyl Chloride (40 FR 59532; Dec. 24, 1975)

(b) The following list presents other substances for which a FEDERAL REGISTER notice has been published that included consideration of the serious health effects, including cancer, from ambient air exposure to the substance.

Acrylonitrile (50 FR 24319; June 10, 1985)

1,3-Butadiene (50 FR 41466; Oct. 10, 1985)

Cadmium (50 FR 42000; Oct. 16, 1985)

Carbon Tetrachloride (50 FR 32621; Aug. 13, 1985)

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

Chlorinated Benzenes (50 FR 32628; Aug. 13, 1985)  
Chlorofluorocarbon—113 (50 FR 24313; June 10, 1985)  
Chloroform (50 FR 39626; Sept. 27, 1985)  
Chloroprene (50 FR 39632; Sept. 27, 1985)  
Chromium (50 FR 24317; June 10, 1985)  
Copper (52 FR 5496; Feb. 23, 1987)  
Epichlorohydrin (50 FR 24575; June 11, 1985)  
Ethylene Dichloride (50 FR 41994; Oct. 16, 1985)  
Ethylene Oxide (50 FR 40286; Oct. 2, 1985)  
Hexachlorocyclopentadiene (50 FR 40154; Oct. 1, 1985)  
Manganese (50 FR 32627; Aug. 13, 1985)  
Methyl Chloroform (50 FR 24314; June 10, 1985)  
Methylene Chloride (50 FR 42037; Oct. 17, 1985)  
Nickel (51 FR 34135; Sept. 25, 1986)  
Perchloroethylene (50 FR 52800; Dec. 26, 1985)  
Phenol (51 FR 22854; June 23, 1986)  
Polycyclic Organic Matter (49 FR 31680; Aug. 8, 1984)  
Toluene (49 FR 22195; May 25, 1984)  
Trichloroethylene (50 FR 52422; Dec. 23, 1985)  
Vinylidene Chloride (50 FR 32632; Aug. 13, 1985)  
Zinc and Zinc Oxide (52 FR 32597, Aug. 28, 1987)

(c) This part applies to the owner or operator of any stationary source for which a standard is prescribed under this part.

(d) In addition to complying with the provisions of this part, the owner or operator of a stationary source subject to a standard in this part may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.

[50 FR 46290, Nov. 7, 1985, as amended at 51 FR 7715, 7719, Mar. 5, 1986; 51 FR 11022, Apr. 1, 1986; 52 FR 37617, Oct. 8, 1987; 59 FR 12429, Mar. 16, 1994]

**§61.02 Definitions.**

The terms used in this part are defined in the Act or in this section as follows:

*Act* means the Clean Air Act (42 U.S.C. 7401 *et seq.*).

*Administrator* means the Administrator of the Environmental Protection Agency or his authorized representative.

*Alternative method* means any method of sampling and analyzing for an air pollutant which is not a reference method but which has been demonstrated to the Administrator's satisfaction to produce results adequate for the Administrator's determination of compliance.

*Approved permit program* means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

*Capital expenditure* means an expenditure for a physical or operational change to a stationary source which exceeds the product of the applicable “annual asset guideline repair allowance percentage” specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the stationary source's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to a stationary source must not be reduced by any “excluded additions” as defined for stationary sources constructed after December 31, 1981, in IRS Publication 534, as would be done for tax purposes. In addition, “annual asset guideline repair allowance” may be used even though it is excluded for tax purposes in IRS Publication 534.

*Commenced* means, with respect to the definition of “new source” in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

*Compliance schedule* means the date or dates by which a source or category of sources is required to comply with the standards of this part and with any steps toward such compliance which are set forth in a waiver of compliance under §61.11.

*Construction* means fabrication, erection, or installation of an affected facility.

*Effective date* is the date of promulgation in the FEDERAL REGISTER of an applicable standard or other regulation under this part.

*Existing source* means any stationary source which is not a new source.

*Force majeure* means, for purposes of §61.13, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.

*Issuance* of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.

*Monitoring system* means any system, required under the monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a record of emissions or process parameters.

*New source* means any stationary source, the construction or modification of which is commenced after the publication in the FEDERAL REGISTER of proposed national emission standards for hazardous air pollutants which will be applicable to such source.

*Owner or operator* means any person who owns, leases, operates, controls, or supervises a stationary source.

*Part 70 permit* means any permit issued, renewed, or revised pursuant to part 70 of this chapter.

*Permit program* means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

*Permitting authority* means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

*Reference method* means any method of sampling and analyzing for an air pollutant, as described in appendix B to this part.

*Run* means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

*Standard* means a national emission standard including a design, equipment, work practice or operational standard for a hazardous air pollutant proposed or promulgated under this part.

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**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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*Startup* means the setting in operation of a stationary source for any purpose.

*State* means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement:

(1) The provisions of this part; and/or

(2) The permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

*Stationary source* means any building, structure, facility, or installation which emits or may emit any air pollutant which has been designated as hazardous by the Administrator.

*Title V permit* means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

[44 FR 55174, Sept. 25, 1979, as amended at 50 FR 46290, Nov. 7, 1985; 59 FR 12429, Mar. 16, 1994; 72 FR 27442, May 16, 2007]

### **§61.03 Units and abbreviations.**

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A = ampere  
g = gram  
Hz = hertz  
J = joule  
K = degree Kelvin  
kg = kilogram  
m = meter  
m<sup>2</sup> = square meter  
m<sup>3</sup> = cubic meter  
mg = milligram = 10<sup>-3</sup>gram  
mm = millimeter = 10<sup>-3</sup>meter  
Mg = megagram = 10<sup>6</sup>gram  
mol = mole  
N = newton  
ng = nanogram = 10<sup>-9</sup>gram  
nm = nanometer = 10<sup>-9</sup>meter  
Pa = pascal  
s = second  
V = volt  
W = watt  
Ω = ohm  
μg = microgram = 10<sup>-6</sup>gram

(b) Other units of measure:

°C = degree Celsius (centigrade)  
cfm = cubic feet per minute  
cc = cubic centimeter  
Ci = curie  
d = day  
°F = degree Fahrenheit  
ft<sup>2</sup> = square feet  
ft<sup>3</sup> = cubic feet  
gal = gallon

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**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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in = inch  
in Hg = inches of mercury  
in H<sub>2</sub>O = inches of water  
l = liter  
lb = pound  
lpm = liter per minute  
min = minute  
ml = milliliter = 10<sup>-3</sup>liter  
mrem = millirem = 10<sup>-3</sup> rem  
oz = ounces  
pCi = picocurie = 10<sup>-12</sup> curie  
psig = pounds per square inch gage  
°R = degree Rankine  
μl = microliter = 10<sup>-6</sup>liter  
v/v = volume per volume  
yd<sup>2</sup> = square yards  
yr = year

(c) Chemical nomenclature:

Be = beryllium  
Hg = mercury  
H<sub>2</sub>O = water

(d) Miscellaneous:

act = actual  
avg = average  
I.D. = inside diameter  
M = molar  
N = normal  
O.D. = outside diameter  
% = percent  
std = standard

[42 FR 51574, Sept. 29, 1977, as amended at 54 FR 51704, Dec. 15, 1989]

**§61.04 Address.**

[Link to an amendment published at 83 FR 15968, Apr. 13, 2018.](#)

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following list of EPA Regional Offices.

Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Office of Ecosystem Protection, U.S. Environmental Protection Agency, 5 Post Office Square—Suite 100, Boston, MA 02109-3912.

Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, Federal Office Building, 26 Federal Plaza (Foley Square), New York, NY 10278.

Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, Mail Code 3AP00, 1650 Arch Street, Philadelphia, PA 19103-2029.

Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, 61 Forsyth St. SW., Suite 9T43, Atlanta, Georgia 30303-8960.

Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, IL 60604-3590.

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas); Director, Air, Pesticides, and Toxics Division; U.S. Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202.

Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air and Waste Management Division, 11201 Renner Boulevard, Lenexa, Kansas 66219.

Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, CO 80202-1129.

Region IX (Arizona, California, Hawaii and Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau), Director, Air Division, U.S. Environmental Protection Agency, 75 Hawthorne Street, San Francisco, CA 94105.

Region X (Alaska, Idaho, Oregon, Washington), Director, Office of Air Quality, U.S. Environmental Protection Agency, 1200 Sixth Avenue (OAQ-107), Seattle, WA 98101.

(b) Section 112(d) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce national emission standards for hazardous air pollutants for stationary sources located in such State. If the authority to implement and enforce a standard under this part has been delegated to a State, all information required to be submitted to EPA under paragraph (a) of this section shall also be submitted to the appropriate State agency (provided, that each specific delegation may exempt sources from a certain Federal or State reporting requirement). The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to EPA and the State agency. If acceptable to both the Administrator and the owner or operator of a source, notifications and reports may be submitted on electronic media. The appropriate mailing address for those States whose delegation request has been approved is as follows:

(1) [Reserved]

(2) State of Alabama: Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, Alabama 36130-1463.

(3) State of Alaska. (i) Alaska Department of Environmental Conservation (ADEC), 410 Willoughby Avenue, Suite 303, Juneau, AK 99801-1795, <http://www.state.ak.us/local/akpages/ENV.CONSERV/home.htm>.

(ii) See paragraph (c)(10) of this section for a table indicating the delegation status of National Emission Standards for Hazardous Air Pollutants for Region 10—Alaska, Idaho, Oregon, and Washington.

(4) Arizona:

Arizona Department of Environmental Quality, 1110 West Washington Street, Phoenix, AZ 85007.

Maricopa County Air Quality Department, 1001 North Central Avenue, Suite 900, Phoenix, AZ 85004.

Pima County Department of Environmental Quality, 33 North Stone Avenue, Suite 700, Tucson, AZ 85701.

Pinal County Air Quality Control District, 31 North Pinal Street, Building F, Florence, AZ 85132.

NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (c)(9) of this section.

(5) State of Arkansas: Chief, Division of Air Pollution Control, Arkansas Department of Pollution Control and Ecology, 8001 National Drive, P.O. Box 9583, Little Rock, AR 72209.

(6) California:

Amador County Air Pollution Control District, 12200-B Airport Road, Jackson, CA 95642.

Antelope Valley Air Quality Management District, 43301 Division Street, Suite 206, Lancaster, CA 93535.

Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, CA 94109.

Butte County Air Quality Management District, 2525 Dominic Drive, Suite J, Chico, CA 95928.

Calaveras County Air Pollution Control District, 891 Mountain Ranch Road, San Andreas, CA 95249.

Colusa County Air Pollution Control District, 100 Sunrise Blvd., Suite A-3, Colusa, CA 95932-3246.

El Dorado County Air Quality Management District, 2850 Fairlane Court, Bldg. C, Placerville, CA 95667-4100.

Eastern Kern Air Pollution Control District, 2700 "M" Street, Suite 302, Bakersfield, CA 93301-2370.

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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Feather River Air Quality Management District, 1007 Live Oak Blvd., Suite B-3, Yuba City, CA 95991.  
Glenn County Air Pollution Control District, 720 N. Colusa Street, P.O. Box 351, Willows, CA 95988-0351.  
Great Basin Unified Air Pollution Control District, 157 Short Street, Suite 6, Bishop, CA 93514-3537.  
Imperial County Air Pollution Control District, 150 South Ninth Street, El Centro, CA 92243-2801.  
Lake County Air Quality Management District, 885 Lakeport Blvd., Lakeport, CA 95453-5405.  
Lassen County Air Pollution Control District, 707 Nevada Street, Suite 1, Susanville, CA 96130.  
Mariposa County Air Pollution Control District, P.O. Box 5, Mariposa, CA 95338.  
Mendocino County Air Quality Management District, 306 E. Gobbi Street, Ukiah, CA 95482-5511.  
Modoc County Air Pollution Control District, 619 North Main Street, Alturas, CA 96101.  
Mojave Desert Air Quality Management District, 14306 Park Avenue, Victorville, CA 92392-2310.  
Monterey Bay Unified Air Pollution Control District, 24580 Silver Cloud Court, Monterey, CA 93940.  
North Coast Unified Air Quality Management District, 2300 Myrtle Avenue, Eureka, CA 95501-3327.  
Northern Sierra Air Quality Management District, 200 Litton Drive, Suite 320, P.O. Box 2509, Grass Valley, CA 95945-2509.

Northern Sonoma County Air Pollution Control District, 150 Matheson Street, Healdsburg, CA 95448-4908.  
Placer County Air Pollution Control District, 3091 County Center Drive, Suite 240, Auburn, CA 95603.  
Sacramento Metropolitan Air Quality Management District, 777 12th Street, Third Floor, Sacramento, CA 95814-1908.  
San Diego County Air Pollution Control District, 10124 Old Grove Road, San Diego, CA 92131-1649.  
San Joaquin Valley Air Pollution Control District, 1990 E. Gettysburg, Fresno, CA 93726.  
San Luis Obispo County Air Pollution Control District, 3433 Roberto Court, San Luis Obispo, CA 93401-7126.  
Santa Barbara County Air Pollution Control District, 260 North San Antonio Road, Suite A, Santa Barbara, CA 93110-1315.

Shasta County Air Quality Management District, 1855 Placer Street, Suite 101, Redding, CA 96001-1759.  
Siskiyou County Air Pollution Control District, 525 So. Foothill Drive, Yreka, CA 96097-3036.  
South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA 91765-4182.  
Tehama County Air Pollution Control District, P.O. Box 8069 (1750 Walnut Street), Red Bluff, CA 96080-0038.  
Tuolumne County Air Pollution Control District, 22365 Airport, Columbia, CA 95310.  
Ventura County Air Pollution Control District, 669 County Square Drive, 2nd Floor, Ventura, CA 93003-5417.  
Yolo-Solano Air Quality Management District, 1947 Galileo Court, Suite 103, Davis, CA 95616-4882.  
NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (c)(9) of this section.

- (7) State of Colorado, Air Pollution Control Division, Department of Public Health and Environment, 4300 Cherry Creek Drive South, Denver, CO 80246-1530.

NOTE: For a table listing Region VIII's NESHAP delegation status, see paragraph (c) of this section.

- (8) State of Connecticut, Bureau of Air Management, Department of Environmental Protection, State Office Building, 165 Capitol Avenue, Hartford, CT 06106.
- (9) State of Delaware, Department of Natural Resources & Environmental Control, 89 Kings Highway, P.O. Box 1401, Dover, Delaware 19903.
- (10) District of Columbia, Department of Public Health, Air Quality Division, 51 N Street, NE., Washington, DC 20002.
- (11) State of Florida: Florida Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, MS 5500, Tallahassee, Florida 32399-2400.
- (12) State of Georgia: Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, 4244 International Parkway, Suite 120, Atlanta, Georgia 30354.
- (13) Hawaii:

Clean Air Branch, Hawaii Department of Health, 919 Ala Moana Blvd., Suite 203, Honolulu, HI 96814.

NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (c)(9) of this section.

- (14) State of Idaho. (i) Idaho Department of Environmental Conservation (IDEQ), 1410 N. Hilton, Boise, ID 83706, <http://www2.state.id.us/deq/>.

(ii) See paragraph (c)(10) of this section for a table indicating the delegation status of National Emission Standards for Hazardous Air Pollutants for Region 10—Alaska, Idaho, Oregon, and Washington.

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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- (15) State of Illinois: Illinois Environmental Protection Agency, 1021 North Grand Avenue East, Springfield, Illinois 62794.
- (16) State of Indiana: Indiana Department of Environmental Management, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana 46204.
- (17) State of Iowa: Iowa Department of Natural Resources, Environmental Protection Division, Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, IA 50322.
- (18) State of Kansas: Kansas Department of Health and Environment, Bureau of Air and Radiation, 1000 S.W. Jackson, Suite 310, Topeka, KS 66612-1366.
- (19) Commonwealth of Kentucky: Kentucky Department for Environmental Protection, Division of Air Quality, 300 Sower Boulevard, 2nd Floor, Frankfort, Kentucky 40601 or local agency, Louisville Metro Air Pollution Control District, 701 W. Ormsby Ave. Suite 303, Louisville, Kentucky 40203.
- (20) State of Louisiana: Louisiana Department of Environmental Quality, P.O. Box 4301, Baton Rouge, Louisiana 70821-4301.
- (21) State of Maine, Bureau of Air Quality Control, Department of Environmental Protection, State House, Station No. 17, Augusta, ME 04333.
- (22) State of Maryland, Department of the Environment, 1800 Washington Boulevard, Suite 705, Baltimore, Maryland 21230.
- (23) Commonwealth of Massachusetts, Division of Air Quality Control, Department of Environmental Protection, One Winter Street, 7th floor, Boston, MA 02108.
- (24) State of Michigan: Michigan Department of Natural Resources and Environment Quality, Air Quality Division, P.O. 30028, Lansing, Michigan 48909.
- (25) State of Minnesota: Minnesota Pollution Control Agency, Division of Air Quality, 520 Lafayette Road North, St. Paul, Minnesota 55155.
- (26) State of Mississippi: Hand Deliver or Courier: Mississippi Department of Environmental Quality, Office of Pollution Control, Air Division, 515 East Amite Street, Jackson, Mississippi 39201, Mailing Address: Mississippi Department of Environmental Quality, Office of Pollution Control, Air Division, P.O. Box 2261, Jackson, Mississippi 39225.
- (27) State of Missouri: Missouri Department of Natural Resources, Division of Environmental Quality, P.O. Box 176, Jefferson City, MO 65102.
- (28) State of Montana, Department of Environmental Quality, 1520 E. 6th Ave., PO Box 200901, Helena, MT 59620-0901.
- NOTE: For a table listing Region VIII's NESHAP delegation status, see paragraph (c) of this section.
- (29) State of Nebraska, Nebraska Department of Environmental Control, P.O. Box 94877, State House Station, Lincoln, NE 68509.
- Lincoln-Lancaster County Health Department, Division of Environmental Health, 2200 St. Marys Avenue, Lincoln, NE 68502.
- (30) Nevada:
- Nevada Division of Environmental Protection, 901 South Stewart Street, Suite 4001, Carson City, NV 89701-5249.
- Clark County Department of Air Quality and Environmental Management, 500 S. Grand Central Parkway, 1st Floor, P.O. Box 555210, Las Vegas, NV 89155-5210.
- Washoe County Health District, Air Quality Management Division, 1001 E. 9th Street, Building A, Suite 115A, Reno, NV 89520.
- NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (c)(9) of this section.
- (31) State of New Hampshire, Air Resources Division, Department of Environmental Services, 64 North Main Street, Caller Box 2033, Concord, NH 03302-2033.



**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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- (32) State of New Jersey: New Jersey Department of Environmental Protection, John Fitch Plaza, P.O. Box 2807, Trenton, NJ 08625.
- (33) *State of New Mexico*: New Mexico Environment Department, P.O. Box 5469, Santa Fe, New Mexico 87502-5469. For a list of delegated standards for New Mexico (excluding Bernalillo County and Indian country), see paragraph (c)(6) of this section.
- (i) Albuquerque-Bernalillo County Air Quality Control Board, c/o Environmental Health Department, P.O. Box 1293, Albuquerque, New Mexico 87103.
- (ii) [Reserved]
- (34) New York: New York State Department of Environmental Conservation, 50 Wolf Road, Albany, NY 12233, attention: Division of Air Resources.
- (35) State of North Carolina: North Carolina Department of Environmental Quality, Division of Air Quality, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641 or local agencies, Forsyth County Office of Environmental Assistance and Protection, 201 North Chestnut Street, Winston-Salem, North Carolina 27101-4120; Mecklenburg County Land Use and Environmental Services Agency, Air Quality, 2145 Suttle Avenue, Charlotte, North Carolina 28208; Western North Carolina Regional Air Quality Agency, 125 S. Lexington Ave., Suite 101, Asheville, North Carolina 28801-3661.
- (36) State of North Dakota, Division of Air Quality, North Dakota Department of Health, P.O. Box 5520, Bismarck, ND 58506-5520.

NOTE: For a table listing Region VIII's NESHAP delegation status, see paragraph (c) of this section.

- (37) State of Ohio:
- (i) Medina, Summit and Portage Counties; Director, Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308.
- (ii) Stark County; Director, Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.
- (iii) Butler, Clermont, Hamilton, and Warren Counties; Director, Hamilton County Department of Environmental Services, 250 William Howard Taft Road, Cincinnati, Ohio 45219-2660.
- (iv) Cuyahoga County; Commissioner, Cleveland Department of Public Health, Division of Air Quality, 75 Erieview Plaza 2nd Floor, Cleveland, Ohio 44114.
- (v) Clark, Darke, Greene, Miami, Montgomery, and Preble Counties; Director, Regional Air Pollution Control Agency, 117 South Main Street, Dayton, Ohio 45422-1280.
- (vi) Lucas County and the City of Rossford (in Wood County); Director, City of Toledo, Division of Environmental Services, 348 South Erie Street, Toledo, OH 43604.
- (vii) Adams, Brown, Lawrence, and Scioto Counties; Portsmouth Local Air Agency, 605 Washington Street, Third Floor, Portsmouth, OH 45662.
- (viii) Allen, Ashland, Auglaize, Crawford, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Marion, Mercer, Ottawa, Paulding, Putnam, Richland, Sandusky, Seneca, Van Wert Williams, Wood (Except City of Rossford), and Wyandot Counties; Ohio Environmental Protection Agency, Northwest District Office, Air Pollution Control, 347 North Dunbridge Road, Bowling Green, Ohio 43402.
- (ix) Ashtabula, Carroll, Columbiana, Holmes, Lorain, and Wayne Counties; Ohio Environmental Protection Agency, Northeast District Office, Air Pollution Unit, 2110 East Aurora Road, Twinsburg, OH 44087.
- (x) Athens, Belmont, Coshocton, Gallia, Guemsey, Harrison, Hocking, Jackson, Jefferson, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Tuscarawas, Vinton, and Washington Counties; Ohio Environmental Protection Agency, Southeast District Office, Air Pollution Unit, 2195 Front Street, Logan, OH 43138.
- (xi) Champaign, Clinton, Highland, Logan, and Shelby Counties; Ohio Environmental Protection Agency, Southwest District Office, Air Pollution Unit, 401 East Fifth Street, Dayton, Ohio 45402-2911.
- (xii) Delaware, Fairfield, Fayette, Franklin, Knox, Licking, Madison, Morrow, Pickaway, and Union Counties; Ohio Environmental Protection Agency, Central District Office, Air Pollution control, 50 West Town Street, Suite 700, Columbus, Ohio 43215.
- (xiii) Geauga and Lake Counties; Lake County General Health District, Air Pollution Control, 33 Mill Street, Painesville, OH 44077.

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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- (xiv) Mahoning and Trumbull Counties; Mahoning-Trumbull Air Pollution Control Agency, 345 Oak Hill Avenue, Suite 200, Youngstown, OH 44502.
- (38) State of Oklahoma, Oklahoma Department of Environmental Quality, Air Quality Division, P.O. Box 1677, Oklahoma City, OK 73101-1677. For a list of delegated standards for Oklahoma (excluding Indian country), see paragraph (c)(6) of this section.
- (i) Oklahoma City and County: Director, Oklahoma City-County Health Department, 921 Northeast 23rd Street, Oklahoma City, OK 73105.
- (ii) Tulsa County: Tulsa City-County Health Department, 4616 East Fifteenth Street, Tulsa, OK 74112.
- (39) State of Oregon. (i) Oregon Department of Environmental Quality (ODEQ), 811 SW Sixth Ave, Portland, OR 97204-1390, <http://www.deq.state.or.us/>.
- (ii) Lane Regional Air Pollution Authority (LRAPA), 1010 Main Street, Springfield, Oregon 97477, <http://www.lrapa.org>.
- (iii) See paragraph (c)(10) of this section for a table indicating the delegation status of National Emission Standards for Hazardous Air Pollutants for Region 10—Alaska, Idaho, Oregon, and Washington.
- (iv)-(vii) [Reserved]
- (viii) Lane Regional Air Pollution Authority, 225 North Fifth, suite 501, Springfield, OR 97477.
- (40)(i) City of Philadelphia, Department of Public Health, Air Management Services, 321 University Avenue, Philadelphia, Pennsylvania 19104.
- (ii) Commonwealth of Pennsylvania, Department of Environmental Protection, Bureau of Air Quality Control, P.O. Box 8468, 400 Market Street, Harrisburg, Pennsylvania 17105.
- (iii) Allegheny County Health Department, Bureau of Environmental Quality, Division of Air Quality, 301 39th Street, Pittsburgh, Pennsylvania 15201.
- (41) State of Rhode Island, Division of Air and Hazardous Materials, Department of Environmental Management, 291 Promenade Street, Providence, RI 02908.
- (42) State of South Carolina: South Carolina Department of Health and Environmental Control, 2600 Bull St., Columbia, South Carolina 29201.
- (43) State of South Dakota, Department of Water and Natural Resources, Office of Air Quality and Solid Waste, Joe Foss Building, 523 East Capitol, Pierre, SD 57501-3181.

NOTE: For a table listing Region VIII's NESHAPs delegation status, see paragraph (c) of this section.

- (44) State of Tennessee: Tennessee Department of Environment and Conservation, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, Tennessee 37243, or local agencies, Knox County Air Quality Management—Department of Public Health, 140 Dameron Avenue, Knoxville, Tennessee 37917; Metro Public Health Department, Pollution Control Division, 2500 Charlotte Ave., Nashville, Tennessee 37209; Chattanooga-Hamilton County Air Pollution Control Bureau, 6125 Preservation Drive, Chattanooga, Tennessee 37416; Shelby County Health Department, Pollution Control Section, 814 Jefferson Avenue, Memphis, Tennessee 38105.
- (45) State of Texas, Texas Air Control Board, 6330 Highway 290 East, Austin, TX 78723.
- (46) State of Utah, Division of Air Quality, Department of Environmental Quality, P.O. Box 144820, Salt Lake City, UT 84114-4820.

NOTE: For a table listing Region VIII's NESHAP delegation status, see paragraph (c) of this section.

- (47) State of Vermont, Air Pollution Control Division, Agency of Natural Resources, Building 3 South, 103 South Main Street, Waterbury, VT 05676.
- (48) Commonwealth of Virginia, Department of Environmental Quality, 629 East Main Street, Richmond, Virginia 23219.
- (49) State of Washington. (i) Washington State Department of Ecology (Ecology), P.O. Box 47600, Olympia, WA 98504-7600, <http://www.ecy.wa.gov/>.

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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- (ii) Benton Clean Air Authority (BCAA), 650 George Washington Way, Richland, WA 99352-4289,  
<http://www.bcaa.net/>.
  - (iii) Northwest Air Pollution Control Authority (NWAPA), 1600 South Second St., Mount Vernon, WA 98273-5202,  
<http://www.nwair.org/>.
  - (iv) Olympic Air Pollution Control Authority (OAPCA), 909 Sleater-Kinney Road S.E., Suite 1, Lacey, WA 98503-1128, <http://www.oapca.org/>.
  - (v) Puget Sound Clean Air Agency (PSCAA), 110 Union Street, Suite 500, Seattle, WA 98101-2038,  
<http://www.pscleanair.org/>.
  - (vi) Spokane County Air Pollution Control Authority (SCAPCA), West 1101 College, Suite 403, Spokane, WA 9920,  
<http://www.scapca.org/>.
  - (vii) Southwest Clean Air Agency (SWCAA), 1308 NE 134th St., Vancouver, WA 98685-2747,  
<http://www.swcleanair.org/>.
  - (viii) Yakima Regional Clean Air Agency (YRCAA), Larson Building, Suite 1016, 6 South 2nd St., Yakima WA 98901, <http://co.yakima.wa.us/cleanair/default.htm>.
  - (ix) See paragraph (c)(10) of this section for a table indicating the delegation status of National Emission Standards for Hazardous Air Pollutants for Region 10—Alaska, Idaho, Oregon, and Washington.
- (50) State of West Virginia, Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE., Charleston, West Virginia 25304.
- (51) State of Wisconsin: Wisconsin Department of Natural Resources, 101 South Webster St., P.O. Box 7921, Madison, Wisconsin 53707-7921. 101 South Webster St., P.O. Box 7921, Madison, Wisconsin 53707-7921.
- (52) State of Wyoming, Air Quality Division, Department of Environmental Quality, 122 W. 25th St., Cheyenne, WY 82002.
- (53) Territory of Guam: Guam Environmental Protection Agency, P.O. Box 22439 GMF, Barrigada, Guam 96921.
- NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (c)(9) of this section.
- (54) Commonwealth of Puerto Rico: Commonwealth of Puerto Rico Environmental Quality Board, P.O. Box 11785, Santurce, PR 00910.
- (55) U.S. Virgin Islands: U.S. Virgin Islands Department of Conservation and Cultural Affairs, P.O. Box 578, Charlotte Amalie, St. Thomas, U.S. Virgin Islands 00801.
- (56) American Samoa: American Samoa Environmental Protection Agency, P.O. Box PPA, Pago Pago, American Samoa 96799.
- NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.
- (57) Commonwealth of the Northern Mariana Islands: CNMI Division of Environmental Quality, P.O. Box 501304, Saipan, MP 96950.

NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(c) The following tables list, by Region, the specific Part 61, National Emission Standards for Hazardous Air Pollutants that have been delegated to state and local agencies.

(1)(i) Inactive waste disposal sites not operated after July 9, 1981 within the state of New Hampshire must comply with the New Hampshire Regulations at Env-Sw 2100: Management and Control of Asbestos Disposal Sites Not Operated after July 9, 1981, effective February 16, 2010 (incorporated by reference, see §61.18).

(ii) The remainder of the sources subject to the Part 61 Subpart M Asbestos provisions, except for those listed under paragraph (c)(1)(i) of this section, must comply with the New Hampshire Regulations at Env-A 1800, Asbestos Management and Control, effective October 21, 2008, Sections 1801-1807, excluding the following provisions: 1801.02(e), 1802.02, 1802.04, 1802.07-1802.09, 1802.13, 1802.15-1802.17, 1802.28-1802.29, 1802.36, 1802.42, 1802.45, 1802.50, 1802.54, 1804.05-1804.09, and 1807.02 (incorporated by reference, see §61.18).

(2)-(5) [Reserved]

(6) The following lists the specific Part 61 standards that have been delegated unchanged to the air pollution control agencies in Region 6.

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

(i) [Reserved]

(ii) *Louisiana*. The Louisiana Department of Environmental Quality (LDEQ) has been delegated the following part 61 standards promulgated by EPA, as amended in the FEDERAL REGISTER through July 1, 2013. The (X) symbol is used to indicate each subpart that has been delegated.

**DELEGATION STATUS FOR PART 61 STANDARDS—STATE OF LOUISIANA**

[Excluding Indian Country]

<b>Subpart</b>	<b>Source category</b>	<b>LDEQ<sup>1</sup></b>
A	General Provisions	X
B	Radon Emissions From Underground Uranium Mines	
C	Beryllium	X
D	Beryllium Rocket Motor Firing	X
E	Mercury	X
F	Vinyl Chloride	X
G	(Reserved)	
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities	
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H	
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X
K	Radionuclide Emissions From Elemental Phosphorus Plants	
L	Benzene Emissions From Coke By-Product Recovery Plants	X
M	Asbestos	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	X
O	Inorganic Arsenic Emissions From Primary Copper Smelters	X
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X
Q	Radon Emissions From Department of Energy Facilities	
R	Radon Emissions From Phosphogypsum Stacks	
S	(Reserved)	
T	Radon Emissions From the Disposal of Uranium Mill Tailings	
U	(Reserved)	
V	Equipment Leaks (Fugitives Emission Sources)	X
W	Radon Emissions From Operating Mill Tailings	
X	(Reserved)	
Y	Benzene Emissions From Benzene Storage Vessels	X
Z-AA	(Reserved)	
BB	Benzene Emissions From Benzene Transfer Operations	X
CC-EE	(Reserved)	
FF	Benzene Waste Operations	X

<sup>1</sup>Program delegated to Louisiana Department of Environmental Quality (LDEQ).

(iii) *New Mexico*. The New Mexico Environment Department (NMED) has been delegated the following part 61 standards promulgated by EPA, as amended in the FEDERAL REGISTER through December 31, 2010. The (X) symbol is used to indicate each subpart that has been delegated.

**DELEGATION STATUS FOR NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (PART 61 STANDARDS) FOR NEW MEXICO**

[Excluding Bernalillo County and Indian Country]

<b>Subpart</b>	<b>Source category</b>	<b>NMED<sup>1</sup></b>
A	General Provisions	X
B	Radon Emissions From Underground Uranium Mines	
C	Beryllium	X

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

D	Beryllium Rocket Motor Firing	X
E	Mercury	X
F	Vinyl Chloride	X
G	(Reserved)	
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities	
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H	
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X
K	Radionuclide Emissions From Elemental Phosphorus Plants	
L	Benzene Emissions From Coke By-Product Recovery Plants	X
M	Asbestos	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	X
O	Inorganic Arsenic Emissions From Primary Copper Smelters	X
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X
Q	Radon Emissions From Department of Energy Facilities	
R	Radon Emissions From Phosphogypsum Stacks	
S	(Reserved)	
T	Radon Emissions From the Disposal of Uranium Mill Tailings	
U	(Reserved)	
V	Equipment Leaks (Fugitives Emission Sources)	X
W	Radon Emissions From Operating Mill Tailings	
X	(Reserved)	
Y	Benzene Emissions From Benzene Storage Vessels	X
Z-AA	(Reserved)	
BB	Benzene Emissions From Benzene Transfer Operations	X
CC-EE	(Reserved)	
FF	Benzene Waste Operations	X

<sup>1</sup>Program delegated to New Mexico Environment Department (NMED).

(iv) The Oklahoma Department of Environmental Quality has been delegated the following part 61 standards promulgated by EPA, as amended in the FEDERAL REGISTER through September 1, 2004. The (X) symbol is used to indicate each subpart that has been delegated.

**DELEGATION STATUS FOR NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (PART 61 STANDARDS) FOR OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY**

[Excluding Indian Country]<sup>1</sup>

<b>Subpart</b>	<b>Source category</b>	<b>ODEQ</b>
A	General Provisions	X
B	Radon Emissions From Underground Uranium Mines	
C	Beryllium	X
D	Beryllium Rocket Motor Firing	X
E	Mercury	X
F	Vinyl Chloride	X
G	(Reserved)	
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities	
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H	
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X
K	Radionuclide Emissions From Elemental Phosphorus Plants	
L	Benzene Emissions From Coke By-Product Recovery Plants	X
M	Asbestos	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	X

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

O	Inorganic Arsenic Emissions From Primary Copper Smelters	X
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X
Q	Radon Emissions From Department of Energy Facilities	
R	Radon Emissions From Phosphogypsum Stacks	
S	(Reserved)	
T	Radon Emissions From the Disposal of Uranium Mill Tailings	
U	(Reserved)	
V	Equipment Leaks (Fugitive Emission Sources)	X
W	Radon Emissions From Operating Mill Tailings	
X	(Reserved)	
Y	Benzene Emissions From Benzene Storage Vessels	X
Z-AA	(Reserved)	
BB	Benzene Emissions From Benzene Transfer Operations	X
CC-EE	(Reserved)	
FF	Benzene Waste Operations	X

<sup>1</sup>Program delegated to Oklahoma Department of Environmental Quality (ODEQ).

(v) [Reserved]

(vi) *Albuquerque-Bernalillo County, New Mexico*. The Albuquerque-Bernalillo County Air Quality Control Board (ABCAQCB) has been delegated the following part 61 standards promulgated by EPA, as amended in the FEDERAL REGISTER through September 13, 2013. The (X) symbol is used to indicate each subpart that has been delegated.

**DELEGATION STATUS FOR NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (PART 61 STANDARDS) FOR ALBUQUERQUE-BERNALILLO COUNTY AIR QUALITY CONTROL BOARD**

[Excluding Indian Country]<sup>1</sup>

<b>Subpart</b>	<b>Source category</b>	<b>ABCAQCB</b>
A	General Provisions	X
B	Radon Emissions From Underground Uranium Mines	
C	Beryllium	X
D	Beryllium Rocket Motor Firing	X
E	Mercury	X
F	Vinyl Chloride	X
G	(Reserved)	
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities	
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H	
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X
K	Radionuclide Emissions From Elemental Phosphorus Plants	
L	Benzene Emissions From Coke By-Product Recovery Plants	X
M	Asbestos	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	X
O	Inorganic Arsenic Emissions From Primary Copper Smelters	X
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X
Q	Radon Emissions From Department of Energy Facilities	
R	Radon Emissions From Phosphogypsum Stacks	
S	(Reserved)	
T	Radon Emissions From the Disposal of Uranium Mill Tailings	
U	(Reserved)	
V	Equipment Leaks (Fugitives Emission Sources)	X
W	Radon Emissions From Operating Mill Tailings	
X	(Reserved)	
Y	Benzene Emissions From Benzene Storage Vessels	X

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

Z-AA	(Reserved)	
BB	Benzene Emissions From Benzene Transfer Operations	X
CC-EE	(Reserved)	
FF	Benzene Waste Operations	X

<sup>1</sup>Program delegated to Albuquerque-Bernalillo County Air Quality Control Board (ABCAQCB).

(7) [Reserved]

(8) The following is a table indicating the delegation status of National Emission Standards for Hazardous Air Pollutants in Region VIII.

**REGION VIII—DELEGATION STATUS OF NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS<sup>1</sup>**

<b>Subpart</b>	<b>CO</b>	<b>MT</b>	<b>ND</b>	<b>SD</b>	<b>UT<sup>2</sup></b>	<b>WY</b>
A General Provisions	*	*	*	*	*	
B Radon Emissions from Underground Uranium Mines					*	
C Beryllium	*	*	*		*	
D Beryllium Rocket Motor Firing	*	*	*		*	
E Mercury	*	*	*		*	
F Vinyl Chloride	*	*	*		*	
H Emissions of Radionuclides other than Radon from Department of Energy Facilities						
I Radionuclide Emissions from Facilities Licensed by the Nuclear Regulatory Commission and Federal Facilities not covered by Subpart H						
J Equipment Leaks (Fugitive Emission Sources) of Benzene	*	*	*		*	
K Radionuclide Emissions from Elemental Phosphorus Plants						
L Benzene Emissions from Coke By-Product Recovery Plants		*	*		*	
M Asbestos	*	*	*	*	*	*3
N Inorganic Arsenic Emissions from Glass Manufacturing Plants		*	*		*	
O Inorganic Arsenic Emissions from Primary Copper Smelters		*	*		*	
P Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities		*	*		*	
Q Radon Emissions from Department of Energy Facilities					*	
R Radon Emission from Phosphogypsum Stacks					*	
T Radon Emissions from the Disposal of Uranium Mill Tailings					*	
V Equipment Leaks (Fugitive Emission Sources)		*	*		*	
W Radon Emissions from Operating Mill Tailings					*	
Y Benzene Emissions from Benzene Storage Vessels		*	*		*	
BB Benzene Emission from Benzene Transfer Operations		*	*		*	
FF Benzene Waste Operations		*	*		*	

\*Indicates approval of delegation of subpart to state.

<sup>1</sup>Authorities which may not be delegated include 40 CFR 61.04(b), 61.12(d)(1), 61.13(h)(1)(ii), 61.112(c), 61.164(a)(2), 61.164(a)(3), 61.172(b)(2)(ii)(B), 61.172(b)(2)(ii)(C), 61.174 (a)(2), 61.174(a)(3), 61.242-1(c)(2), 61.244, and all authorities listed as not delegable in each subpart under Delegation of Authority.

<sup>2</sup>Indicates approval of National Emission Standards for Hazardous Air Pollutants as part of the State Implementation Plan (SIP) with the exception of the radionuclide NESHAP Subparts B, Q, R, T, W which were approved through Section 112(l) of the Clean Air Act.

<sup>3</sup>Delegation only for asbestos demolition, renovation, spraying, manufacturing, and fabricating operations, insulating materials, waste disposal for demolition, renovation, spraying, manufacturing and fabricating operations, inactive waste disposal sites for manufacturing and fabricating operations, and operations that convert asbestos-containing waste material into nonasbestos (asbestos-free) material.

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

(9) The following tables list the specific Part 61 standards that have been delegated unchanged to the air pollution control agencies in Region IX. The (X) symbol is used to indicate each standard that has been delegated. The following provisions of this subpart are not delegated: §§61.04(b), 61.04(c), 61.05(c), 61.11, 61.12(d), 61.13(h)(1)(ii), 61.14(d), 61.14(g)(1)(ii), and 61.16.

(i) *Arizona*. The following table identifies delegations for Arizona:

**DELEGATION STATUS FOR NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR ARIZONA**

	<b>Subpart</b>	<b>Air pollution control agency</b>			
		<b>Arizona DEQ</b>	<b>Maricopa County</b>	<b>Pima County</b>	<b>Pinal County</b>
A	General Provisions	X	X	X	X
B	Radon Emissions From Underground Uranium Mines				
C	Beryllium	X	X	X	X
D	Beryllium Rocket Motor Firing	X	X	X	X
E	Mercury	X	X	X	X
F	Vinyl Chloride	X	X	X	X
G	(Reserved)				
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities				
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H				
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X	X	X	X
K	Radionuclide Emissions From Elemental Phosphorus Plants				
L	Benzene Emissions from Coke By-Product Recovery Plants	X	X	X	X
M	Asbestos	X	X	X	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	X	X	X	
O	Inorganic Arsenic Emissions From Primary Copper Smelters	X	X	X	
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X	X		
Q	Radon Emissions From Department of Energy Facilities				
R	Radon Emissions From Phosphogypsum Stacks				
S	(Reserved)				
T	Radon Emissions From the Disposal of Uranium Mill Tailings				
U	(Reserved)				
V	Equipment Leaks (Fugitive Emission Sources)	X	X	X	X
W	Radon Emissions From Operating Mill Tailings				
X	(Reserved)				
Y	Benzene Emissions From Benzene Storage Vessels	X	X	X	X
Z-AA	(Reserved)				
BB	Benzene Emissions From Benzene Transfer Operations	X	X	X	X
CC-EE	(Reserved)				
FF	Benzene Waste Operations	X	X	X	X

(ii) *California*. The following tables identify delegations for California:

(A) Delegations for Amador County Air Pollution Control District, Antelope Valley Air Quality Management District, Bay Area Air Quality Management District, and Butte County Air Quality Management District are shown in the following table:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR AMADOR COUNTY APCD, ANTELOPE VALLEY AQMD, BAY AREA AQMD, AND BUTTE COUNTY AQMD**

	<b>Subpart</b>	<b>Air pollution control agency</b>			
		<b>Amador County</b>	<b>Antelope Valley</b>	<b>Bay Area</b>	<b>Butte County</b>



**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

		APCD	AQMD	AQMD	AQMD
A	General Provisions		X	X	
B	Radon Emissions From Underground Uranium Mines				
C	Beryllium		X	X	
D	Beryllium Rocket Motor Firing		X	X	
E	Mercury		X	X	
F	Vinyl Chloride		X	X	
G	(Reserved)				
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities				
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H				
J	Equipment Leaks (Fugitive Emission Sources) of Benzene		X		
K	Radionuclide Emissions From Elemental Phosphorus Plants				
L	Benzene Emissions from Coke By-Product Recovery Plants		X	X	
M	Asbestos		X	X	
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants		X		
O	Inorganic Arsenic Emissions From Primary Copper Smelters		X		
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities		X		
Q	Radon Emissions From Department of Energy Facilities				
R	Radon Emissions From Phosphogypsum Stacks				
S	(Reserved)				
T	Radon Emissions From the Disposal of Uranium Mill Tailings				
U	(Reserved)				
V	Equipment Leaks (Fugitive Emission Sources)		X		
W	Radon Emissions From Operating Mill Tailings				
X	(Reserved)				
Y	Benzene Emissions From Benzene Storage Vessels		X	X	
Z-AA	(Reserved)				
BB	Benzene Emissions From Benzene Transfer Operations		X	X	
CC-EE	(Reserved)				
FF	Benzene Waste Operations		X	X	

(B) [Reserved]

(C) Delegations for Glenn County Air Pollution Control District, Great Basin Unified Air Pollution Control District, Imperial County Air Pollution Control District, and Kern County Air Pollution Control District are shown in the following table:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR GLENN COUNTY APCD, GREAT BASIN UNIFIED APCD, IMPERIAL COUNTY APCD, AND KERN COUNTY APCD**

	Subpart	Air Pollution Control Agency			
		Glenn County APCD	Great Basin Unified APCD	Imperial County APCD	Kern County APCD
A	General Provisions	X	X		
B	Radon Emissions From Underground Uranium				
C	Beryllium	X	X		
D	Beryllium Rocket Motor Firing	X	X		
E	Mercury	X	X		
F	Vinyl Chloride	X			
G	(Reserved)				

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities				
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H				
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X			
K	Radionuclide Emissions From Elemental Phosphorus Plants				
L	Benzene Emissions from Coke By-Product Recovery Plants	X			
M	Asbestos	X	X		
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	X			
O	Inorganic Arsenic Emissions From Primary Copper Smelters	X			
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X			
Q	Radon Emissions From Department of Energy Facilities				
R	Radon Emissions From Phosphogypsum Stacks				
S	(Reserved)				
T	Radon Emissions From the Disposal of Uranium Mill Tailings				
U	(Reserved)				
V	Equipment Leaks (Fugitive Emission Sources)	X			
W	Radon Emissions From Operating Mill Tailings				
X	(Reserved)				
Y	Benzene Emissions From Benzene Storage Vessels	X			
Z-AA	(Reserved)				
BB	Benzene Emissions From Benzene Transfer Operations	X			
CC-EE	(Reserved)				
FF	Benzene Waste Operations	X			

(D) Delegations for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District are shown in the following table:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR LAKE COUNTY AIR QUALITY MANAGEMENT DISTRICT, LASSEN COUNTY AIR POLLUTION CONTROL DISTRICT, MARIPOSA COUNTY AIR POLLUTION CONTROL DISTRICT, AND MENDOCINO COUNTY AIR POLLUTION CONTROL DISTRICT**

	Subpart	Air pollution control agency			
		Lake County AQMD	Lassen County APCD	Mariposa County AQMD	Mendocino County AQMD
A	General Provisions	X		X	
B	Radon Emissions From Underground Uranium				
C	Beryllium	X			X
D	Beryllium Rocket Motor Firing	X			X
E	Mercury	X			X
F	Vinyl Chloride				X
G	(Reserved)				
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities				
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H				
J	Equipment Leaks (Fugitive Emission Sources) of Benzene				
K	Radionuclide Emissions From Elemental Phosphorus Plants				

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

L	Benzene Emissions from Coke By-Product Recovery Plants				
M	Asbestos	X			X

(E) Delegations for Modoc Air Pollution Control District, Mojave Desert Air Quality Management District, Monterey Bay Unified Air Pollution Control District, and North Coast Unified Air Quality Management District are shown in the following table:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR MODOC COUNTY APCD, MOJAVE DESERT AQMD, MONTEREY BAY UNIFIED APCD, AND NORTH COAST UNIFIED AQMD**

	Subpart	Air pollution control agency			
		Modoc County APCD	Mojave Desert AQMD	Monterey Bay Unified APCD	North Coast Unified AQMD
A	General Provisions	X	X	X	X
B	Radon Emissions From Underground Uranium Mines				
C	Beryllium	X	X	X	X
D	Beryllium Rocket Motor Firing	X	X	X	X
E	Mercury	X	X	X	X
F	Vinyl Chloride	X	X	X	X
G	(Reserved)				
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities				
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H				
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X	X	X	X
K	Radionuclide Emissions From Elemental Phosphorus Plants				
L	Benzene Emissions from Coke By-Product Recovery Plants		X	X	X
M	Asbestos	X	X	X	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants		X	X	
O	Inorganic Arsenic Emissions From Primary Copper Smelters	X	X	X	
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X	X	X	
Q	Radon Emissions From Department of Energy Facilities				
R	Radon Emissions From Phosphogypsum Stacks				
S	(Reserved)				
T	Radon Emissions From the Disposal of Uranium Mill Tailings				
U	(Reserved)				
V	Equipment Leaks (Fugitive Emission Sources)	X	X	X	X
W	Radon Emissions From Operating Mill Tailings				
X	(Reserved)				
Y	Benzene Emissions From Benzene Storage Vessels		X	X	X
Z-AA	(Reserved)				
BB	Benzene Emissions From Benzene Transfer Operations		X	X	
CC-EE	(Reserved)				
FF	Benzene Waste Operations		X	X	

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

(F) Delegations for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District are shown in the following table:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT, NORTHERN SONOMA COUNTY AIR POLLUTION CONTROL DISTRICT, PLACER COUNTY AIR POLLUTION CONTROL DISTRICT, AND SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT**

	Subpart	Air pollution control agency			
		Northern Sierra AQMD	Northern Sonoma County APCD	Placer County APCD	Sacramento Metro AQMD
A	General Provisions		X		
B	Radon Emissions From Underground Uranium				
C	Beryllium		X		
D	Beryllium Rocket Motor Firing		X		
E	Mercury		X		
F	Vinyl Chloride		X		X
G	(Reserved)				
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities				
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H				
J	Equipment Leaks (Fugitive Emission Sources) of Benzene				
K	Radionuclide Emissions From Elemental Phosphorus Plants				
L	Benzene Emissions from Coke By-Product Recovery Plants				
M	Asbestos		X		X

(G) Delegations for San Diego County Air Pollution Control District, San Joaquin Valley Unified Air Pollution Control District, San Luis Obispo County Air Pollution Control District, and Santa Barbara County Air Pollution Control District are shown in the following table:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SAN DIEGO COUNTY AIR POLLUTION CONTROL DISTRICT, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT, AND SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT**

	Subpart	Air Pollution Control Agency			
		San Diego County APCD	San Joaquin Valley APCD	San Luis Obispo County APCD	Santa Barbara County APCD
A	General Provisions	X	X	X	X
B	Radon Emissions From Underground Uranium				
C	Beryllium	X	X	X	X
D	Beryllium Rocket Motor Firing	X	X	X	X
E	Mercury	X	X	X	X
F	Vinyl Chloride	X	X	X	X
G	(Reserved)				
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities				

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H				
J	Equipment Leaks (Fugitive Emission Sources) of Benzene		X	X	X
K	Radionuclide Emissions From Elemental Phosphorus Plants		X		
L	Benzene Emissions from Coke By-Product Recovery Plants		X	X	X
M	Asbestos	X	X	X	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants		X	X	X
O	Inorganic Arsenic Emissions From Primary Copper Smelters		X	X	X
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities		X	X	X
Q	Radon Emissions From Department of Energy Facilities				
R	Radon Emissions From Phosphogypsum Stacks				
S	(Reserved)				
T	Radon Emissions From the Disposal of Uranium Mill Tailings				
U	(Reserved)				
V	Equipment Leaks (Fugitive Emission Sources)		X	X	X
W	Radon Emissions From Operating Mill Tailings				
X	(Reserved)				
Y	Benzene Emissions From Benzene Storage Vessels		X	X	X
Z-AA	(Reserved)				
BB	Benzene Emissions From Benzene Transfer Operations		X	X	X
CC-EE	(Reserved)				
FF	Benzene Waste Operations		X	X	X

(H) Delegations for Shasta County Air Quality Management District, Siskiyou County Air Pollution Control District, South Coast Air Quality Management District, and Tehama County Air Pollution Control District are shown in the following table:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SHASTA COUNTY AIR QUALITY MANAGEMENT DISTRICT, SISKIYOU COUNTY AIR POLLUTION CONTROL DISTRICT, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, AND TEHAMA COUNTY AIR POLLUTION CONTROL DISTRICT**

	Subpart	Air pollution control agency			
		Shasta County AQMD	Siskiyou County APCD	South Coast AQMD	Tehama County APCD
A	General Provisions			X	
B	Radon Emissions From Underground Uranium				
C	Beryllium	X		X	
D	Beryllium Rocket Motor Firing	X		X	
E	Mercury	X		X	
F	Vinyl Chloride	X		X	
G	(Reserved)				
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities				
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H				
J	Equipment Leaks (Fugitive Emission Sources) of Benzene			X	
K	Radionuclide Emissions From Elemental Phosphorus Plants				
L	Benzene Emissions from Coke By-Product Recovery Plants			X	
M	Asbestos	X		X	

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

N	Inorganic Arsenic Emissions From Glass Manufacturing Plants			X	
O	Inorganic Arsenic Emissions From Primary Copper Smelters			X	
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities			X	
Q	Radon Emissions From Department of Energy Facilities				
R	Radon Emissions From Phosphogypsum Stacks				
S	(Reserved)				
T	Radon Emissions From the Disposal of Uranium Mill Tailings				
U	(Reserved)				
V	Equipment Leaks (Fugitive Emission Sources)			X	
W	Radon Emissions From Operating Mill Tailings				
X	(Reserved)				
Y	Benzene Emissions From Benzene Storage Vessels			X	
Z-AA	(Reserved)				
BB	Benzene Emissions From Benzene Transfer Operations			X	
CC-EE	(Reserved)				
FF	Benzene Waste Operations			X	

(I) Delegations for Tuolumne County Air Pollution Control District, Ventura County Air Pollution Control District, and Yolo-Solano Air Quality Management District are shown in the following table:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR TUOLUMNE COUNTY AIR POLLUTION CONTROL DISTRICT, VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT, AND YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT**

	Subpart	Air Pollution Control Agency		
		Tuolumne County APCD	Ventura County APCD	Yolo-Solano AQMD
A	General Provisions	X		
B	Radon Emissions From Underground Uranium			
C	Beryllium	X		
D	Beryllium Rocket Motor Firing	X		
E	Mercury	X	X	
F	Vinyl Chloride	X		
G	(Reserved)			
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities			
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H			
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X		
K	Radionuclide Emissions From Elemental Phosphorus Plants			
L	Benzene Emissions from Coke By-Product Recovery Plants	X		
M	Asbestos	X	X	
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	X		
O	Inorganic Arsenic Emissions From Primary Copper Smelters	X		
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X		
Q	Radon Emissions From Department of Energy Facilities			
R	Radon Emissions From Phosphogypsum Stacks			
S	(Reserved)			
T	Radon Emissions From the Disposal of Uranium Mill Tailings			
U	(Reserved)			

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

V	Equipment Leaks (Fugitive Emission Sources)	X		
W	Radon Emissions From Operating Mill Tailings			
X	(Reserved)			
Y	Benzene Emissions From Benzene Storage Vessels	X		
Z-AA	(Reserved)			
BB	Benzene Emissions From Benzene Transfer Operations	X		
CC-EE	(Reserved)			
FF	Benzene Waste Operations	X		

(iii) Hawaii. The following table identifies delegations as of October 21, 2004:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR HAWAII**

	<b>Subpart</b>	<b>Hawaii</b>
A	General Provisions	X
B	Radon Emissions From Underground Uranium	
C	Beryllium	X
D	Beryllium Rocket Motor Firing	X
E	Mercury	X
F	Vinyl Chloride	
G	(Reserved)	
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities	
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H	
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X
K	Radionuclide Emissions From Elemental Phosphorus Plants	
L	Benzene Emissions from Coke By-Product Recovery Plants	
M	Asbestos	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	
O	Inorganic Arsenic Emissions From Primary Copper Smelters	
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	
Q	Radon Emissions From Department of Energy Facilities	
R	Radon Emissions From Phosphogypsum Stacks	
S	(Reserved)	
T	Radon Emissions From the Disposal of Uranium Mill Tailings	
U	(Reserved)	
V	Equipment Leaks (Fugitive Emission Sources)	X
W	Radon Emissions From Operating Mill Tailings	
X	(Reserved)	
Y	Benzene Emissions From Benzene Storage Vessels	X
Z-AA	(Reserved)	
BB	Benzene Emissions From Benzene Transfer Operations	X
CC-EE	(Reserved)	
FF	Benzene Waste Operations	X

(iv) Nevada. The following table identifies delegations for Nevada:

**DELEGATION STATUS FOR NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR NEVADA**

	<b>Subpart</b>	<b>Air pollution control agency</b>		
		<b>Nevada DEP</b>	<b>Clark County</b>	<b>Washoe County</b>
A	General Provisions	X	X	
B	Radon Emissions From Underground Uranium Mines			
C	Beryllium	X	X	X

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

D	Beryllium Rocket Motor Firing	X	X	
E	Mercury	X	X	
F	Vinyl Chloride	X	X	
G	(Reserved)			
H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities	X		
I	Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H	X		
J	Equipment Leaks (Fugitive Emission Sources) of Benzene	X	X	
K	Radionuclide Emissions From Elemental Phosphorus Plants	X		
L	Benzene Emissions from Coke By-Product Recovery Plants	X	X	
M	Asbestos		X	X
N	Inorganic Arsenic Emissions From Glass Manufacturing Plants	X	X	
O	Inorganic Arsenic Emissions From Primary Copper Smelters	X	X	
P	Inorganic Arsenic Emissions From Arsenic Trioxide and Metallic Arsenic Production Facilities	X	X	
Q	Radon Emissions From Department of Energy Facilities			
R	Radon Emissions From Phosphogypsum Stacks			
S	(Reserved)			
T	Radon Emissions From the Disposal of Uranium Mill Tailings			
U	(Reserved)			
V	Equipment Leaks (Fugitive Emission Sources)	X	X	
W	Radon Emissions From Operating Mill Tailings			
X	(Reserved)			
Y	Benzene Emissions From Benzene Storage Vessels	X	X	
Z-AA	(Reserved)			
BB	Benzene Emissions From Benzene Transfer Operations	X	X	
CC-EE	(Reserved)			
FF	Benzene Waste Operations	X	X	

(10) The following table lists the delegation status of specific Part 61 Subparts that have been delegated unchanged to state and local air pollution control agencies in Region 10. An “X” indicates the subpart has been delegated, subject to all the conditions and limitations set forth in federal law, regulations, policy, guidance, and determinations. Some authorities cannot be delegated and are retained by EPA. These include certain General Provisions authorities and specific parts of some standards. The dates noted at the end of this table indicate the effective dates of federal rules that have been delegated. Any amendments made to these rules after this effective date are not delegated.

**DELEGATION STATUS FOR PART 61 STANDARDS—REGION 10<sup>1</sup>**

Subparts <sup>2</sup>	AK	ID	OR		WA								
	AD EC <sup>3</sup>	IDE Q <sup>4</sup>	OD EQ <sup>5</sup>	LRA PA <sup>6</sup>	Ecolo gy <sup>7</sup>	BC AA <sup>8</sup>	NWC AA <sup>9</sup>	ORC AA <sup>10</sup>	PSC AA <sup>11</sup>	SWC AA <sup>12</sup>	SCAP CA <sup>13</sup>	YRC AA <sup>14</sup>	WDO H <sup>15</sup>
A General Provisions <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>16</sup>	X <sup>17</sup>
B Radon from Underground Uranium Mines													X
C Berylli		X	X	X	X	X	X	X	X	X	X	X	



**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

um													
D Beryllium Rocket Motor Firing		X	X	X	X	X	X	X	X	X	X	X	
E Mercury	X	X	X	X	X	X	X	X	X	X	X	X	
F Vinyl Chloride		X	X	X	X	X	X	X	X	X	X	X	
H Radionuclide other than Radon from Dept. of Energy Facilities													X
I Radionuclide from Federal Facilities other than Nuclear Regulatory Commission Licensees and not covered by Subpart H													X
J Equipment Leaks of Benzene	X	X	X	X	X	X	X	X	X	X	X	X	
K Radionuclide from Elemental Phosphorus Plants													X
L Benzene from Coke By-Product Recovery Plants		X	X	X	X	X	X	X	X	X	X	X	
M Asbestos	X				X	X	X	X	X	X	X	X	
N Inorganic Arsenic		X	X		X	X	X	X	X	X	X	X	

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

from Glass Manufactu ring Plants													
O Inorga nic Arsenic from Primary Copper Smelters		X	X		X	X	X	X	X	X	X	X	
P Inorga nic Arsenic emissions from Arsenic Trioxide and Metallic Arsenic Productio n Facilities		X	X		X	X	X	X	X	X	X	X	
Q Radon from Dept. of Energy Facilities													X
R Radon from Phosphog ypsum Stacks													X
T Radon from Disposal Uranium Mill Tailings													X
V Equip ment Leaks (Fugitive Sources)	X	X	X		X	X	X	X	X	X	X	X	
W Radon from Operating Mill Tailings													X
Y Benze ne from Benzene Storage	X	X	X		X	X	X	X	X	X	X	X	

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

Vessels													
BB Benzene from Benzene Transfer Operations		X	X		X	X	X	X	X	X	X	X	
FF Benzene Waste Operations	X	X	X		X	X	X	X	X	X	X	X	

1. Table last updated on July 5, 2006.

2. Any authority within any subpart of this part (*i.e.* under “Delegation of Authority”) that is identified as not delegable, is not delegated.

3. Alaska Department of Environmental Conservation (01/18/1997). Note: Alaska received delegation for §61.145 and §61.154 of subpart M (Asbestos), along with other sections and appendices which are referenced in §61.145, as §61.145 applies to sources required to obtain an operating permit under Alaska's regulations. Alaska has not received delegation for subpart M for sources not required to obtain an operating permit under Alaska's regulations.

4. Idaho Department of Environmental Quality (07/01/2003). Note: Delegation of these part 61 subparts applies only to those sources in Idaho required to obtain an operating permit under title V of the Clean Air Act.

5. Oregon Department of Environmental Quality (07/01/2004).

6. Lane Regional Air Pollution Authority (07/01/2001).

7. Washington Department of Ecology (02/20/2001). Note: Delegation of part 61, subpart M, applies only to sources required to obtain an operating permit under title V of the Clean Air Act, including Hanford. (Pursuant to RCW 70.105.240, only Ecology can enforce non-radionuclide regulations at Hanford).

8. Benton Clean Air Authority (02/20/2001). Note: Delegation of part 61, subpart M, excludes Hanford, see note #7.

9. Northwest Clean Air Agency (07/01/2003).

10. Olympic Regional Clean Air Agency (07/01/2000). Note: Delegation of part 61, subpart M applies only to sources required to obtain an operating permit under title V of the Clean Air Act.

11. Puget Sound Clean Air Agency (07/01/2005).

12. Southwest Clean Air Agency (08/01/1998).

13. Spokane County Air Pollution Control Authority (02/20/2001).

14. Yakima Regional Clean Air Authority (07/01/2000).

15. Washington State Department of Health (07/01/2004). Note: WDOH is only delegated the Radionuclide NESHAPs. Other NESHAPs will be enforced by Washington State Department of Ecology and local air agencies, as applicable.

16. General Provisions Authorities which are not delegated include: §§61.04(b); 61.12(d)(1); 61.13(h)(1)(ii) for approval of major alternatives to test methods; §61.14(g)(1)(ii) for approval of major alternatives to monitoring; §61.16; §61.53(c)(4); and any sections in the subparts pertaining to approval of alternative standards (*i.e.*, alternative means of emission limitations), or approval of major alternatives to test methods or monitoring. For definitions of *minor*, *intermediate*, and *major* alternatives or changes to test methods and monitoring, see 40 CFR 63.90.

17. General Provisions Authorities which are not delegated include: waiver of recordkeeping, approval of alternative means of emission limitation, approval of alternatives to test methods, except as provided in 40 CFR 61.13(h)(1)(i), approval of alternative to monitoring that do not qualify as “Minor changes to monitoring,” “Intermediate changes to monitoring,” or “Minor changes to recordkeeping/reporting” as defined in 40 CFR 63.90, and availability of information.

[40 FR 18170, Apr. 25, 1975]

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**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §61.04, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.fdsys.gov](http://www.fdsys.gov).

**§61.05 Prohibited activities.**

(a) After the effective date of any standard, no owner or operator shall construct or modify any stationary source subject to that standard without first obtaining written approval from the Administrator in accordance with this subpart, except under an exemption granted by the President under section 112(c)(2) of the Act. Sources, the construction or modification of which commenced after the publication date of the standards proposed to be applicable to the sources, are subject to this prohibition.

(b) After the effective date of any standard, no owner or operator shall operate a new stationary source subject to that standard in violation of the standard, except under an exemption granted by the President under section 112(c)(2) of the Act.

(c) Ninety days after the effective date of any standard, no owner or operator shall operate any existing source subject to that standard in violation of the standard, except under a waiver granted by the Administrator under this part or under an exemption granted by the President under section 112(c)(2) of the Act.

(d) No owner or operator subject to the provisions of this part shall fail to report, revise reports, or report source test results as required under this part.

[38 FR 8826, Apr. 6, 1973, as amended at 50 FR 46291, Nov. 7, 1985]

**§61.06 Determination of construction or modification.**

An owner or operator may submit to the Administrator a written application for a determination of whether actions intended to be taken by the owner or operator constitute construction or modification, or commencement thereof, of a source subject to a standard. The Administrator will notify the owner or operator of his determination within 30 days after receiving sufficient information to evaluate the application.

[50 FR 46291, Nov. 7, 1985]

**§61.07 Application for approval of construction or modification.**

(a) The owner or operator shall submit to the Administrator an application for approval of the construction of any new source or modification of any existing source. The application shall be submitted before the construction or modification is planned to commence, or within 30 days after the effective date if the construction or modification had commenced before the effective date and initial startup has not occurred. A separate application shall be submitted for each stationary source.

(b) Each application for approval of construction shall include—

- (1) The name and address of the applicant;
- (2) The location or proposed location of the source; and

(3) Technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including a description of any equipment to be used for control of emissions. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations.

(c) Each application for approval of modification shall include, in addition to the information required in paragraph (b) of this section—

- (1) The precise nature of the proposed changes;
- (2) The productive capacity of the source before and after the changes are completed; and

(3) Calculations of estimates of emissions before and after the changes are completed, in sufficient detail to permit assessment of the validity of the calculations.

[50 FR 46291, Nov. 7, 1985]

**§61.08 Approval of construction or modification.**

(a) The Administrator will notify the owner or operator of approval or intention to deny approval of construction or modification within 60 days after receipt of sufficient information to evaluate an application under §61.07.

(b) If the Administrator determines that a stationary source for which an application under §61.07 was submitted will not cause emissions in violation of a standard if properly operated, the Administrator will approve the construction or modification.

(c) Before denying any application for approval of construction or modification, the Administrator will notify the applicant of the Administrator's intention to issue the denial together with—

(1) Notice of the information and findings on which the intended denial is based; and

(2) Notice of opportunity for the applicant to present, within such time limit as the Administrator shall specify, additional information or arguments to the Administrator before final action on the application.

(d) A final determination to deny any application for approval will be in writing and will specify the grounds on which the denial is based. The final determination will be made within 60 days of presentation of additional information or arguments, or 60 days after the final date specified for presentation if no presentation is made.

(e) Neither the submission of an application for approval nor the Administrator's approval of construction or modification shall—

(1) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or of any other applicable Federal, State, or local requirement; or

(2) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

[50 FR 46291, Nov. 7, 1985]

**§61.09 Notification of startup.**

(a) The owner or operator of each stationary source which has an initial startup after the effective date of a standard shall furnish the Administrator with written notification as follows:

(1) A notification of the anticipated date of initial startup of the source not more than 60 days nor less than 30 days before that date.

(2) A notification of the actual date of initial startup of the source within 15 days after that date.

(b) If any State or local agency requires a notice which contains all the information required in the notification in paragraph (a) of this section, sending the Administrator a copy of that notification will satisfy paragraph (a) of this section.

[50 FR 46291, Nov. 7, 1985]

**§61.10 Source reporting and waiver request.**

(a) The owner or operator of each existing source or each new source which had an initial startup before the effective date shall provide the following information in writing to the Administrator within 90 days after the effective date:

(1) Name and address of the owner or operator.

(2) The location of the source.

(3) The type of hazardous pollutants emitted by the stationary source.

(4) A brief description of the nature, size, design, and method of operation of the stationary source including the operating design capacity of the source. Identify each point of emission for each hazardous pollutant.

(5) The average weight per month of the hazardous materials being processed by the source, over the last 12 months preceding the date of the report.

(6) A description of the existing control equipment for each emission point including—

(i) Each control device for each hazardous pollutant; and

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(ii) Estimated control efficiency (percent) for each control device.

(7) A statement by the owner or operator of the source as to whether the source can comply with the standards within 90 days after the effective date.

(b) The owner or operator of an existing source unable to comply with an applicable standard may request a waiver of compliance with that standard for a period not exceeding 2 years after the effective date. Any request shall be in writing and shall include the following information:

(1) A description of the controls to be installed to comply with the standard.

(2) A compliance schedule, including the date each step toward compliance will be reached. The list shall include as a minimum the following dates:

(i) Date by which contracts for emission control systems or process changes for emission control will be awarded, or date by which orders will be issued for the purchase of component parts to accomplish emission control or process changes;

(ii) Date of initiation of onsite construction or installation of emission control equipment or process change;

(iii) Date by which onsite construction or installation of emission control equipment or process change is to be completed; and

(iv) Date by which final compliance is to be achieved.

(3) A description of interim emission control steps which will be taken during the waiver period.

(c) Any change in the information provided under paragraph (a) of this section or §61.07(b) shall be provided to the Administrator within 30 days after the change. However, if any change will result from modification of the source, §§61.07(c) and 61.08 apply.

(d) A possible format for reporting under this section is included as appendix A of this part. Advice on reporting the status of compliance may be obtained from the Administrator.

(e) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.

(f) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

(g) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (j) of this section.

(h) If an owner or operator of a stationary source in a State with delegated authority is required to submit reports under this part to the State, and if the State has an established timeline for the submission of reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the source is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (j) of this section.

(i) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 60, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which

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**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the source is required to be in compliance with the applicable subpart in this part, or 1 year after the source is required to be in compliance with the applicable part 60 or part 63 standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (j) of this section.

(j)(1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (j)(2) and (j)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (j)(2) and (j)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

[38 FR 8826, Apr. 6, 1973, as amended at 50 FR 46292, Nov. 7, 1985; 59 FR 12430, Mar. 16, 1994]

**§61.11 Waiver of compliance.**

(a) Based on the information provided in any request under §61.10, or other information, the Administrator may grant a waiver of compliance with a standard for a period not exceeding 2 years after the effective date of the standard.

(b) The waiver will be in writing and will—

(1) Identify the stationary source covered;

(2) Specify the termination date of the waiver;

(3) Specify dates by which steps toward compliance are to be taken; and

(4) Specify any additional conditions which the Administrator determines necessary to assure installation of the necessary controls within the waiver period and to assure protection of the health of persons during the waiver period.

(c) The Administrator may terminate the waiver at an earlier date than specified if any specification under paragraphs (b)(3) and (b)(4) of this section are not met.

(d) Before denying any request for a waiver, the Administrator will notify the owner or operator making the request of the Administrator's intention to issue the denial, together with—

(1) Notice of the information and findings on which the intended denial is based; and

(2) Notice of opportunity for the owner or operator to present, within the time limit the Administrator specifies, additional information or arguments to the Administrator before final action on the request.

(e) A final determination to deny any request for a waiver will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 60 days after presentation of additional information or argument; or within 60 days after the final date specified for the presentation if no presentation is made.

(f) The granting of a waiver under this section shall not abrogate the Administrator's authority under section 114 of the Act.

[50 FR 46292, Nov. 7, 1985]

**§61.12 Compliance with standards and maintenance requirements.**

(a) Compliance with numerical emission limits shall be determined in accordance with emission tests established in §61.13 or as otherwise specified in an individual subpart.

(b) Compliance with design, equipment, work practice or operational standards shall be determined as specified in an individual subpart.

(c) The owner or operator of each stationary source shall maintain and operate the source, including associated equipment for air pollution control, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operating and maintenance procedures, and inspection of the source.

(d)(1) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions of a pollutant from a source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice or operational standard, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative means for purposes of compliance with the standard. The notice will restrict the permission to the source(s) or category(ies) of sources on which the alternative means will achieve equivalent emission reductions. The notice may condition permission on requirements related to the operation and maintenance of the alternative means.

(2) Any notice under paragraph (d)(1) shall be published only after notice and an opportunity for a hearing.

(3) Any person seeking permission under this subsection shall, unless otherwise specified in the applicable subpart, submit a proposed test plan or the results of testing and monitoring, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring.

(e) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test had been performed.

[50 FR 46292, Nov. 7, 1985, as amended 62 FR 8328, Feb. 24, 1997]

**§61.13 Emission tests and waiver of emission tests.**

(a) Except as provided in paragraphs (a)(3), (a)(4), (a)(5), and (a)(6) of this section, if required to do emission testing by an applicable subpart and unless a waiver of emission testing is obtained under this section, the owner or operator shall test emissions from the source:

(1) Within 90 days after the effective date, for an existing source or a new source which has an initial startup date before the effective date.

(2) Within 90 days after initial startup, for a new source which has an initial startup date after the effective date.

(3) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline specified in paragraphs (a)(1) or (a)(2) of this section or beyond a deadline established pursuant to the requirements under paragraph (b) of this section, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.

(4) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.



**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

---

(5) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.

(6) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(3), (a)(4), and (a)(5) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.

(b) The Administrator may require an owner or operator to test emissions from the source at any other time when the action is authorized by section 114 of the Act.

(c) The owner or operator shall notify the Administrator of the emission test at least 30 days before the emission test to allow the Administrator the opportunity to have an observer present during the test.

(d) If required to do emission testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source shall provide emission testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to each source.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(5) Any other facilities that the Administrator needs to safely and properly test a source.

(e) Each emission test shall be conducted under such conditions as the Administrator shall specify based on design and operational characteristics of the source.

(1) The performance testing shall include a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. Gaseous audit samples are designed to audit the performance of the sampling system as well as the analytical system and must be collected by the sampling system during the compliance test just as the compliance samples are collected. If a liquid or solid audit sample is designed to audit the sampling system, it must also be collected by the sampling system during the compliance test. If multiple sampling systems or sampling trains are used during the compliance test for any of the test methods, the tester is only required to use one of the sampling systems per method to collect the audit sample. The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system and at the same time as the compliance samples. Retests are required when there is a failure to produce acceptable results for an audit sample. However, if the audit results do not affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. Acceptance of the test results shall constitute a waiver of the reanalysis requirement, further audits, or retests. The compliance authority may also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample. For pollutants that exist in the gas phase at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in air or nitrogen that can be introduced into the sampling system of the test method at or near the same entry point as a sample from the emission source. If no gas phase audit samples are available, an acceptable alternative is a sample of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. For samples that exist only in a liquid or solid form at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. An accredited audit sample provider (AASP) is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.

(i) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. No audit samples are required for the following test methods: Methods 3A and 3C of appendix A-3 of part 60 of this chapter; Methods 6C, 7E, 9, and 10 of appendix A-4 of part 60; Method 18 and 19 of appendix A-6 of part 60; Methods 20, 22, and 25A of appendix A-7 of part 60; Methods 30A and 30B of appendix A-8 of part 60; and Methods 303, 318, 320, and 321 of appendix A of part 63 of this

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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chapter. If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test. The compliance authority responsible for the compliance test may waive the requirement to include an audit sample if they believe that an audit sample is not necessary. “Commercially available” means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, [www.epa.gov/ttn/emc](http://www.epa.gov/ttn/emc), to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test. When ordering an audit sample, the source owner, operator, or representative shall give the sample provider an estimate for the concentration of each pollutant that is emitted by the source or the estimated concentration of each pollutant based on the permitted level and the name, address, and phone number of the compliance authority. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the AASP. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The tester may request, and the compliance authority may grant, a waiver to the requirement that a representative of the compliance authority must be present at the testing site during the field analysis of an audit sample. The source owner, operator, or representative may report the results of the audit sample to the compliance authority and then report the results of the audit sample to the AASP prior to collecting any emission samples. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

(ii) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:

(A) Preparing the sample;

(B) Confirming the true concentration of the sample;

(C) Defining the acceptance limits for the results from a well qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range;

(D) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;

(E) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;

(F) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;

(G) Reporting the results from each audit sample in a timely manner to the compliance authority and to the source owner, operator, or representative by the AASP. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.

(H) Evaluating the acceptance limits of samples at least once every two years to determine in consultation with the voluntary consensus standard body if they should be changed;

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(I) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.

(iii) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria document that describes how audit or samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:

(A) Checking audit samples to confirm their true value as reported by the AASP.

(B) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years.

(C) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.

(iv) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). The VCSB shall operate in accordance with the procedures and requirements in the Office of Management and Budget *Circular A-119*. A copy of Circular A-119 is available upon request by writing the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, by calling (202) 395-6880 or downloading online at [http://standards.gov/standards\\_gov/a119.cfm](http://standards.gov/standards_gov/a119.cfm). The VCSB shall approve all accrediting bodies. The Administrator will review all technical criteria documents. If the technical criteria documents do not meet the minimum technical requirements in paragraphs (e)(1)(ii) through (iv) of this section, the technical criteria documents are not acceptable and the proposed audit sample program is not capable of producing audit samples of sufficient quality to be used in a compliance test. All acceptable technical criteria documents shall be posted on the EPA Web site at the following URL, <http://www.epa.gov/ttn/emc>.

(2) [Reserved]

(f) Unless otherwise specified in an applicable subpart, samples shall be analyzed and emissions determined within 30 days after each emission test has been completed. The owner or operator shall report the determinations of the emission test to the Administrator by a registered letter sent before the close of business on the 31st day following the completion of the emission test.

(g) The owner or operator shall retain at the source and make available, upon request, for inspection by the Administrator, for a minimum of 2 years, records of emission test results and other data needed to determine emissions.

(h)(1) Emission tests shall be conducted as set forth in this section, the applicable subpart and appendix B unless the Administrator—

(i) Specifies or approves the use of a reference method with minor changes in methodology; or

(ii) Approves the use of an alternative method; or

(iii) Waives the requirement for emission testing because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the source is in compliance with the standard.

(2) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative method, he may require the use of a reference method. If the results of the reference and alternative methods do not agree, the results obtained by the reference method prevail.

(3) The owner or operator may request approval for the use of an alternative method at any time, except—

(i) For an existing source or a new source that had an initial startup before the effective date, any request for use of an alternative method during the initial emission test shall be submitted to the Administrator within 30 days after the effective date, or with the request for a waiver of compliance if one is submitted under §60.10(b); or

(ii) For a new source that has an initial startup after the effective date, any request for use of an alternative method during the initial emission test shall be submitted to the Administrator no later than with the notification of anticipated startup required under §60.09.

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(i)(1) Emission tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the standard, or the source is being operated under a waiver or compliance, or the owner or operator has requested a waiver of compliance and the Administrator is still considering that request.

(2) If application for waiver of the emission test is made, the application shall accompany the information required by §61.10 or the notification of startup required by §61.09, whichever is applicable. A possible format is contained in appendix A to this part.

(3) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later cancelling the waiver. The cancellation will be made only after notice is given to the owner or operator of the source.

[50 FR 46292, Nov. 7, 1985, as amended at 72 FR 27442, May 16, 2007; 75 FR 55652, Sept. 13, 2010; 79 FR 11275, Feb. 27, 2014; 81 FR 59825, Aug. 30, 2016]

**§61.14 Monitoring requirements.**

(a) Unless otherwise specified, this section applies to each monitoring system required under each subpart which requires monitoring.

(b) Each owner or operator shall maintain and operate each monitoring system as specified in the applicable subpart and in a manner consistent with good air pollution control practice for minimizing emissions. Any unavoidable breakdown or malfunction of the monitoring system should be repaired or adjusted as soon as practicable after its occurrence. The Administrator's determination of whether acceptable operating and maintenance procedures are being used will be based on information which may include, but not be limited to, review of operating and maintenance procedures, manufacturer recommendations and specifications, and inspection of the monitoring system.

(c) When required by the applicable subpart, and at any other time the Administrator may require, the owner or operator of a source being monitored shall conduct a performance evaluation of the monitoring system and furnish the Administrator with a copy of a written report of the results within 60 days of the evaluation. Such a performance evaluation shall be conducted according to the applicable specifications and procedures described in the applicable subpart. The owner or operator of the source shall furnish the Administrator with written notification of the date of the performance evaluation at least 30 days before the evaluation is to begin.

(d) When the effluents from a single source, or from two or more sources subject to the same emission standards, are combined before being released to the atmosphere, the owner or operator shall install a monitoring system on each effluent or on the combined effluent. If two or more sources are not subject to the same emission standards, the owner or operator shall install a separate monitoring system on each effluent, unless otherwise specified. If the applicable standard is a mass emission standard and the effluent from one source is released to the atmosphere through more than one point, the owner or operator shall install a monitoring system at each emission point unless the installation of fewer systems is approved by the Administrator.

(e) The owner or operator of each monitoring system shall reduce the monitoring data as specified in each applicable subpart. Monitoring data recorded during periods of unavoidable monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in any data average.

(f) The owner or operator shall maintain records of monitoring data, monitoring system calibration checks, and the occurrence and duration of any period during which the monitoring system is malfunctioning or inoperative. These records shall be maintained at the source for a minimum of 2 years and made available, upon request, for inspection by the Administrator.

(g)(1) Monitoring shall be conducted as set forth in this section and the applicable subpart unless the Administrator—

(i) Specifies or approves the use of the specified monitoring requirements and procedures with minor changes in methodology; or

(ii) Approves the use of alternatives to any monitoring requirements or procedures.

(2) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, the Administrator may require the monitoring requirements and procedures specified in this part.

[50 FR 46293, Nov. 7, 1985]

**§61.15 Modification.**

(a) Except as provided under paragraph (d) of this section, any physical or operational change to a stationary source which results in an increase in the rate of emission to the atmosphere of a hazardous pollutant to which a standard applies shall be considered a modification.

(b) Upon modification, an existing source shall become a new source for each hazardous pollutant for which the rate of emission to the atmosphere increases and to which a standard applies.

(c) Emission rate shall be expressed as kg/hr of any hazardous pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine the emission rate:

(1) Emission factors as specified in the background information document (BID) for the applicable standard, or in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where use of emission factors demonstrates that the emission rate will clearly increase or clearly not increase as a result of the physical or operational change.

(2) Material balances, monitoring data, or manual emission tests in cases where use of emission factors, as referenced in paragraph (c)(1) of this section, does not demonstrate to the Administrator's satisfaction that the emission rate will clearly increase or clearly not increase as a result of the physical or operational change, or where an interested person demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator using emission factors. When the emission rate is based on results from manual emission tests or monitoring data, the procedures specified in appendix C of 40 CFR part 60 shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator. At least three test runs must be conducted before and at least three after the physical or operational change. If the Administrator approves, the results of the emission tests required in §61.13(a) may be used for the test runs to be conducted before the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum degree feasible for all test runs.

(d) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category.

(2) An increase in production rate of a stationary source, if that increase can be accomplished without a capital expenditure on the stationary source.

(3) An increase in the hours of operation.

(4) Any conversion to coal that meets the requirements specified in section 111(a)(8) of the Act.

(5) The relocation or change in ownership of a stationary source. However, such activities must be reported in accordance with §61.10(c).

[50 FR 46294, Nov. 7, 1985]

**§61.16 Availability of information.**

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter.

[38 FR 8826, Apr. 6, 1973. Redesignated at 50 FR 46294, Nov. 7, 1985]

**§61.17 State authority.**

(a) This part shall not be construed to preclude any State or political subdivision thereof from—

(1) Adopting and enforcing any emission limiting regulation applicable to a stationary source, provided that such emission limiting regulation is not less stringent than the standards prescribed under this part; or

(2) Requiring the owner or operator of a stationary source to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of the source.

[50 FR 46294, Nov. 7, 1985]

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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**§61.18 Incorporations by reference.**

The materials listed below are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of the approval, and a notice of any change in these materials will be published in the FEDERAL REGISTER. The materials are available for inspection at the corresponding address noted below, and at U.S. EPA's Air Docket at 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(a) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM) International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA, 19428-2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

(1) ASTM D737-75, Standard Test Method for Air Permeability of Textile Fabrics, incorporation by reference (IBR) approved January 27, 1983 for §61.23(a).

(2) ASTM D835-85, Standard Specification for Refined Benzene-485, IBR approved September 14, 1989 for §61.270(a).

(3) ASTM D836-84, Standard Specification for Industrial Grade Benzene, IBR approved September 14, 1989 for §61.270(a).

(4) ASTM D1193-77, 91, Standard Specification for Reagent Water, IBR approved for appendix B: Method 101, Section 7.1.1; Method 101A, Section 7.1.1; and Method 104, Section 7.1; Method 108, Section 7.1.3; Method 108A, Section 7.1.1; Method 108B, Section 7.1.1; Method 108C, Section 7.1.1; and Method 111, Section 7.3.

(5) ASTM D2267-68, 78, 88, Standard Test Method for Aromatics in Light Naphthas and Aviation Gasoline by Gas Chromatography, IBR approved September 30, 1986, for §61.67(h)(1).

(6) ASTM D2359-85a, 93, Standard Specification for Refined Benzene-535, IBR approved September 14, 1989 for §61.270(a).

(7) ASTM D2382-76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved June 6, 1984 for §61.245(e)(3).

(8) ASTM D2504-67, 77, 88 (Reapproved 1993), Noncondensable Gases in C<sub>3</sub> and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved June 6, 1984 for §61.245(e)(3).

(9) ASTM D2879-83, Standard Test Method for Vapor Pressure—Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved December 14, 2000 for §61.241.

(10) ASTM D2986-71, 78, 95a, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Diocetyl Phthalate) Smoke Test, IBR approved for appendix B: Method 103, Section 6.1.3.

(11) ASTM D4420-94, Standard Test Method for Determination of Aromatics in Finished Gasoline by Gas Chromatography, IBR approved for §61.67(h)(1).

(12) ASTM D4734-87, 96, Standard Specification for Refined Benzene-545, IBR approved September 14, 1989 for §61.270(a).

(13) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §61.245(e)(3).

(14) ASTM E50-82, 86, 90 (Reapproved 1995), Standard Practices for Apparatus Reagents, and Safety Precautions for Chemical Analysis of Metals, IBR approved for appendix B: Method 108C, Section 6.1.4.

(b) The following material is available from the U.S. EPA Environmental Monitoring and Support Laboratory, Cincinnati, Ohio 45268.

(1) Method 601, Test Method for Purgeable Halocarbons, July 1982, IBR approved September 30, 1986, for §61.67(g)(2).

**APPENDIX 40 CFR 61, NESHAP, SUBPART A**  
**40 CFR 61, NESHAP SUBPART A – GENERAL PROVISIONS.**

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(c) The following material is available for purchase from the American National Standards Institute, 25 West 43rd Street, 4th Floor, New York, New York 10036.

(1) ANSI N13.1-1969, “Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities.” IBR approved for 61.93(b)(2)(ii) and 61.107(b)(2)(ii).

(2) ANSI/HPS N13.1-1999 “Sampling and Monitoring Releases of Airborne Radioactive Substances from the Stacks and Ducts of Nuclear Facilities,” IBR approved October 9, 2002, for §§61.93(c); 61.107(d) and Method 114, paragraph 2.1 of appendix B to 40 CFR part 61.

(d) The following material is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325, telephone (202) 512-1800 or outside of Washington, DC area: 1-866-512-1800.

(1) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, EPA Publication SW-846, Third Edition, November 1986, as amended by Revision I, December 1987, Order Number 955-001-00000-1:

(i) Method 8020, Aromatic Volatile Organics, IBR approved March 7, 1990, for §61.355(c)(2)(iv)(A).

(ii) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series, IBR approved March 7, 1990, for §61.355(c)(2)(iv)(B).

(iii) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics, IBR approved March 7, 1990, for §61.355(c)(2)(iv)(C).

(iv) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique, IBR approved March 7, 1990, for §61.355(c)(2)(iv)(D).

(e) *State and Local Requirements.* The following materials listed below are available at the Air and Radiation Docket and Information Center, 1200 Pennsylvania Avenue NW., Washington, DC 20460, telephone number (202) 566-1745.

(1)(i) New Hampshire Regulations at Env-Sw 2100, Management and Control of Asbestos Disposal Sites Not Operated after July 9, 1981, effective February 16, 2010 (including a letter from Thomas S. Burack, Commissioner, Department of Environmental Services, State of New Hampshire, to Carol J. Holahan, Director, Office of Legislative Services, dated February 12, 2010, certifying that the enclosed rule, Env-Sw 2100, is the official version of this rule). Incorporation By Reference approved for §61.04(c).

(ii) New Hampshire Regulations at Env-A 1800, Asbestos Management and Control, effective October 21, 2008, Sections 1801-1807, excluding the following provisions: 1801.02(e), 1802.02, 1802.04, 1802.07-1802.09, 1802.13, 1802.15-1802.17, 1802.28-1802.29, 1802.36, 1802.42, 1802.45, 1802.50, 1802.54, 1804.05-1804.09, 1807.02 (including a letter from Thomas S. Burack, Commissioner, Department of Environmental Services, State of New Hampshire, to Carol J. Holahan, Director, Office of Legislative Services, dated November 14, 2008, certifying that the enclosed rule, Env-A 1800, is the official version of this rule). Incorporation By Reference approved for §61.04(c).

[48 FR 3740, Jan. 27, 1983, as amended at 48 FR 55266, Dec. 9, 1983; 49 FR 23520, June 6, 1984; 51 FR 34914, Sept. 30, 1986; 54 FR 38073, Sept. 14, 1989; 54 FR 51704, Dec. 15, 1989; 55 FR 8341, Mar. 7, 1990; 55 FR 18331, May 2, 1990; 55 FR 22027, May 31, 1990; 55 FR 32914, Aug. 13, 1990; 65 FR 62150, Oct. 17, 2000; 65 FR 78280, Dec. 14, 2000; 67 FR 57166, Sept. 9, 2002; 69 FR 18803, Apr. 9, 2004; 78 FR 2338, Jan. 11, 2013]

#### **§61.19 Circumvention.**

No owner or operator shall build, erect, install, or use any article machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous dilutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.

[40 FR 48299, Oct. 14, 1975. Redesignated at 50 FR 46294, Nov. 7, 1985]

#### [Table of Contents](#)

e-CFR data is current as of May 24, 2018

**PART 61—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS**

**Subpart M—National Emission Standard for Asbestos**

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**Contents**

§61.140	Applicability.
§61.141	Definitions.
§61.142	Standard for asbestos mills.
§61.143	Standard for roadways.
§61.144	Standard for manufacturing.
§61.145	Standard for demolition and renovation.
§61.146	Standard for spraying.
§61.147	Standard for fabricating.
§61.148	Standard for insulating materials.
§61.149	Standard for waste disposal for asbestos mills.
§61.150	Standard for waste disposal for manufacturing, fabricating, demolition, renovation, and spraying operations.
§61.151	Standard for inactive waste disposal sites for asbestos mills and manufacturing and fabricating operations.
§61.152	Air-cleaning.
§61.153	Reporting.
§61.154	Standard for active waste disposal sites.
§61.155	Standard for operations that convert asbestos-containing waste material into nonasbestos (asbestos-free) material.
§61.156	Cross-reference to other asbestos regulations.
§61.157	Delegation of authority.
Appendix A to Subpart M of Part 61—Interpretive Rule Governing Roof Removal Operations	

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AUTHORITY: 42 U.S.C. 7401, 7412, 7414, 7416, 7601.

SOURCE: 49 FR 13661, Apr. 5, 1984, unless otherwise noted.

**§61.140 Applicability.**

The provisions of this subpart are applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155.

[55 FR 48414, Nov. 20, 1990]

**§61.141 Definitions.**

All terms that are used in this subpart and are not defined below are given the same meaning as in the Act and in subpart A of this part.

*Active waste disposal site* means any disposal site other than an inactive site.

*Adequately wet* means sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

*Asbestos* means the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite-grunerite, anthophyllite, and actinolite-tremolite.

*Asbestos-containing waste materials* means mill tailings or any waste that contains commercial asbestos and is generated by a source subject to the provisions of this subpart. This term includes filters from control devices, friable asbestos waste material, and bags or other similar packaging contaminated with commercial asbestos. As applied to demolition and renovation operations, this term also includes regulated asbestos-containing material waste and materials contaminated with asbestos including disposable equipment and clothing.

*Asbestos mill* means any facility engaged in converting, or in any intermediate step in converting, asbestos ore into commercial asbestos. Outside storage of asbestos material is not considered a part of the asbestos mill.



*Asbestos tailings* means any solid waste that contains asbestos and is a product of asbestos mining or milling operations.

*Asbestos waste from control devices* means any waste material that contains asbestos and is collected by a pollution control device.

*Category I nonfriable asbestos-containing material (ACM)* means asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy.

*Category II nonfriable ACM* means any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

*Commercial asbestos* means any material containing asbestos that is extracted from ore and has value because of its asbestos content.

*Cutting* means to penetrate with a sharp-edged instrument and includes sawing, but does not include shearing, slicing, or punching.

*Demolition* means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.

*Emergency renovation operation* means a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden. This term includes operations necessitated by nonroutine failures of equipment.

*Fabricating* means any processing (e.g., cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.

*Facility* means any institutional, commercial, public, industrial, or residential structure, installation, or building (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding residential buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For purposes of this definition, any building, structure, or installation that contains a loft used as a dwelling is not considered a residential structure, installation, or building. Any structure, installation or building that was previously subject to this subpart is not excluded, regardless of its current use or function.

*Facility component* means any part of a facility including equipment.

*Friable asbestos material* means any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent as determined by a method other than point counting by polarized light microscopy (PLM), verify the asbestos content by point counting using PLM.

*Fugitive source* means any source of emissions not controlled by an air pollution control device.

*Glove bag* means a sealed compartment with attached inner gloves used for the handling of asbestos-containing materials. Properly installed and used, glove bags provide a small work area enclosure typically used for small-scale asbestos stripping operations. Information on glove-bag installation, equipment and supplies, and work practices is contained in the Occupational Safety and Health Administration's (OSHA's) final rule on occupational exposure to asbestos (appendix G to 29 CFR 1926.58).

*Grinding* means to reduce to powder or small fragments and includes mechanical chipping or drilling.

*In poor condition* means the binding of the material is losing its integrity as indicated by peeling, cracking, or crumbling of the material.

*Inactive waste disposal site* means any disposal site or portion of it where additional asbestos-containing waste material has not been deposited within the past year.

*Installation* means any building or structure or any group of buildings or structures at a single demolition or renovation site that are under the control of the same owner or operator (or owner or operator under common control).

*Leak-tight* means that solids or liquids cannot escape or spill out. It also means dust-tight.

*Malfunction* means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner so that emissions of asbestos are increased. Failures of equipment shall not be considered malfunctions if they are caused in any way by poor maintenance, careless operation, or any other preventable upset conditions, equipment breakdown, or process failure.

*Manufacturing* means the combining of commercial asbestos—or, in the case of woven friction products, the combining of textiles containing commercial asbestos—with any other material(s), including commercial asbestos, and the processing of this combination into a product. Chlorine production is considered a part of manufacturing.

*Natural barrier* means a natural object that effectively precludes or deters access. Natural barriers include physical obstacles such as cliffs, lakes or other large bodies of water, deep and wide ravines, and mountains. Remoteness by itself is not a natural barrier.

*Nonfriable asbestos-containing material* means any material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

*Nonscheduled renovation operation* means a renovation operation necessitated by the routine failure of equipment, which is expected to occur within a given period based on past operating experience, but for which an exact date cannot be predicted.

*Outside air* means the air outside buildings and structures, including, but not limited to, the air under a bridge or in an open air ferry dock.

*Owner or operator of a demolition or renovation activity* means any person who owns, leases, operates, controls, or supervises the facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both.

*Particulate asbestos material* means finely divided particles of asbestos or material containing asbestos.

*Planned renovation operations* means a renovation operation, or a number of such operations, in which some RACM will be removed or stripped within a given period of time and that can be predicted. Individual nonscheduled operations are included if a number of such operations can be predicted to occur during a given period of time based on operating experience.

*Regulated asbestos-containing material (RACM)* means (a) Friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this subpart.

*Remove* means to take out RACM or facility components that contain or are covered with RACM from any facility.

*Renovation* means altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load-supporting structural members are wrecked or taken out are demolitions.

*Resilient floor covering* means asbestos-containing floor tile, including asphalt and vinyl floor tile, and sheet vinyl floor covering containing more than 1 percent asbestos as determined using polarized light microscopy according to the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy.

*Roadways* means surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.

*Strip* means to take off RACM from any part of a facility or facility components.

*Structural member* means any load-supporting member of a facility, such as beams and load supporting walls; or any nonload-supporting member, such as ceilings and nonload-supporting walls.

*Visible emissions* means any emissions, which are visually detectable without the aid of instruments, coming from RACM or asbestos-containing waste material, or from any asbestos milling, manufacturing, or fabricating operation. This does not include condensed, uncombined water vapor.

*Waste generator* means any owner or operator of a source covered by this subpart whose act or process produces asbestos-containing waste material.

*Waste shipment record* means the shipping document, required to be originated and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material.

*Working day* means Monday through Friday and includes holidays that fall on any of the days Monday through Friday. [49 FR 13661, Apr. 5, 1984; 49 FR 25453, June 21, 1984, as amended by 55 FR 48414, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991; 60 FR 31920, June 19, 1995]

**§61.142 Standard for asbestos mills.**

(a) Each owner or operator of an asbestos mill shall either discharge no visible emissions to the outside air from that asbestos mill, including fugitive sources, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(b) Each owner or operator of an asbestos mill shall meet the following requirements:

(1) Monitor each potential source of asbestos emissions from any part of the mill facility, including air cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least 15 seconds duration per source of emissions.

(2) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunction, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the Administrator, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(i) Maintenance schedule.

(ii) Recordkeeping plan.

(3) Maintain records of the results of visible emissions monitoring and air cleaning device inspections using a format similar to that shown in Figures 1 and 2 and include the following:

(i) Date and time of each inspection.

(ii) Presence or absence of visible emissions.

(iii) Condition of fabric filters, including presence of any tears, holes, and abrasions.

(iv) Presence of dust deposits on clean side of fabric filters.

(v) Brief description of corrective actions taken, including date and time.

(vi) Daily hours of operation for each air cleaning device.

(4) Furnish upon request, and make available at the affected facility during normal business hours for inspection by the Administrator, all records required under this section.

(5) Retain a copy of all monitoring and inspection records for at least 2 years.

(6) Submit semiannually a copy of visible emission monitoring records to the Administrator if visible emissions occurred during the report period. Semiannual reports shall be postmarked by the 30th day following the end of the six-month period.

**APPENDIX 40 CFR 61, NESHAP, SUBPART M**

**40 CFR 61, NESHAP SUBPART M – NATIONAL EMISSION STANDARD FOR ASBESTOS.**

Date of inspection (mo/day/yr)	Time of inspection (a.m./p.m.)	Air cleaning device or fugitive source designation or number	Visible emissions observed (yes/no), corrective action taken	Daily operating hours	Inspector's initials

Figure 1. Record of Visible Emission Monitoring

1. Air cleaning device designation or number	_____
2. Date of inspection	_____
3. Time of inspection	_____
4. Is air cleaning device operating properly (yes/no)	_____
5. Tears, holes, or abrasions in fabric filter (yes/no)	_____
6. Dust on clean side of fabric filters (yes/no)	_____
7. Other signs of malfunctions or potential malfunctions (yes/no)	_____
8. Describe other malfunctions or signs of potential malfunctions.	_____ _____ _____
9. Describe corrective action(s) taken.	_____ _____ _____
10. Date and time corrective action taken	_____
11. Inspected by	_____
(Print/type Name)	(Title) (Signature) (Date)
(Print/type Name)	(Title) (Signature) (Date)

Figure 2. Air Cleaning Device Inspection Checklist

[55 FR 48416, Nov. 20, 1990, as amended at 64 FR 7467, Feb. 12, 1999]

**§61.143 Standard for roadways.**

No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings.

(a) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine): or

(b) It is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or

(c) It is encapsulated in asphalt concrete meeting the specifications contained in section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85, 1985, or their equivalent.

[55 FR 48419, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991]

**§61.144 Standard for manufacturing.**

(a) *Applicability.* This section applies to the following manufacturing operations using commercial asbestos.

(1) The manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials.

(2) The manufacture of cement products.

(3) The manufacture of fireproofing and insulating materials.

(4) The manufacture of friction products.

(5) The manufacture of paper, millboard, and felt.

(6) The manufacture of floor tile.

(7) The manufacture of paints, coatings, caulks, adhesives, and sealants.

(8) The manufacture of plastics and rubber materials.

(9) The manufacture of chlorine utilizing asbestos diaphragm technology.

(10) The manufacture of shotgun shell wads.

(11) The manufacture of asphalt concrete.

(b) *Standard.* Each owner or operator of any of the manufacturing operations to which this section applies shall either:

(1) Discharge no visible emissions to the outside air from these operations or from any building or structure in which they are conducted or from any other fugitive sources; or

(2) Use the methods specified by §61.152 to clean emissions from these operations containing particulate asbestos material before they escape to, or are vented to, the outside air.

(3) Monitor each potential source of asbestos emissions from any part of the manufacturing facility, including air cleaning devices, process equipment, and buildings housing material processing and handling equipment, at least once each day during daylight hours for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least 15 seconds duration per source of emissions.

(4) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the Administrator, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(i) Maintenance schedule.

(ii) Recordkeeping plan.

(5) Maintain records of the results of visible emission monitoring and air cleaning device inspections using a format similar to that shown in Figures 1 and 2 and include the following.

- (i) Date and time of each inspection.
- (ii) Presence or absence of visible emissions.
- (iii) Condition of fabric filters, including presence of any tears, holes and abrasions.
- (iv) Presence of dust deposits on clean side of fabric filters.
- (v) Brief description of corrective actions taken, including date and time.
- (vi) Daily hours of operation for each air cleaning device.

(6) Furnish upon request, and make available at the affected facility during normal business hours for inspection by the Administrator, all records required under this section.

(7) Retain a copy of all monitoring and inspection records for at least 2 years.

(8) Submit semiannually a copy of the visible emission monitoring records to the Administrator if visible emission occurred during the report period. Semiannual reports shall be postmarked by the 30th day following the end of the six-month period.

[49 FR 13661, Apr. 5, 1984, as amended at 55 FR 48419, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991; 64 FR 7467, Feb. 12, 1999]

**§61.145 Standard for demolition and renovation.**

(a) *Applicability.* To determine which requirements of paragraphs (a), (b), and (c) of this section apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of paragraphs (b) and (c) of this section apply to each owner or operator of a demolition or renovation activity, including the removal of RACM as follows:

(1) In a facility being demolished, all the requirements of paragraphs (b) and (c) of this section apply, except as provided in paragraph (a)(3) of this section, if the combined amount of RACM is

(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or

(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

(2) In a facility being demolished, only the notification requirements of paragraphs (b)(1), (2), (3)(i) and (iv), and (4)(i) through (vii) and (4)(ix) and (xvi) of this section apply, if the combined amount of RACM is

(i) Less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) on other facility components, and

(ii) Less than one cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously or there is no asbestos.

(3) If the facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of paragraphs (b)(1), (b)(2), (b)(3)(iii), (b)(4) (except (b)(4)(viii)), (b)(5), and (c)(4) through (c)(9) of this section apply.

(4) In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of paragraphs (b) and (c) of this section apply if the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is

(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or

(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

(iii) To determine whether paragraph (a)(4) of this section applies to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31.

(iv) To determine whether paragraph (a)(4) of this section applies to emergency renovation operations, estimate the combined amount of RACM to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.

(5) Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09.

(b) *Notification requirements.* Each owner or operator of a demolition or renovation activity to which this section applies shall:

(1) Provide the Administrator with written notice of intention to demolish or renovate. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent.

(3) Postmark or deliver the notice as follows:

(i) At least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge or similarly disturb asbestos material), if the operation is described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section. If the operation is as described in paragraph (a)(2) of this section, notification is required 10 working days before demolition begins.

(ii) At least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in paragraph (a)(4)(iii) of this section.

(iii) As early as possible before, but not later than, the following working day if the operation is a demolition ordered according to paragraph (a)(3) of this section or, if the operation is a renovation described in paragraph (a)(4)(iv) of this section.

(iv) For asbestos stripping or removal work in a demolition or renovation operation, described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section, and for a demolition described in paragraph (a)(2) of this section, that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator as follows:

(A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,

(1) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and

(2) Provide the Administrator with a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by the U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(B) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin on a date earlier than the original start date,

(1) Provide the Administrator with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins.

(2) For demolitions covered by paragraph (a)(2) of this section, provide the Administrator written notice of a new start date at least 10 working days before commencement of demolition. Delivery of updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(C) In no event shall an operation covered by this paragraph begin on a date other than the date contained in the written notice of the new start date.

(4) Include the following in the notice:

(i) An indication of whether the notice is the original or a revised notification.

(ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.

(iii) Type of operation: demolition or renovation.

(iv) Description of the facility or affected part of the facility including the size (square meters [square feet] and number of floors), age, and present and prior use of the facility.

(v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM.

(vi) Estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before demolition.

(vii) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state, of the facility being demolished or renovated.

(viii) Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in paragraph (a)(4)(iii) of this section.

(ix) Scheduled starting and completion dates of demolition or renovation.

(x) Description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components.

(xi) Description of work practices and engineering controls to be used to comply with the requirements of this subpart, including asbestos removal and waste-handling emission control procedures.

(xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.

(xiii) A certification that at least one person trained as required by paragraph (c)(8) of this section will supervise the stripping and removal described by this notification. This requirement shall become effective 1 year after promulgation of this regulation.

(xiv) For facilities described in paragraph (a)(3) of this section, the name, title, and authority of the State or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification.

(xv) For emergency renovations described in paragraph (a)(4)(iv) of this section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden.

(xvi) Description of procedures to be followed in the event that unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.

(xvii) Name, address, and telephone number of the waste transporter.

(5) The information required in paragraph (b)(4) of this section must be reported using a form similar to that shown in Figure 3.

(c) *Procedures for asbestos emission control.* Each owner or operator of a demolition or renovation activity to whom this paragraph applies, according to paragraph (a) of this section, shall comply with the following procedures:

(1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:

(i) It is Category I nonfriable ACM that is not in poor condition and is not friable.



(ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or

(iii) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of.

(iv) They are Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.

(2) When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:

(i) Adequately wet all RACM exposed during cutting or disjoining operations; and

(ii) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM.

(3) When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.

(i) In renovation operations, wetting is not required if:

(A) The owner or operator has obtained prior written approval from the Administrator based on a written application that wetting to comply with this paragraph would unavoidably damage equipment or present a safety hazard; and

(B) The owner or operator uses one of the following emission control methods:

(1) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.

(2) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.

(3) Leak-tight wrapping to contain all RACM prior to dismantlement.

(ii) In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in paragraph (c)(3)(i) of this section cannot be used, another method may be used after obtaining written approval from the Administrator based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph (c)(3)(i) of this section.

(iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.

(4) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to paragraph (c)(2) of this section, it shall be stripped or contained in leak-tight wrapping, except as described in paragraph (c)(5) of this section. If stripped, either:

(i) Adequately wet the RACM during stripping; or

(ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.

(5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (c)(2), (3), and (4) of this section), the RACM is not required to be stripped if the following requirements are met:

(i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.

(ii) The component is encased in a leak-tight wrapping.

(iii) The leak-tight wrapping is labeled according to §61.149(d)(1)(i), (ii), and (iii) during all loading and unloading operations and during storage.

(6) For all RACM, including material that has been removed or stripped:

(i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with §61.150; and

(ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.

(iii) Transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections.

(iv) RACM contained in leak-tight wrapping that has been removed in accordance with paragraphs (c)(4) and (c)(3)(i)(B)(3) of this section need not be wetted.

(7) When the temperature at the point of wetting is below 0 °C (32 °F):

(i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.

(ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.

(iii) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Administrator during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.

(8) Effective 1 year after promulgation of this regulation, no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on-site representative, such as a foreman or management-level person or other authorized representative, trained in the provisions of this regulation and the means of complying with them, is present. Every 2 years, the trained on-site individual shall receive refresher training in the provisions of this regulation. The required training shall include as a minimum: applicability; notifications; material identification; control procedures for removals including, at least, wetting, local exhaust ventilation, negative pressure enclosures, glove-bag procedures, and High Efficiency Particulate Air (HEPA) filters; waste disposal work practices; reporting and recordkeeping; and asbestos hazards and worker protection. Evidence that the required training has been completed shall be posted and made available for inspection by the Administrator at the demolition or renovation site.

(9) For facilities described in paragraph (a)(3) of this section, adequately wet the portion of the facility that contains RACM during the wrecking operation.

(10) If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with the NESHAP before burning.

**APPENDIX 40 CFR 61, NESHAP, SUBPART M**

**40 CFR 61, NESHAP SUBPART M – NATIONAL EMISSION STANDARD FOR ASBESTOS.**

NOTIFICATION OF DEMOLITION AND RENOVATION					
Operator Project #	Postmark	Date Received	Notification #		
<b>I. TYPE OF NOTIFICATION</b> ( <input type="checkbox"/> Original <input type="checkbox"/> Revised <input type="checkbox"/> Cancelled ):					
<b>II. FACILITY INFORMATION</b> ( Identify owner, removal contractor, and other operator )					
OWNER NAME:					
Address:					
City:		State:	Zip:		
Contact:		Tel:			
REMOVAL CONTRACTOR:					
Address:					
City:		State:	Zip:		
Contact:		Tel:			
OTHER OPERATOR:					
Address:					
City:		State:	Zip:		
Contact:		Tel:			
<b>III. TYPE OF OPERATION</b> ( <input type="checkbox"/> Demo <input type="checkbox"/> Ordered Demo <input type="checkbox"/> Renovation <input type="checkbox"/> Dem.Renovation ):					
<b>IV. IS ASBESTOS PRESENT?</b> ( Yes/No )					
<b>V. FACILITY DESCRIPTION</b> ( Include building name, number and floor or room number )					
Bldg Name:					
Address:					
City:		State:	County:		
Site Location:					
Building Size:		# of Floors:	Age in Years:		
Present Use:		Prior Use:			
<b>VI. PROCEDURE, INCLUDING ANALYTICAL METHOD, IF APPROPRIATE, USED TO DETECT THE PRESENCE OF ASBESTOS MATERIAL:</b>					
<b>VII. APPROXIMATE AMOUNT OF ASBESTOS, INCLUDING:</b>					
1. Regulated ACM to be removed		ACM To Be Removed	Nonfriable Asbestos Material Not To Be Removed		Indicate Unit of Measurement Below
2. Category I ACM Not Removed			Cat I	Cat II	UNIT
3. Category II ACM Not Removed					
Pipes					Ln ft Sq ft
Surface Area					Sq ft Sq ft
Was ACM Off Facility Component					Cu ft Cu ft
<b>VIII. SCHEDULED DATES ASBESTOS REMOVAL (MM/DD/YY)</b> Starts: _____ Completes: _____					
<b>IX. SCHEDULED DATES DEMO/RENOVATION (MM/DD/YY)</b> Starts: _____ Completes: _____					

Continued on page two

Figure 3. Notification of Demolition and Renovation

## 40 CFR 61, NESHAP SUBPART M – NATIONAL EMISSION STANDARD FOR ASBESTOS.

NOTIFICATION OF DEMOLITION AND RENOVATION (continued)

X. DESCRIPTION OF PLANNED DEMOLITION OR RENOVATION WORK, AND METHOD(S) TO BE USED:		
XI. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSIONS OF ASBESTOS AT THE DEMOLITION AND RENOVATION SITE:		
XII. WASTE TRANSPORTER #1		
Name:		
Address:		
City:	State:	Zip:
Contact Person:	Telephone:	
WASTE TRANSPORTER #2		
Name:		
Address:		
City:	State:	Zip:
Contact Person:	Telephone:	
XIII. WASTE DISPOSAL SITE		
Name:		
Location:		
City:	State:	Zip:
Telephone:		
XIV. IF DEMOLITION ORDERED BY A GOVERNMENT AGENCY, PLEASE IDENTIFY THE AGENCY BELOW:		
Name:	Title:	
Authority:		
Date of Order (MM/DD/YY):	Date Ordered to Begin (MM/DD/YY):	
XV. FOR EMERGENCY RENOVATIONS		
Date and Hour of Emergency (MM/DD/YY):		
Description of the Sudden, Unexpected Event:		
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:		
XVI. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED ASBESTOS IS FOUND OR PREVIOUSLY NONFRIABLE ASBESTOS MATERIAL BECOMES CRUMBLING, PULVERIZED, OR REDUCED TO POWDER.		
XVI. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF THIS REGULATION (40 CFR PART 61, SUBPART M) WILL BE ON-SITE DURING THE DEMOLITION OR RENOVATION AND EVIDENCE THAT THE REQUIRED TRAINING HAS BEEN ACCOMPLISHED BY THIS PERSON WILL BE AVAILABLE FOR INSPECTION DURING NORMAL BUSINESS HOURS. (Required 1 year after promulgation)		
(Signature of Owner/Operator)		(Date)
XVII. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT.		
(Signature of Owner/Operator)		(Date)

Figure 3. Notification of Demolition and Renovation

[55 FR 48419, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991]

### §61.146 Standard for spraying.

The owner or operator of an operation in which asbestos-containing materials are spray applied shall comply with the following requirements:

(a) For spray-on application on buildings, structures, pipes, and conduits, do not use material containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, except as provided in paragraph (c) of this section.

(b) For spray-on application of materials that contain more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy, on equipment and machinery, except as provided in paragraph (c) of this section:

(1) Notify the Administrator at least 20 days before beginning the spraying operation. Include the following information in the notice:

- (i) Name and address of owner or operator.
- (ii) Location of spraying operation.
- (iii) Procedures to be followed to meet the requirements of this paragraph.

(2) Discharge no visible emissions to the outside air from spray-on application of the asbestos-containing material or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(c) The requirements of paragraphs (a) and (b) of this section do not apply to the spray-on application of materials where the asbestos fibers in the materials are encapsulated with a bituminous or resinous binder during spraying and the materials are not friable after drying.

(d) Owners or operators of sources subject to this paragraph are exempt from the requirements of §§61.05(a), 61.07 and 61.09.

[49 FR 13661, Apr. 5, 1984. Redesignated and amended at 55 FR 48424, Nov. 20, 1990; 60 FR 31920, June 19, 1995]

**§61.147 Standard for fabricating.**

(a) *Applicability.* This section applies to the following fabricating operations using commercial asbestos:

(1) The fabrication of cement building products.

(2) The fabrication of friction products, except those operations that primarily install asbestos friction materials on motor vehicles.

(3) The fabrication of cement or silicate board for ventilation hoods; ovens; electrical panels; laboratory furniture, bulkheads, partitions, and ceilings for marine construction; and flow control devices for the molten metal industry.

(b) *Standard.* Each owner or operator of any of the fabricating operations to which this section applies shall either:

(1) Discharge no visible emissions to the outside air from any of the operations or from any building or structure in which they are conducted or from any other fugitive sources; or

(2) Use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(3) Monitor each potential source of asbestos emissions from any part of the fabricating facility, including air cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring shall be by visual observation of at least 15 seconds duration per source of emissions.

(4) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this paragraph, submit to the Administrator, and revise as necessary, a written maintenance plan to include, at a minimum, the following:

(i) Maintenance schedule.

(ii) Recordkeeping plan.

(5) Maintain records of the results of visible emission monitoring and air cleaning device inspections using a format similar to that shown in Figures 1 and 2 and include the following:

(i) Date and time of each inspection.

(ii) Presence or absence of visible emissions.

(iii) Condition of fabric filters, including presence of any tears, holes, and abrasions.

(iv) Presence of dust deposits on clean side of fabric filters.

(v) Brief description of corrective actions taken, including date and time.

(vi) Daily hours of operation for each air cleaning device.

(6) Furnish upon request and make available at the affected facility during normal business hours for inspection by the Administrator, all records required under this section.

(7) Retain a copy of all monitoring and inspection records for at least 2 years.

(8) Submit semiannually a copy of the visible emission monitoring records to the Administrator if visible emission occurred during the report period. Semiannual reports shall be postmarked by the 30th day following the end of the six-month period.

[49 FR 13661, Apr. 5, 1984. Redesignated and amended at 55 FR 48424, Nov. 20, 1991; 64 FR 7467, Feb. 12, 1999]

**§61.148 Standard for insulating materials.**

No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this section do not apply to spray-applied insulating materials regulated under §61.146.

[55 FR 48424, Nov. 20, 1990]

**§61.149 Standard for waste disposal for asbestos mills.**

Each owner or operator of any source covered under the provisions of §61.142 shall:

(a) Deposit all asbestos-containing waste material at a waste disposal site operated in accordance with the provisions of §61.154; and

(b) Discharge no visible emissions to the outside air from the transfer of control device asbestos waste to the tailings conveyor, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air. Dispose of the asbestos waste from control devices in accordance with §61.150(a) or paragraph (c) of this section; and

(c) Discharge no visible emissions to the outside air during the collection, processing, packaging, or on-site transporting of any asbestos-containing waste material, or use one of the disposal methods specified in paragraphs (c) (1) or (2) of this section, as follows:

(1) Use a wetting agent as follows:

(i) Adequately mix all asbestos-containing waste material with a wetting agent recommended by the manufacturer of the agent to effectively wet dust and tailings, before depositing the material at a waste disposal site. Use the agent as recommended for the particular dust by the manufacturer of the agent.

(ii) Discharge no visible emissions to the outside air from the wetting operation or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(iii) Wetting may be suspended when the ambient temperature at the waste disposal site is less than  $-9.5^{\circ}\text{C}$  ( $15^{\circ}\text{F}$ ), as determined by an appropriate measurement method with an accuracy of  $\pm 1^{\circ}\text{C}$  ( $\pm 2^{\circ}\text{F}$ ). During periods when wetting operations are suspended, the temperature must be recorded at least at hourly intervals, and records must be retained for at least 2 years in a form suitable for inspection.

(2) Use an alternative emission control and waste treatment method that has received prior written approval by the Administrator. To obtain approval for an alternative method, a written application must be submitted to the Administrator demonstrating that the following criteria are met:

(i) The alternative method will control asbestos emissions equivalent to currently required methods.

(ii) The suitability of the alternative method for the intended application.

(iii) The alternative method will not violate other regulations.

(iv) The alternative method will not result in increased water pollution, land pollution, or occupational hazards.

(d) When waste is transported by vehicle to a disposal site:

(1) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of the waste so that the signs are visible. The markings must:

(i) Be displayed in such a manner and location that a person can easily read the legend.

(ii) Conform to the requirements for 51 cm  $\times$  36 cm (20 in  $\times$  14 in) upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend

DANGER

ASBESTOS DUST HAZARD

CANCER AND LUNG DISEASE HAZARD

Authorized Personnel Only

Notation

2.5 cm (1 inch) Sans Serif, Gothic or Block

2.5 cm (1 inch) Sans Serif, Gothic or Block

1.9 cm (  $\frac{3}{4}$  inch) Sans Serif, Gothic or Block

14 Point Gothic

Spacing between any two lines must be a least equal to the height of the upper of the two lines.

(2) For off-site disposal, provide a copy of the waste shipment record, described in paragraph (e)(1) of this section, to the disposal site owner or operator at the same time as the asbestos-containing waste material is delivered to the disposal site.

(e) For all asbestos-containing waste material transported off the facility site:

(1) Maintain asbestos waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

(ii) The name and address of the local, State, or EPA Regional agency responsible for administering the asbestos NESHAP program.

(iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).

(iv) The name and telephone number of the disposal site operator.

(v) The name and physical site location of the disposal site.

(vi) The date transported.

(vii) The name, address, and telephone number of the transporter(s).

(viii) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

(2) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.

(3) Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:

(i) A copy of the waste shipment record for which a confirmation of delivery was not received, and

(ii) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.

**APPENDIX 40 CFR 61, NESHAP, SUBPART M**

**40 CFR 61, NESHAP SUBPART M – NATIONAL EMISSION STANDARD FOR ASBESTOS.**

(4) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years.

(f) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.

Generator	1. Work site name and mailing address		Owner's name	Owner's telephone no.
	2. Operator's name and address		Operator's telephone no.	
	3. Waste disposal site (WDS) name, mailing address, and physical site location		WDS phone no.	
	4. Name, and address of responsible agency			
	5. Description of materials		6. Containers No. Type	7. Total quantity m <sup>3</sup> (yd <sup>3</sup> )
Transporter	8. Special handling instructions and additional information			
	9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.			
	Printed/typed name & title		Signature	Month Day Year
	10. Transporter 1 (Acknowledgment of receipt of materials)			
	Printed/typed name & title		Signature	Month Day Year
Disposal Site	Address and telephone no.			
	11. Transporter 2 (Acknowledgment of receipt of materials)			
	Printed/typed name & title		Signature	Month Day Year
	Address and telephone no.			
	12. Discrepancy indication space			
13. Waste disposal site owner or operator: Certification of receipt of asbestos materials covered by this manifest except as noted in item 12.				
Printed/typed name & title		Signature	Month Day Year	

(Continued)

Figure 4. Waste Shipment Record



## 40 CFR 61, NESHA SUBPART M – NATIONAL EMISSION STANDARD FOR ASBESTOS.

INSTRUCTIONS

Waste Generator Section (Items 1-9)

1. Enter the name of the facility at which asbestos waste is generated and the address where the facility is located. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.
2. If a demolition or renovation, enter the name and address of the company and authorized agent responsible for performing the asbestos removal. In the appropriate spaces, also enter the phone number of the operator.
3. Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the asbestos materials. In the appropriate spaces, also enter the phone number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.
4. Provide the name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHA program.
5. Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is
  - Friable asbestos material
  - Nonfriable asbestos material
6. Enter the number of containers used to transport the asbestos materials listed in item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below):
  - DM - Metal drums, barrels
  - DP - Plastic drums, barrels
  - BA - 6 mil plastic bags or wrapping
7. Enter the quantities of each type of asbestos material removed in units of cubic meters (cubic yards).
8. Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.
9. The authorized agent of the waste generator must read and then sign and date this certification. The date is the date of receipt by transporter.

NOTE: The waste generator must retain a copy of this form.

(continued)

Figure 4. Waste Shipment Record

Transporter Section (Items 10 & 11)

10. & 11. Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport. Enter date of receipt and signature.

NOTE: The transporter must retain a copy of this form.

Disposal Site Section (Items 12 & 13)

12. The authorized representative of the WDS must note in this space any discrepancy between waste described on this manifest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to nonasbestos material is considered a WDS.
13. The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in item 12. The date is the date of signature and receipt of shipment.

NOTE: The WDS must retain a completed copy of this form. The WDS must also send a completed copy to the operator listed in item 2.

Figure 4. Waste Shipment Record

### §61.150 Standard for waste disposal for manufacturing, fabricating, demolition, renovation, and spraying operations.

Each owner or operator of any source covered under the provisions of §§61.144, 61.145, 61.146, and 61.147 shall comply with the following provisions:

(a) Discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, or transporting of any asbestos-containing waste material generated by the source, or use one of the emission control and waste treatment methods specified in paragraphs (a) (1) through (4) of this section.

(1) Adequately wet asbestos-containing waste material as follows:

(i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and

(ii) Discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; and

(iii) After wetting, seal all asbestos-containing waste material in leak-tight containers while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight wrapping; and

(iv) Label the containers or wrapped materials specified in paragraph (a)(1)(iii) of this section using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(4) or 1926.1101(k)(8). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.

(v) For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.

(2) Process asbestos-containing waste material into nonfriable forms as follows:

(i) Form all asbestos-containing waste material into nonfriable pellets or other shapes;

(ii) Discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(3) For facilities demolished where the RACM is not removed prior to demolition according to §§61.145(c)(1) (i), (ii), (iii), and (iv) or for facilities demolished according to §61.145(c)(9), adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this paragraph do not have to be sealed in leak-tight containers or wrapping but may be transported and disposed of in bulk.

(4) Use an alternative emission control and waste treatment method that has received prior approval by the Administrator according to the procedure described in §61.149(c)(2).

(5) As applied to demolition and renovation, the requirements of paragraph (a) of this section do not apply to Category I nonfriable ACM waste and Category II nonfriable ACM waste that did not become crumbled, pulverized, or reduced to powder.

(b) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:

(1) A waste disposal site operated in accordance with the provisions of §61.154, or

(2) An EPA-approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of §61.155.

(3) The requirements of paragraph (b) of this section do not apply to Category I nonfriable ACM that is not RACM.

(c) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must conform to the requirements of §§61.149(d)(1) (i), (ii), and (iii).

(d) For all asbestos-containing waste material transported off the facility site:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

(ii) The name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.

- (iii) The approximate quantity in cubic meters (cubic yards).
- (iv) The name and telephone number of the disposal site operator.
- (v) The name and physical site location of the disposal site.
- (vi) The date transported.
- (vii) The name, address, and telephone number of the transporter(s).

(viii) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

(2) Provide a copy of the waste shipment record, described in paragraph (d)(1) of this section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site.

(3) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.

(4) Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:

(i) A copy of the waste shipment record for which a confirmation of delivery was not received, and

(ii) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.

(5) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years.

(e) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.

[55 FR 48429, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991, as amended at 68 FR 54793, Sept. 18, 2003]

**§61.151 Standard for inactive waste disposal sites for asbestos mills and manufacturing and fabricating operations.**

Each owner or operator of any inactive waste disposal site that was operated by sources covered under §61.142, 61.144, or 61.147 and received deposits of asbestos-containing waste material generated by the sources, shall:

(a) Comply with one of the following:

(1) Either discharge no visible emissions to the outside air from an inactive waste disposal site subject to this paragraph; or

(2) Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material. In desert areas where vegetation would be difficult to maintain, at least 8 additional centimeters (3 inches) of well-graded, nonasbestos crushed rock may be placed on top of the final cover instead of vegetation and maintained to prevent emissions; or

(3) Cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste; or

(4) For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in paragraphs (a) (1), (2), and (3) of this section. Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the

**40 CFR 61, NESHAP SUBPART M – NATIONAL EMISSION STANDARD FOR ASBESTOS.**

Administrator to use other equally effective dust suppression agents. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

(b) Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with paragraph (a)(2) or (a)(3) of this section.

(1) Display warning signs at all entrances and at intervals of 100 m (328 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements for 51 cm × 36 cm (20" × 14") upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

<b>Legend</b>	<b>Notation</b>
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block
Do Not Create Dust	1.9 cm (¾ inch) Sans Serif, Gothic or Block
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) Fence the perimeter of the site in a manner adequate to deter access by the general public.

(3) When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Administrator to determine whether a fence or a natural barrier adequately deters access by the general public.

(c) The owner or operator may use an alternative control method that has received prior approval of the Administrator rather than comply with the requirements of paragraph (a) or (b) of this section.

(d) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site under this section, and follow the procedures specified in the notification. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

(e) Within 60 days of a site becoming inactive and after the effective date of this subpart, record, in accordance with State law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:

(1) The land has been used for the disposal of asbestos-containing waste material;

(2) The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in §61.154(f) have been filed with the Administrator; and

(3) The site is subject to 40 CFR part 61, subpart M.

[49 FR 13661, Apr. 5, 1984, as amended at 53 FR 36972, Sept. 23, 1988. Redesignated and amended at 55 FR 48429, Nov. 20, 1990]

**§61.152 Air-cleaning.**

(a) The owner or operator who uses air cleaning, as specified in §§61.142(a), 61.144(b)(2), 61.145(c)(3)(i)(B)(I), 61.145(c)(4)(ii), 61.145(c)(11)(i), 61.146(b)(2), 61.147(b)(2), 61.149(b), 61.149(c)(1)(ii), 61.150(a)(1)(ii), 61.150(a)(2)(ii), and 61.155(e) shall:

(1) Use fabric filter collection devices, except as noted in paragraph (b) of this section, doing all of the following:

(i) Ensuring that the airflow permeability, as determined by ASTM Method D737-75, does not exceed 9 m<sup>3</sup>/min/m<sup>2</sup> (30 ft<sup>3</sup>/min/ft<sup>2</sup>) for woven fabrics or 11<sup>3</sup>/min/m<sup>2</sup>(35 ft<sup>3</sup>/min/ft<sup>2</sup>) for felted fabrics, except that 12 m<sup>3</sup>/min/m<sup>2</sup> (40 ft<sup>3</sup>/min/ft<sup>2</sup>) for woven and 14 m<sup>3</sup>/min/m<sup>2</sup> (45 ft<sup>3</sup>/min/ft<sup>2</sup>) for felted fabrics is allowed for filtering air from asbestos ore dryers; and

(ii) Ensuring that felted fabric weighs at least 475 grams per square meter (14 ounces per square yard) and is at least 1.6 millimeters (one-sixteenth inch) thick throughout; and

(iii) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.

(2) Properly install, use, operate, and maintain all air-cleaning equipment authorized by this section. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.

(3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.

(b) There are the following exceptions to paragraph (a)(1):

(1) After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the Administrator determines that a fabric filter is not feasible, the Administrator may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (40 inches water gage pressure).

(2) Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles.

(3) The Administrator may authorize the use of filtering equipment other than described in paragraphs (a)(1) and (b)(1) and (2) of this section if the owner or operator demonstrates to the Administrator's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.

[49 FR 13661, Apr. 5, 1984; 49 FR 25453, June 21, 1984, as amended at 51 FR 8199, Mar. 10, 1986. Redesignated and amended at 55 FR 48430, Nov. 20, 1990]

**§61.153 Reporting.**

(a) Any new source to which this subpart applies (with the exception of sources subject to §§61.143, 61.145, 61.146, and 61.148), which has an initial startup date preceding the effective date of this revision, shall provide the following information to the Administrator postmarked or delivered within 90 days of the effective date. In the case of a new source that does not have an initial startup date preceding the effective date, the information shall be provided, postmarked or delivered, within 90 days of the initial startup date. Any owner or operator of an existing source shall provide the following information to the Administrator within 90 days of the effective date of this subpart unless the owner or operator of the existing source has previously provided this information to the Administrator. Any changes in the information provided by any existing source shall be provided to the Administrator, postmarked or delivered, within 30 days after the change.

(1) A description of the emission control equipment used for each process; and

(i) If the fabric device uses a woven fabric, the airflow permeability in m<sup>3</sup>/min/m<sup>2</sup> and; if the fabric is synthetic, whether the fill yarn is spun or not spun; and

(ii) If the fabric filter device uses a felted fabric, the density in g/m<sup>2</sup>, the minimum thickness in inches, and the airflow permeability in m<sup>3</sup>/min/m<sup>2</sup>.

(2) If a fabric filter device is used to control emissions,

(i) The airflow permeability in m<sup>3</sup>/min/m<sup>2</sup> (ft<sup>3</sup>/min/ft<sup>2</sup>) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and

**40 CFR 61, NESHAP SUBPART M – NATIONAL EMISSION STANDARD FOR ASBESTOS.**

(ii) If the fabric filter device uses a felted fabric, the density in g/m<sup>2</sup> (oz/yd<sup>2</sup>), the minimum thickness in millimeters (inches), and the airflow permeability in m<sup>3</sup>/min/m<sup>2</sup> (ft<sup>3</sup>/min/ft<sup>2</sup>).

(3) If a HEPA filter is used to control emissions, the certified efficiency.

(4) For sources subject to §§61.149 and 61.150:

(i) A brief description of each process that generates asbestos-containing waste material; and

(ii) The average volume of asbestos-containing waste material disposed of, measured in m<sup>3</sup>/day (yd<sup>3</sup>/day); and

(iii) The emission control methods used in all stages of waste disposal; and

(iv) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.

(5) For sources subject to §§61.151 and 61.154:

(i) A brief description of the site; and

(ii) The method or methods used to comply with the standard, or alternative procedures to be used.

(b) The information required by paragraph (a) of this section must accompany the information required by §61.10.

Active waste disposal sites subject to §61.154 shall also comply with this provision. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of §61.10(a). The information described in this section must be reported using the format of appendix A of this part as a guide.

(Sec. 114. Clean Air Act as amended (42 U.S.C. 7414))

[49 FR 13661, Apr. 5, 1984. Redesignated and amended at 55 FR 48430, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991]

**§61.154 Standard for active waste disposal sites.**

Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under §61.149, 61.150, or 61.155 shall meet the requirements of this section:

(a) Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of paragraph (c) or (d) of this section must be met.

(b) Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as follows, or the requirements of paragraph (c)(1) of this section must be met.

(1) Warning signs must be displayed at all entrances and at intervals of 100 m (330 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material is deposited. The warning signs must:

(i) Be posted in such a manner and location that a person can easily read the legend; and

(ii) Conform to the requirements of 51 cm × 36 cm (20" × 14") upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

(iii) Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

<b>Legend</b>	<b>Notation</b>
Asbestos Waste Disposal Site	2.5 cm (1 inch) Sans Serif, Gothic or Block.
Do Not Create Dust	1.9 cm ( ¾ inch) Sans Serif, Gothic or Block.
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic.

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

(2) The perimeter of the disposal site must be fenced in a manner adequate to deter access by the general public.

(3) Upon request and supply of appropriate information, the Administrator will determine whether a fence or a natural barrier adequately deters access by the general public.

(c) Rather than meet the no visible emission requirement of paragraph (a) of this section, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:

(1) Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, or

(2) Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

(d) Rather than meet the no visible emission requirement of paragraph (a) of this section, use an alternative emissions control method that has received prior written approval by the Administrator according to the procedures described in §61.149(c)(2).

(e) For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

(ii) The name, address, and telephone number of the transporter(s).

(iii) The quantity of the asbestos-containing waste material in cubic meters (cubic yards).

(iv) The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.

(v) The date of the receipt.

(2) As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator.

(3) Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.

(4) Retain a copy of all records and reports required by this paragraph for at least 2 years.

(f) Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.

(g) Upon closure, comply with all the provisions of §61.151.

(h) Submit to the Administrator, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities.

(i) Furnish upon request, and make available during normal business hours for inspection by the Administrator, all records required under this section.

(j) Notify the Administrator in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice:

(1) Scheduled starting and completion dates.

(2) Reason for disturbing the waste.

(3) Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Administrator may require changes in the emission control procedures to be used.

(4) Location of any temporary storage site and the final disposal site.

(Secs. 112 and 301(a) of the Clean Air Act as amended (42 U.S.C. 7412, 7601(a))

[49 FR 13661, Apr. 5, 1990. Redesignated and amended at 55 FR 48431, Nov. 20, 1990; 56 FR 1669, Jan. 16, 1991]

**§61.155 Standard for operations that convert asbestos-containing waste material into nonasbestos (asbestos-free) material.**

Each owner or operator of an operation that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material shall:

(a) Obtain the prior written approval of the Administrator to construct the facility. To obtain approval, the owner or operator shall provide the Administrator with the following information:

(1) Application to construct pursuant to §61.07.

(2) In addition to the information requirements of §61.07(b)(3), a

(i) Description of waste feed handling and temporary storage.

(ii) Description of process operating conditions.

(iii) Description of the handling and temporary storage of the end product.

(iv) Description of the protocol to be followed when analyzing output materials by transmission electron microscopy.

(3) Performance test protocol, including provisions for obtaining information required under paragraph (b) of this section.

(4) The Administrator may require that a demonstration of the process be performed prior to approval of the application to construct.

(b) Conduct a start-up performance test. Test results shall include:

(1) A detailed description of the types and quantities of nonasbestos material, RACM, and asbestos-containing waste material processed, *e.g.*, asbestos cement products, friable asbestos insulation, plaster, wood, plastic, wire, etc. Test feed is to include the full range of materials that will be encountered in actual operation of the process.

(2) Results of analyses, using polarized light microscopy, that document the asbestos content of the wastes processed.

(3) Results of analyses, using transmission electron microscopy, that document that the output materials are free of asbestos. Samples for analysis are to be collected as 8-hour composite samples (one 200-gram (7-ounce) sample per hour), beginning with the initial introduction of RACM or asbestos-containing waste material and continuing until the end of the performance test.

(4) A description of operating parameters, such as temperature and residence time, defining the full range over which the process is expected to operate to produce nonasbestos (asbestos-free) materials. Specify the limits for each operating parameter within which the process will produce nonasbestos (asbestos-free) materials.

(5) The length of the test.



(c) During the initial 90 days of operation,

(1) Continuously monitor and log the operating parameters identified during start-up performance tests that are intended to ensure the production of nonasbestos (asbestos-free) output material.

(2) Monitor input materials to ensure that they are consistent with the test feed materials described during start-up performance tests in paragraph (b)(1) of this section.

(3) Collect and analyze samples, taken as 10-day composite samples (one 200-gram (7-ounce) sample collected every 8 hours of operation) of all output material for the presence of asbestos. Composite samples may be for fewer than 10 days. Transmission electron microscopy (TEM) shall be used to analyze the output material for the presence of asbestos. During the initial 90-day period, all output materials must be stored on-site until analysis shows the material to be asbestos-free or disposed of as asbestos-containing waste material according to §61.150.

(d) After the initial 90 days of operation,

(1) Continuously monitor and record the operating parameters identified during start-up performance testing and any subsequent performance testing. Any output produced during a period of deviation from the range of operating conditions established to ensure the production of nonasbestos (asbestos-free) output materials shall be:

(i) Disposed of as asbestos-containing waste material according to §61.150, or

(ii) Recycled as waste feed during process operation within the established range of operating conditions, or

(iii) Stored temporarily on-site in a leak-tight container until analyzed for asbestos content. Any product material that is not asbestos-free shall be either disposed of as asbestos-containing waste material or recycled as waste feed to the process.

(2) Collect and analyze monthly composite samples (one 200-gram (7-ounce) sample collected every 8 hours of operation) of the output material. Transmission electron microscopy shall be used to analyze the output material for the presence of asbestos.

(e) Discharge no visible emissions to the outside air from any part of the operation, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(f) Maintain records on-site and include the following information:

(1) Results of start-up performance testing and all subsequent performance testing, including operating parameters, feed characteristic, and analyses of output materials.

(2) Results of the composite analyses required during the initial 90 days of operation under §61.155(c).

(3) Results of the monthly composite analyses required under §61.155(d).

(4) Results of continuous monitoring and logs of process operating parameters required under §61.155 (c) and (d).

(5) The information on waste shipments received as required in §61.154(e).

(6) For output materials where no analyses were performed to determine the presence of asbestos, record the name and location of the purchaser or disposal site to which the output materials were sold or deposited, and the date of sale or disposal.

(7) Retain records required by paragraph (f) of this section for at least 2 years.

(g) Submit the following reports to the Administrator:

(1) A report for each analysis of product composite samples performed during the initial 90 days of operation.

(2) A quarterly report, including the following information concerning activities during each consecutive 3-month period:

(i) Results of analyses of monthly product composite samples.

(ii) A description of any deviation from the operating parameters established during performance testing, the duration of the deviation, and steps taken to correct the deviation.

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**APPENDIX 40 CFR 61, NESHAP, SUBPART M****40 CFR 61, NESHAP SUBPART M – NATIONAL EMISSION STANDARD FOR ASBESTOS.**

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(iii) Disposition of any product produced during a period of deviation, including whether it was recycled, disposed of as asbestos-containing waste material, or stored temporarily on-site until analyzed for asbestos content.

(iv) The information on waste disposal activities as required in §61.154(f).

(h) Nonasbestos (asbestos-free) output material is not subject to any of the provisions of this subpart. Output materials in which asbestos is detected, or output materials produced when the operating parameters deviated from those established during the start-up performance testing, unless shown by TEM analysis to be asbestos-free, shall be considered to be asbestos-containing waste and shall be handled and disposed of according to §§61.150 and 61.154 or reprocessed while all of the established operating parameters are being met.

[55 FR 48431, Nov. 20, 1990]

**§61.156 Cross-reference to other asbestos regulations.**

In addition to this subpart, the regulations referenced in Table 1 also apply to asbestos and may be applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155 of this subpart. These cross-references are presented for the reader's information and to promote compliance with the cited regulations.

**TABLE 1—CROSS-REFERENCE TO OTHER ASBESTOS REGULATIONS**

<b>Agency</b>	<b>CFR citation</b>	<b>Comment</b>
EPA	40 CFR part 763, subpart E	Requires schools to inspect for asbestos and implement response actions and submit asbestos management plans to States. Specifies use of accredited inspectors, air sampling methods, and waste disposal procedures.
	40 CFR part 427	Effluent standards for asbestos manufacturing source categories.
	40 CFR part 763, subpart G	Protects public employees performing asbestos abatement work in States not covered by OSHA asbestos standard.
OSHA	29 CFR 1910.1001	Worker protection measures-engineering controls, worker training, labeling, respiratory protection, bagging of waste, permissible exposure level.
	29 CFR 1926.1101	Worker protection measures for all construction work involving asbestos, including demolition and renovation-work practices, worker training, bagging of waste, permissible exposure level.
MSHA	30 CFR part 56, subpart D	Specifies exposure limits, engineering controls, and respiratory protection measures for workers in surface mines.
	30 CFR part 57, subpart D	Specifies exposure limits, engineering controls, and respiratory protection measures for workers in underground mines.
DOT	49 CFR parts 171 and 172	Regulates the transportation of asbestos-containing waste material. Requires waste containment and shipping papers.

[55 FR 48432, Nov. 20, 1990, as amended at 60 FR 31920, June 19, 1995; 68 FR 54793, Sept. 18, 2003; 69 FR 43324, July 20, 2004]

**§61.157 Delegation of authority.**

(a) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities that will not be delegated to States:

- (1) Section 61.149(c)(2)
- (2) Section 61.150(a)(4)
- (3) Section 61.151(c)

(4) Section 61.152(b)(3)

(5) Section 61.154(d)

(6) Section 61.155(a).

[55 FR 48433, Nov. 20, 1990]

## **Appendix A to Subpart M of Part 61—Interpretive Rule Governing Roof Removal Operations**

### ***I. Applicability of the Asbestos NESHAP***

1.1. Asbestos-containing material (ACM) is material containing more than one percent asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy. The NESHAP classifies ACM as either “friable” or “nonfriable”. Friable ACM is ACM that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. Nonfriable ACM is ACM that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

1.2. Nonfriable ACM is further classified as either Category I ACM or Category II ACM. Category I ACM and Category II ACM are distinguished from each other by their potential to release fibers when damaged. Category I ACM includes asbestos-containing gaskets, packings, resilient floor coverings, resilient floor covering mastic, and asphalt roofing products containing more than one percent asbestos. Asphalt roofing products which may contain asbestos include built-up roofing; asphalt-containing single ply membrane systems; asphalt shingles; asphalt-containing underlayment felts; asphalt-containing roof coatings and mastics; and asphalt-containing base flashings. ACM roofing products that use other bituminous or resinous binders (such as coal tars or pitches) are also considered to be Category I ACM. Category II ACM includes all other nonfriable ACM, for example, asbestos-cement (A/C) shingles, A/C tiles, and transite boards or panels containing more than one percent asbestos. Generally speaking, Category II ACM is more likely to become friable when damaged than is Category I ACM. The applicability of the NESHAP to Category I and II ACM depends on: (1) the condition of the material at the time of demolition or renovation, (2) the nature of the operation to which the material will be subjected, (3) the amount of ACM involved.

1.3. Asbestos-containing material regulated under the NESHAP is referred to as “regulated asbestos-containing material” (RACM). RACM is defined in §61.141 of the NESHAP and includes: (1) friable asbestos-containing material; (2) Category I nonfriable ACM that has become friable; (3) Category I nonfriable ACM that has been or will be sanded, ground, cut, or abraded; or (4) Category II nonfriable ACM that has already been or is likely to become crumbled, pulverized, or reduced to powder. If the coverage threshold for RACM is met or exceeded in a renovation or demolition operation, then all friable ACM in the operation, and in certain situations, nonfriable ACM in the operation, are subject to the NESHAP.

#### **A. Threshold Amounts of Asbestos-Containing Roofing Material**

1.A.1. The NESHAP does not cover roofing projects on single family homes or on residential buildings containing four or fewer dwelling units. 40 CFR 61.141. For other roofing renovation projects, if the total asbestos-containing roof area undergoing renovation is less than 160 ft<sup>2</sup>, the NESHAP does not apply, regardless of the removal method to be used, the type of material (Category I or II), or its condition (friable versus nonfriable). 40 CFR 61.145(a)(4). However, EPA would recommend the use of methods that damage asbestos-containing roofing material as little as possible. EPA has determined that where a rotating blade (RB) roof cutter or equipment that similarly damages the roofing material is used to remove Category I nonfriable asbestos-containing roofing material, the removal of 5580 ft<sup>2</sup> of that material will create 160 ft<sup>2</sup> of RACM. For the purposes of this interpretive rule, “RB roof cutter” means an engine-powered roof cutting machine with one or more rotating cutting blades the edges of which are blunt. (Equipment with blades having sharp or tapered edges, and/or which does not use a rotating blade, is used for “slicing” rather than “cutting” the roofing material; such equipment is not included in the term “RB roof cutter”.) Therefore, it is EPA’s interpretation that when an RB roof cutter or equipment that similarly damages the roofing material is used to remove Category I nonfriable asbestos-containing roofing material, any project that is 5580 ft<sup>2</sup> or greater is subject to the NESHAP; conversely, it is EPA’s interpretation that when an RB roof cutter or equipment that similarly damages the roofing material is used to remove Category I nonfriable asbestos-containing roofing material in a roof removal project that is less than 5580 ft<sup>2</sup>, the project is not subject to the NESHAP, except that notification is always required for demolitions. EPA further construes the NESHAP to mean that if slicing or other methods that do not sand, grind, cut or abrade will be used on Category I nonfriable ACM, the NESHAP does not apply, regardless of the area of roof to be removed.

1.A.2. For asbestos cement (A/C) shingles (or other Category II roofing material), if the area of the roofing material to be removed is at least 160 ft<sup>2</sup> and the removal methods will crumble, pulverize, reduce to powder, or contaminate with RACM (from other ACM that has been crumbled, pulverized or reduced to powder) 160 ft<sup>2</sup> or more of such roofing material, the removal is subject to the NESHAP. Conversely, if the area of the A/C shingles (or other Category II roofing materials) to be removed is less than 160 ft<sup>2</sup>, the removal is not subject to the NESHAP regardless of the removal method used, except that notification is always required for demolitions. 40 CFR 61.145(a). However, EPA would recommend the use of methods that damage asbestos-containing roofing material as little as possible. If A/C shingles (or other Category II roofing materials) are removed without 160 ft<sup>2</sup> or more of such roofing material being crumbled, pulverized, reduced to powder, or contaminated with RACM (from other ACM that has been crumbled, pulverized or reduced to powder), the operation is not subject to the NESHAP, even where the total area of the roofing material to be removed exceeds 160 ft<sup>2</sup>; provided, however, that if the renovation includes other operations involving RACM, the roof removal operation is covered if the total area of RACM from all renovation activities exceeds 160 ft<sup>2</sup>. *See* the definition of regulated asbestos-containing material (RACM), 40 CFR 61.141.

1.A.3. Only roofing material that meets the definition of ACM can qualify as RACM subject to the NESHAP. Therefore, to determine if a removal operation that meets or exceeds the coverage threshold is subject to the NESHAP, any suspect roofing material (*i.e.* roofing material that may be ACM) should be tested for asbestos. If any such roofing material contains more than one percent asbestos and if the removal operation is covered by the NESHAP, then EPA must be notified and the work practices in §61.145(c) must be followed. In EPA's view, if a removal operation involves at least the threshold level of suspect material, a roofing contractor may choose not to test for asbestos if the contractor follows the notification and work practice requirements of the NESHAP.

#### B. A/C Shingle Removal (Category II ACM Removal)

1.B.1. A/C shingles, which are Category II nonfriable ACM, become regulated ACM if the material has a high probability of becoming or has become crumbled, pulverized or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations. 40 CFR 61.141. However, merely breaking an A/C shingle (or any other category II ACM) that is not friable may not necessarily cause the material to become RACM. A/C shingles are typically nailed to buildings on which they are attached. EPA believes that the extent of breakage that will normally result from carefully removing A/C shingles and lowering the shingles to the ground will not result in crumbling, pulverizing or reducing the shingles to powder. Conversely, the extent of breakage that will normally occur if the A/C shingles are dropped from a building or scraped off of a building with heavy machinery would cause the shingles to become RACM. EPA therefore construes the NESHAP to mean that the removal of A/C shingles that are not friable, using methods that do not crumble, pulverize, or reduce the A/C shingles to powder (such as pry bars, spud bars and shovels to carefully pry the material), is not subject to the NESHAP provided that the A/C shingles are properly handled during and after removal, as discussed in this paragraph and the asbestos NESHAP. This interpretation also applies to other Category II nonfriable asbestos-containing roofing materials.

#### C. Cutting vs. Slicing and Manual Methods for Removal of Category I ACM

1.C.1. Because of damage to the roofing material, and the potential for fiber release, roof removal operations using rotating blade (RB) roof cutters or other equipment that sand, grind, cut or abrade the roof material are subject to the NESHAP. As EPA interprets the NESHAP, the use of certain manual methods (using equipment such as axes, hatchets, or knives, spud bars, pry bars, and shovels, but not saws) or methods that slice, shear, or punch (using equipment such as a power slicer or power plow) does not constitute "cutting, sanding, grinding or abrading." This is because these methods do not destroy the structural matrix or integrity of the material such that the material is crumbled, pulverized or reduced to powder. Hence, it is EPA's interpretation that when such methods are used, assuming the roof material is not friable, the removal operation is not subject to the regulation.

1.C.2. Power removers or power tear-off machines are typically used to pry the roofing material up from the deck after the roof membrane has been cut. It is EPA's interpretation that when these machines are used to pry roofing material up, their use is not regulated by the NESHAP.

1.C.3. As noted previously, the NESHAP only applies to the removal of asbestos-containing roofing materials. Thus, the NESHAP does not apply to the use of RB cutters to remove non-asbestos built up roofing (BUR). On roofs containing some asbestos-containing and some non-asbestos-containing materials, coverage under the NESHAP depends on the methods used to remove each type of material in addition to other coverage thresholds specified above. For example, it is not uncommon for existing roofs to be made of non-asbestos BUR and base flashings that do contain asbestos. In that situation,

EPA construes the NESHAP to be inapplicable to the removal of the non-asbestos BUR using an RB cutter so long as the RB cutter is not used to cut 5580 ft<sup>2</sup> or more of the asbestos-containing base flashing or other asbestos-containing material into sections. In addition, the use of methods that slice, shear, punch or pry could then be used to remove the asbestos flashings and not trigger coverage under the NESHAP.

## *II. Notification*

2.1. Notification for a demolition is always required under the NESHAP. However, EPA believes that few roof removal jobs constitute “demolitions” as defined in the NESHAP (§61.141). In particular, it is EPA's view that the removal of roofing systems (i.e., the roof membrane, insulation, surfacing, coatings, flashings, mastic, shingles, and felt underlayment), when such removal is not a part of a demolition project, constitutes a “renovation” under the NESHAP. If the operation is a renovation, and Category I roofing material is being removed using either manual methods or slicing, notification is not required by the NESHAP. If Category II material is not friable and will be removed without crumbling, pulverizing, or reducing it to powder, no notification is required. Also, if the renovation involves less than the threshold area for applicability as discussed above, then no notification is required. However, if a roof removal meets the applicability and threshold requirements under the NESHAP, then EPA (or the delegated agency) must be notified in advance of the removal in accordance with the requirements of §61.145(b), as follows:

- Notification must be given in writing at least 10 working days in advance and must include the information in §61.145(b)(4), except for emergency renovations as discussed below.
- The notice must be updated as necessary, including, for example, when the amount of asbestos-containing roofing material reported changes by 20 percent or more.
- EPA must be notified if the start date of the roof removal changes. If the start date of a roof removal project is changed to an earlier date, EPA must be provided with a written notice of the new start date at least 10 working days in advance. If the start date changes to a later date, EPA must be notified by telephone as soon as possible before the original start date and a written notice must be sent as soon as possible.
- For emergency renovations (as defined in §61.141), where work must begin immediately to avoid safety or public health hazards, equipment damage, or unreasonable financial burden, the notification must be postmarked or delivered to EPA as soon as possible, but no later than the following work day.

## *III. Emission Control Practices*

### *A. Requirements To Adequately Wet and Discharge No Visible Emission*

3.A.1. The principal controls contained in the NESHAP for removal operations include requirements that the affected material be adequately wetted, and that asbestos waste be handled, collected, and disposed of properly. The requirements for disposal of waste materials are discussed separately in section IV below. The emission control requirements discussed in this section III apply only to roof removal operations that are covered by the NESHAP as set forth in Section I above.

3.A.2. For any operation subject to the NESHAP, the regulation (§§61.145(c)(2)(i), (3), (6)(i)) requires that RACM be adequately wet (as defined in §61.141) during the operation that damages or disturbs the asbestos material until collected for disposal.

3.A.3. When using an RB roof cutter (or any other method that sands, grinds, cuts or abrades the roofing material) to remove Category I asbestos-containing roofing material, the emission control requirements of §61.145(c) apply as discussed in Section I above. EPA will consider a roof removal project to be in compliance with the “adequately wet” and “discharge no visible emission” requirements of the NESHAP if the RB roof cutter is equipped and operated with the following: (1) a blade guard that completely encloses the blade and extends down close to the roof surface; and (2) a device for spraying a fine mist of water inside the blade guard, and which device is in operation during the cutting of the roof.

### *B. Exemptions From Wetting Requirements*

3.B.1. The NESHAP provides that, in certain instances, wetting may not be required during the cutting of Category I asbestos roofing material with an RB roof cutter. If EPA determines in accordance with §61.145(c)(3)(i), that wetting will unavoidably damage the building, equipment inside the building, or will present a safety hazard while stripping the ACM from a facility component that remains in place, the roof removal operation will be exempted from the requirement to wet during cutting. EPA must have sufficient written information on which to base such a decision. Before proceeding with a dry removal, the contractor must have received EPA's written approval. Such exemptions will be made on a case-by-case basis.

3.B.2. It is EPA's view that, in most instances, exemptions from the wetting requirements are not necessary. Where EPA grants an exemption from wetting because of the potential for damage to the building, damage to equipment within the building or a safety hazard, the NESHAP specifies alternative control methods (§61.145(c)(3)(i)(B)). Alternative control methods include (a) the use of local exhaust ventilation systems that capture the dust, and do not produce visible emissions, or (b) methods that are designed and operated in accordance with the requirements of §61.152, or (c) other methods that have received the written approval of EPA. EPA will consider an alternative emission control method in compliance with the NESHAP if the method has received written approval from EPA and the method is being implemented consistent with the approved procedures (§61.145(c)(3)(ii) or §61.152(b)(3)).

3.B.3. An exemption from wetting is also allowed when the air or roof surface temperature at the point of wetting is below freezing, as specified in §61.145(c)(7). If freezing temperatures are indicated as the reason for not wetting, records must be kept of the temperature at the beginning, middle and end of the day on which wetting is not performed and the records of temperature must be retained for at least 2 years. 42 CFR §61.145(c)(7)(iii). It is EPA's interpretation that in such cases, no written application to, or written approval by the Administrator is needed for using emission control methods listed in §61.145(c)(3)(i)(B), or alternative emission control methods that have been previously approved by the Administrator. However, such written application or approval is required for alternative emission control methods that have not been previously approved. Any dust and debris collected from cutting must still be kept wet and placed in containers. All of the other requirements for notification and waste disposal would continue to apply as described elsewhere in this notice and the Asbestos NESHAP.

#### C. Waste Collection and Handling

3.C.1. It is EPA's interpretation that waste resulting from slicing and other methods that do not cut, grind, sand or abrade Category I nonfriable asbestos-containing roofing material is not subject to the NESHAP and can be disposed of as nonasbestos waste. EPA further construes the NESHAP to provide that if Category II roofing material (such as A/C shingles) is removed and disposed of without crumbling, pulverizing, or reducing it to powder, the waste from the removal is not subject to the NESHAP waste disposal requirements. EPA also interprets the NESHAP to be inapplicable to waste resulting from roof removal operations that do not meet or exceed the coverage thresholds described in section I above. Of course, other State, local, or Federal regulations may apply.

3.C.2. It is EPA's interpretation that when an RB roof cutter, or other method that similarly damages the roofing material, is used to cut Category I asbestos containing roofing material, the damaged material from the cut (the sawdust or debris) is considered asbestos containing waste subject to §61.150 of the NESHAP, provided the coverage thresholds discussed above in section 1 are met or exceeded. This sawdust or debris must be disposed of at a disposal site operated in accordance with the NESHAP. It is also EPA's interpretation of the NESHAP that if the remainder of the roof is free of the sawdust and debris generated by the cutting, or if such sawdust or debris is collected as discussed below in paragraphs 3.C.3, 3.C.4, 3.C.5 and 3.C.6, the remainder of the roof can be disposed of as nonasbestos waste because it is considered to be Category I nonfriable material (as long as the remainder of the roof is in fact nonasbestos material or if it is Category I asbestos material and the removal methods do not further sand, grind, cut or abrade the roof material). EPA further believes that if the roof is not cleaned of such sawdust or debris, *i.e.*, it is contaminated, then it must be treated as asbestos-containing waste material and be handled in accordance with §61.150.

3.C.3. In order to be in compliance with the NESHAP while using an RB roof cutter (or device that similarly damages the roofing material) to cut Category I asbestos containing roofing material, the dust and debris resulting from the cutting of the roof should be collected as soon as possible after the cutting operation, and kept wet until collected and placed in leak-tight containers. EPA believes that where the blade guard completely encloses the blade and extends down close to the roof surface and is equipped with a device for spraying a fine mist of water inside the blade guard, and the spraying device is in operation during the cutting, most of the dust and debris from cutting will be confined along the cut. The most efficient methods to collect the dust and debris from cutting are to immediately collect or vacuum up the damaged material where it lies along the cut using a filtered vacuum cleaner or debris collector that meets the requirements of 40 CFR 61.152 to clean up as much of the debris as possible, or to gently sweep up the bulk of the debris, and then use a filtered vacuum cleaner that meets the requirements of 40 CFR 61.152 to clean up as much of the remainder of the debris as possible. On smooth surfaced roofs (nonaggregate roofs), sweeping up the debris and then wet wiping the surface may be done in place of using a filtered vacuum cleaner. It is EPA's view that if these decontamination procedures are followed, the remaining roofing material does not have to be collected and disposed of as asbestos waste. Additionally, it is EPA's view that where such decontamination procedures are followed, if the remaining portions of the roof are non-asbestos or Category I nonfriable asbestos material, and if the remaining portions are removed using removal methods that slice, shear, punch or pry, as discussed in section 1.C

above, then the remaining portions do not have to be collected and disposed of as asbestos waste and the NESHAP's no visible emissions and adequately wet requirements are not applicable to the removal of the remaining portions. In EPA's interpretation, the failure of a filtered vacuum cleaner or debris collector to collect larger chunks or pieces of damaged roofing material created by the RB roof cutter does not require the remaining roofing material to be handled and disposed of as asbestos waste, provided that such visible chunks or pieces of roofing material are collected (e.g. by gentle sweeping) and disposed of as asbestos waste. Other methods of decontamination may not be adequate, and should be approved by the local delegated agency.

3.C.4. In EPA's interpretation, if the debris from the cutting is not collected immediately, it will be necessary to lightly mist the dust or debris, until it is collected, as discussed above, and placed in containers. The dust or debris should be lightly misted frequently enough to prevent the material from drying, and to prevent airborne emissions, prior to collection as described above. It is EPA's interpretation of the NESHAP that if these procedures are followed, the remaining roofing material does not have to be collected and disposed of as asbestos waste, as long as the remaining roof material is in fact nonasbestos material or if it is Category I asbestos material and the removal methods do not further sand, grind, cut or abrade the roof material.

3.C.5. It is EPA's interpretation that, provided the roofing material is not friable prior to the cutting operation, and provided the roofing material has not been made friable by the cutting operation, the appearance of rough, jagged or damaged edges on the remaining roofing material, due to the use of an RB roof cutter, does not require that such remaining roofing material be handled and disposed of as asbestos waste. In addition, it is also EPA's interpretation that if the sawdust or debris generated by the use of an RB roof cutter has been collected as discussed in paragraphs 3.C.3, 3.C.4 and 3.C.6, the presence of dust along the edge of the remaining roof material does not render such material "friable" for purposes of this interpretive rule or the NESHAP, provided the roofing material is not friable prior to the cutting operation, and provided that the remaining roofing material near the cutline has not been made friable by the cutting operation. Where roofing material near the cutline has been made friable by the use of the RB cutter (*i.e.* where such remaining roofing material near the cutline can be crumbled, pulverized or reduced to powder using hand pressure), it is EPA's interpretation that the use of an encapsulant will ensure that such friable material need not be treated or disposed of as asbestos containing waste material. The encapsulant may be applied to the friable material after the roofing material has been collected into stacks for subsequent disposal as nonasbestos waste. It is EPA's view that if the encapsulation procedure set forth in this paragraph is followed in operations where roofing material near the cutline has been rendered friable by the use of an RB roof cutter, and if the decontamination procedures set forth in paragraph 3.C.3 have been followed, the NESHAP's no visible emissions and adequately wet requirements would be met for the removal, handling and disposal of the remaining roofing material.

3.C.6. As one way to comply with the NESHAP, the dust and debris from cutting can be placed in leak-tight containers, such as plastic bags, and the containers labeled using warning labels required by OSHA (29 CFR 1926.58). In addition, the containers must have labels that identify the waste generator (such as the name of the roofing contractor, abatement contractor, and/or building owner or operator) and the location of the site at which the waste was generated.

#### **IV. Waste Disposal**

##### **A. Disposal Requirements**

4.A.1. Section 61.150(b) requires that, as soon as is practical, all collected dust and debris from cutting as well as any contaminated roofing squares, must be taken to a landfill that is operated in accordance with §61.154 or to an EPA-approved site that converts asbestos waste to nonasbestos material in accordance with §61.155. During the loading and unloading of affected waste, asbestos warning signs must be affixed to the vehicles.

##### **B. Waste Shipment Record**

4.B.1. For each load of asbestos waste that is regulated under the NESHAP, a waste shipment record (WSR) must be maintained in accordance with §61.150(d). Information that must be maintained for each waste load includes the following:

- Name, address, and telephone number of the waste generator
- Name and address of the local, State, or EPA regional office responsible for administering the asbestos NESHAP program
- Quantity of waste in cubic meters (or cubic yards)
- Name and telephone number of the disposal site operator

- Name and physical site location of the disposal site
- Date transported
- Name, address, and telephone number of the transporter(s)
- Certification that the contents meet all government regulations for transport by highways.

4.B.2. The waste generator is responsible for ensuring that a copy of the WSR is delivered to the disposal site along with the waste shipment. If a copy of the WSR signed by the disposal site operator is not returned to the waste generator within 35 days, the waste generator must contact the transporter and/or the disposal site to determine the status of the waste shipment. 40 CFR 61.150(d)(3). If the signed WSR is not received within 45 days, the waste generator must report, in writing, to the responsible NESHAP program agency and send along a copy of the WSR. 40 CFR 61.150(d)(4). Copies of WSRs, including those signed by the disposal site operator, must be retained for at least 2 years. 40 CFR 61.150(d)(5).

#### ***V. Training***

5.1. For those roof removals that are subject to the NESHAP, at least one on-site supervisor trained in the provisions of the NESHAP must be present during the removal of the asbestos roofing material. 40 CFR 61.145(c)(8). In EPA's view, this person can be a job foreman, a hired consultant, or someone who can represent the building owner or contractor responsible for the removal. In addition to the initial training requirement, a refresher training course is required every 2 years. The NESHAP training requirements became effective on November 20, 1991.

5.2. Asbestos training courses developed specifically to address compliance with the NESHAP in roofing work, as well as courses developed for other purposes can satisfy this requirement of the NESHAP, as long as the course covers the areas specified in the regulation. EPA believes that Asbestos Hazard Emergency Response Act (AHERA) training courses will, for example, satisfy the NESHAP training requirements. However, nothing in this interpretive rule or in the NESHAP shall be deemed to require that roofing contractors or roofing workers performing operations covered by the NESHAP must be trained or accredited under AHERA, as amended by the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). Likewise, state or local authorities may independently impose additional training, licensing, or accreditation requirements on roofing contractors performing operations covered by the NESHAP, but such additional training, licensing or accreditation is not called for by this interpretive rule or the federal NESHAP.

5.3. For removal of Category I asbestos containing roofing material where RB roof cutters or equipment that similarly damages the asbestos-containing roofing material are used, the NESHAP training requirements (§61.145(c)(8)) apply as discussed in Section I above. It is EPA's intention that removal of Category I asbestos-containing roofing material using hatchets, axes, knives, and/or the use of spud bars, pry bars and shovels to lift the roofing material, or similar removal methods that slice, punch, or shear the roof membrane are not subject to the training requirements, since these methods do not cause the roof removal to be subject to the NESHAP. Likewise, it is EPA's intention that roof removal operations involving Category II nonfriable ACM are not subject to the training requirements where such operations are not subject to the NESHAP as discussed in section I above.

[59 FR 31158, June 17, 1994, as amended at 60 FR 31920, June 19, 1995]

#### **[Table of Contents](#)**



**Subpart A—General Provisions**

**§60.1 Applicability.**

(a) Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.

(d) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.* (1) This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia ("site").

(2) Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either complying directly with the requirements of this part, or reducing the site-wide emissions caps in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the site-wide emissions caps in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this part.

(3) Notwithstanding the provisions of paragraph (d)(2) of this section, for any provisions of this part except for Subpart Kb, the owner/operator of the site shall comply with the applicable provisions of this part if the Administrator determines that compliance with the provisions of this part is necessary for achieving the objectives of the regulation and the Administrator notifies the site in accordance with the provisions of the permit issued pursuant to 40 CFR 52.2454.

[40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382, Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994; 62 FR 52641, Oct. 8, 1997]

**§60.2 Definitions.**

The terms used in this part are defined in the Act or in this section as follows:

*Act* means the Clean Air Act (42 U.S.C. 7401 *et seq.*)

*Administrator* means the Administrator of the Environmental Protection Agency or his authorized representative.

*Affected facility* means, with reference to a stationary source, any apparatus to which a standard is applicable.

*Alternative method* means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for his determination of compliance.

*Approved permit program* means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to Title V of the Act (42 U.S.C. 7661).

*Capital expenditure* means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable "annual asset guideline repair allowance percentage" specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any "excluded additions" as defined in IRS Publication 534, as would be done for tax purposes.

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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*Clean coal technology demonstration project* means a project using funds appropriated under the heading ‘Department of Energy-Clean Coal Technology’, up to a total amount of \$2,500,000,000 for commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.

*Commenced* means, with respect to the definition of *new source* in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

*Construction* means fabrication, erection, or installation of an affected facility.

*Continuous monitoring system* means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

*Electric utility steam generating unit* means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

*Equivalent method* means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

*Excess Emissions and Monitoring Systems Performance Report* is a report that must be submitted periodically by a source in order to provide data on its compliance with stated emission limits and operating parameters, and on the performance of its monitoring systems.

*Existing facility* means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.

*Force majeure* means, for purposes of §60.8, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.

*Isokinetic sampling* means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.

*Issuance* of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a Title V permit occurs immediately after the EPA takes final action on the final permit.

*Malfunction* means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

*Modification* means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

*Monitoring device* means the total equipment, required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.

*Nitrogen oxides* means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in this part.

*One-hour period* means any 60-minute period commencing on the hour.

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**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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*Opacity* means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

*Owner or operator* means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.

*Part 70 permit* means any permit issued, renewed, or revised pursuant to part 70 of this chapter.

*Particulate matter* means any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified under each applicable subpart, or an equivalent or alternative method.

*Permit program* means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

*Permitting authority* means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

*Proportional sampling* means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.

*Reactivation of a very clean coal-fired electric utility steam generating unit* means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(2) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(3) Is equipped with low-NO<sub>x</sub> burners prior to the time of commencement of operations following reactivation; and

(4) Is otherwise in compliance with the requirements of the Clean Air Act.

*Reference method* means any method of sampling and analyzing for an air pollutant as specified in the applicable subpart.

*Repowering* means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

*Run* means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

*Shutdown* means the cessation of operation of an affected facility for any purpose.

*Six-minute period* means any one of the 10 equal parts of a one-hour period.

*Standard* means a standard of performance proposed or promulgated under this part.

*Standard conditions* means a temperature of 293 K (68F) and a pressure of 101.3 kilopascals (29.92 in Hg).

*Startup* means the setting in operation of an affected facility for any purpose.

*State* means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part; and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

*Stationary source* means any building, structure, facility, or installation which emits or may emit any air pollutant.

*Title V permit* means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

*Volatile Organic Compound* means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any subpart.

[44 FR 55173, Sept. 25, 1979, as amended at 45 FR 5617, Jan. 23, 1980; 45 FR 85415, Dec. 24, 1980; 54 FR 6662, Feb. 14, 1989; 55 FR 51382, Dec. 13, 1990; 57 FR 32338, July 21, 1992; 59 FR 12427, Mar. 16, 1994; 72 FR 27442, May 16, 2007]

### **§60.3 Units and abbreviations.**

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A—ampere  
g—gram  
Hz—hertz  
J—joule  
K—degree Kelvin  
kg—kilogram  
m—meter  
m<sup>3</sup>—cubic meter  
mg—milligram—10<sup>-3</sup> gram  
mm—millimeter—10<sup>-3</sup> meter  
Mg—megagram—10<sup>6</sup> gram  
mol—mole  
N—newton  
ng—nanogram—10<sup>-9</sup> gram  
nm—nanometer—10<sup>-9</sup> meter  
Pa—pascal  
s—second  
V—volt  
W—watt  
Ω—ohm  
μg—microgram—10<sup>-6</sup> gram

(b) Other units of measure:

Btu—British thermal unit  
°C—degree Celsius (centigrade)  
cal—calorie  
cfm—cubic feet per minute  
cu ft—cubic feet  
dcf—dry cubic feet  
dcm—dry cubic meter  
dscf—dry cubic feet at standard conditions  
dscm—dry cubic meter at standard conditions  
eq—equivalent  
°F—degree Fahrenheit  
ft—feet

gal—gallon  
gr—grain  
g-eq—gram equivalent  
hr—hour  
in—inch  
k—1,000  
l—liter  
lpm—liter per minute  
lb—pound  
meq—milliequivalent  
min—minute  
ml—milliliter  
mol. wt.—molecular weight  
ppb—parts per billion  
ppm—parts per million  
psia—pounds per square inch absolute  
psig—pounds per square inch gage  
°R—degree Rankine  
scf—cubic feet at standard conditions  
scfh—cubic feet per hour at standard conditions  
scm—cubic meter at standard conditions  
sec—second  
sq ft—square feet  
std—at standard conditions

(c) Chemical nomenclature:

CdS—cadmium sulfide  
CO—carbon monoxide  
CO<sub>2</sub>—carbon dioxide  
HCl—hydrochloric acid  
Hg—mercury  
H<sub>2</sub>O—water  
H<sub>2</sub>S—hydrogen sulfide  
H<sub>2</sub>SO<sub>4</sub>—sulfuric acid  
N<sub>2</sub>—nitrogen  
NO—nitric oxide  
NO<sub>2</sub>—nitrogen dioxide  
NO<sub>x</sub>—nitrogen oxides  
O<sub>2</sub>—oxygen  
SO<sub>2</sub>—sulfur dioxide  
SO<sub>3</sub>—sulfur trioxide  
SO<sub>x</sub>—sulfur oxides

(d) Miscellaneous:

A.S.T.M.—American Society for Testing and Materials  
[42 FR 37000, July 19, 1977; 42 FR 38178, July 27, 1977]

**§60.4 Address.**

[Link to an amendment published at 83 FR 15968, Apr. 13, 2018.](#)

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following list of EPA Regional Offices.

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Office of Ecosystem Protection, U.S. Environmental Protection Agency, 5 Post Office Square—Suite 100, Boston, MA 02109-3912.

Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, Federal Office Building, 26 Federal Plaza (Foley Square), New York, NY 10278.

Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, Mail Code 3AP00, 1650 Arch Street, Philadelphia, PA 19103-2029.

Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, 61 Forsyth St. SW., Suite 9T43, Atlanta, Georgia 30303-8960.

Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, IL 60604-3590.

Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas); Director; Air, Pesticides, and Toxics Division; U.S. Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202.

Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air and Waste Management Division, 11201 Renner Boulevard, Lenexa, Kansas 66219.

Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, CO 80202-1129.

Region IX (Arizona, California, Hawaii and Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau), Director, Air Division, U.S. Environmental Protection Agency, 75 Hawthorne Street, San Francisco, CA 94105.

Region X (Alaska, Oregon, Idaho, Washington), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, 1200 Sixth Avenue, Seattle, WA 98101.

(b) Section 111(c) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards of performance for new stationary sources located in such State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may except sources from a certain Federal or State reporting requirement). The appropriate mailing address for those States whose delegation request has been approved is as follows:

(1) [Reserved]

(2) State of Alabama: Alabama Department of Environmental Management, P.O. Box 301463, Montgomery, Alabama 36130-1463.

(3) State of Alaska, Department of Environmental Conservation, Pouch O, Juneau, AK 99811.

(4) Arizona:

Arizona Department of Environmental Quality, 1110 West Washington Street, Phoenix, AZ 85007.

Maricopa County Air Quality Department, 1001 North Central Avenue, Suite 900, Phoenix, AZ 85004.

Pima County Department of Environmental Quality, 33 North Stone Avenue, Suite 700, Tucson, AZ 85701.

Pinal County Air Quality Control District, 31 North Pinal Street, Building F, Florence, AZ 85132.

NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(5) State of Arkansas: Chief, Division of Air Pollution Control, Arkansas Department of Pollution Control and Ecology, 8001 National Drive, P.O. Box 9583, Little Rock, AR 72209.

(6) California:

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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Amador County Air Pollution Control District, 12200-B Airport Road, Jackson, CA 95642.

Antelope Valley Air Quality Management District, 43301 Division Street, Suite 206, Lancaster, CA 93535.

Bay Area Air Quality Management District, 939 Ellis Street, San Francisco, CA 94109.

Butte County Air Quality Management District, 2525 Dominic Drive, Suite J, Chico, CA 95928.

Calaveras County Air Pollution Control District, 891 Mountain Ranch Road, San Andreas, CA 95249.

Colusa County Air Pollution Control District, 100 Sunrise Blvd., Suite A-3, Colusa, CA 95932-3246.

El Dorado County Air Quality Management District, 2850 Fairlane Court, Bldg. C, Placerville, CA 95667-4100.

Eastern Kern Air Pollution Control District, 2700 “M” Street, Suite 302, Bakersfield, CA 93301-2370.

Feather River Air Quality Management District, 1007 Live Oak Blvd., Suite B-3, Yuba City, CA 95991.

Glenn County Air Pollution Control District, 720 N. Colusa Street, P.O. Box 351, Willows, CA 95988-0351.

Great Basin Unified Air Pollution Control District, 157 Short Street, Suite 6, Bishop, CA 93514-3537.

Imperial County Air Pollution Control District, 150 South Ninth Street, El Centro, CA 92243-2801.

Lake County Air Quality Management District, 885 Lakeport Blvd., Lakeport, CA 95453-5405.

Lassen County Air Pollution Control District, 707 Nevada Street, Suite 1, Susanville, CA 96130.

Mariposa County Air Pollution Control District, P.O. Box 5, Mariposa, CA 95338.

Mendocino County Air Quality Management District, 306 E. Gobbi Street, Ukiah, CA 95482-5511.

Modoc County Air Pollution Control District, 619 North Main Street, Alturas, CA 96101.

Mojave Desert Air Quality Management District, 14306 Park Avenue, Victorville, CA 92392-2310.

Monterey Bay Unified Air Pollution Control District, 24580 Silver Cloud Court, Monterey, CA 93940.

North Coast Unified Air Quality Management District, 2300 Myrtle Avenue, Eureka, CA 95501-3327.

Northern Sierra Air Quality Management District, 200 Litton Drive, Suite 320, P.O. Box 2509, Grass Valley, CA 95945-2509.

Northern Sonoma County Air Pollution Control District, 150 Matheson Street, Healdsburg, CA 95448-4908.

Placer County Air Pollution Control District, 3091 County Center Drive, Suite 240, Auburn, CA 95603.

Sacramento Metropolitan Air Quality Management District, 777 12th Street, Third Floor, Sacramento, CA 95814-1908.

San Diego County Air Pollution Control District, 10124 Old Grove Road, San Diego, CA 92131-1649.

San Joaquin Valley Air Pollution Control District, 1990 E. Gettysburg, Fresno, CA 93726.

San Luis Obispo County Air Pollution Control District, 3433 Roberto Court, San Luis Obispo, CA 93401-7126.

Santa Barbara County Air Pollution Control District, 260 North San Antonio Road, Suite A, Santa Barbara, CA 93110-1315.

Shasta County Air Quality Management District, 1855 Placer Street, Suite 101, Redding, CA 96001-1759.

Siskiyou County Air Pollution Control District, 525 So. Foothill Drive, Yreka, CA 96097-3036.

South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA 91765-4182.

Tehama County Air Pollution Control District, P.O. Box 8069 (1750 Walnut Street), Red Bluff, CA 96080-0038.

Tuolumne County Air Pollution Control District, 22365 Airport, Columbia, CA 95310.

Ventura County Air Pollution Control District, 669 County Square Drive, 2nd Floor, Ventura, CA 93003-5417.

Yolo-Solano Air Quality Management District, 1947 Galileo Court, Suite 103, Davis, CA 95616-4882.

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(7) State of Colorado, Department of Public Health and Environment, 4300 Cherry Creek Drive South, Denver, CO 80222-1530.

NOTE: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(8) State of Connecticut, Bureau of Air Management, Department of Environmental Protection, State Office Building, 165 Capitol Avenue, Hartford, CT 06106.

(9) State of Delaware, Department of Natural Resources & Environmental Control, 89 Kings Highway, P.O. Box 1401, Dover, Delaware 19903.

(10) District of Columbia, Department of Public Health, Air Quality Division, 51 N Street, NE., Washington, DC 20002.

(11) State of Florida: Florida Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, MS 5500, Tallahassee, Florida 32399-2400.

(12) State of Georgia: Georgia Department of Natural Resources, Environmental Protection Division, Air Protection Branch, 4244 International Parkway, Suite 120, Atlanta, Georgia 30354.

(13) Hawaii:

Clean Air Branch, Hawaii Department of Health, 919 Ala Moana Blvd., Suite 203, Honolulu, HI 96814.

NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(14) State of Idaho, Department of Health and Welfare, Statehouse, Boise, ID 83701.

(15) State of Illinois: Illinois Environmental Protection Agency, 1021 North Grand Avenue East, Springfield, Illinois 62794.

(16) State of Indiana: Indiana Department of Environmental Management, Office of Air Quality, 100 North Senate Avenue, Indianapolis, Indiana 46204.

(17) State of Iowa: Iowa Department of Natural Resources, Environmental Protection Division, Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, IA 50322.

(18) State of Kansas: Kansas Department of Health and Environment, Bureau of Air and Radiation, 1000 S.W. Jackson, Suite 310, Topeka, KS 66612-1366.

(19) Commonwealth of Kentucky: Kentucky Department for Environmental Protection, Division for Air Quality, 300 Sower Boulevard, 2nd Floor, Frankfort, Kentucky 40601 or local agency, Louisville Metro Air Pollution Control District, 701 W. Ormsby Ave., Suite 303, Louisville, Kentucky 40203.

(20) State of Louisiana: Louisiana Department of Environmental Quality, P.O. Box 4301, Baton Rouge, Louisiana 70821-4301.

NOTE: For a list of delegated standards for Louisiana (excluding Indian country), see paragraph (e)(2) of this section.

(21) State of Maine, Bureau of Air Quality Control, Department of Environmental Protection, State House, Station No. 17, Augusta, ME 04333.

(22) State of Maryland, Department of the Environment, 1800 Washington Boulevard, Suite 705, Baltimore, Maryland 21230.

(23) Commonwealth of Massachusetts, Division of Air Quality Control, Department of Environmental Protection, One Winter Street, 7th floor, Boston, MA 02108.

(24) State of Michigan: Michigan Department of Natural Resources and Environment, Air Quality Division, P.O. Box 30028, Lansing, Michigan 48909.

(25) State of Minnesota: Minnesota Pollution Control Agency, Division of Air Quality, 520 Lafayette Road North, St. Paul, Minnesota 55155.



**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

(26) State of Mississippi: Hand Deliver or Courier: Mississippi Department of Environmental Quality, Office of Pollution Control, Air Division, 515 East Amite Street, Jackson, Mississippi 39201, Mailing Address: Mississippi Department of Environmental Quality, Office of Pollution Control, Air Division, P.O. Box 2261, Jackson, Mississippi 39225.

(27) State of Missouri: Missouri Department of Natural Resources, Division of Environmental Quality, P.O. Box 176, Jefferson City, MO 65102.

(28) State of Montana, Department of Environmental Quality, 1520 E. 6th Ave., PO Box 200901, Helena, MT 59620-0901.

NOTE: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(29) State of Nebraska, Nebraska Department of Environmental Control, P.O. Box 94877, State House Station, Lincoln, NE 68509.

Lincoln-Lancaster County Health Department, Division of Environmental Health, 2200 St. Marys Avenue, Lincoln, NE 68502

(30) Nevada:

Nevada Division of Environmental Protection, 901 South Stewart Street, Suite 4001, Carson City, NV 89701-5249.

Clark County Department of Air Quality and Environmental Management, 500 S. Grand Central Parkway, 1st Floor, P.O. Box 555210, Las Vegas, NV 89155-5210.

Washoe County Health District, Air Quality Management Division, 1001 E. 9th Street, Building A, Suite 115A, Reno, NV 89520.

NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(31) State of New Hampshire, Air Resources Division, Department of Environmental Services, 64 North Main Street, Caller Box 2033, Concord, NH 03302-2033.

(32) State of New Jersey: New Jersey Department of Environmental Protection, Division of Environmental Quality, Enforcement Element, John Fitch Plaza, CN-027, Trenton, NJ 08625.

(1) The following table lists the specific source and pollutant categories that have been delegated to the states in Region II. The (X) symbol is used to indicate each category that has been delegated.

	<b>Subpart</b>	<b>State</b>			
		<b>New Jersey</b>	<b>New York</b>	<b>Puerto Rico</b>	<b>Virgin Islands</b>
D	Fossil-Fuel Fired Steam Generators for Which Construction Commenced After August 17, 1971 (Steam Generators and Lignite Fired Steam Generators)	X	X	X	X
Da	Electric Utility Steam Generating Units for Which Construction Commenced After September 18, 1978	X		X	
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
E	Incinerators	X	X	X	X
F	Portland Cement Plants	X	X	X	X
G	Nitric Acid Plants	X	X	X	X
H	Sulfuric Acid Plants	X	X	X	X
I	Asphalt Concrete Plants	X	X	X	X
J	Petroleum Refineries—(All Categories)	X	X	X	X
K	Storage Vessels for Petroleum Liquids Constructed After June 11, 1973, and prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids Constructed After May 18, 1978	X	X	X	
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Ingot Production Plants	X	X	X	X
N	Iron and Steel Plants	X	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	X
Q	Primary Zinc Smelters	X	X	X	X
R	Primary Lead Smelters	X	X	X	X
S	Primary Aluminum Reduction Plants	X	X	X	X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate	X	X	X	X
Y	Coal Preparation Plants	X	X	X	X
Z	Ferroalloy Production Facilities	X	X	X	X
AA	Steel Plants: Electric Arc Furnaces	X	X	X	X
AAa	Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels in Steel Plants	X	X	X	
BB	Kraft Pulp Mills	X	X	X	
CC	Glass Manufacturing Plants	X	X	X	
DD	Grain Elevators	X	X	X	
EE	Surface Coating of Metal Furniture	X	X	X	
GG	Stationary Gas Turbines	X	X	X	
HH	Lime Plants	X	X	X	
KK	Lead Acid Battery Manufacturing Plants	X	X		
LL	Metallic Mineral Processing Plants	X	X	X	
MM	Automobile and Light-Duty Truck Surface Coating Operations	X	X		
NN	Phosphate Rock Plants	X	X		
PP	Ammonium Sulfate Manufacturing Plants	X	X		
QQ	Graphic Art Industry Publication Rotogravure Printing	X	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	
SS	Industrial Surface Coating: Large Appliances	X	X	X	
TT	Metal Coil Surface Coating	X	X	X	
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	
VV	Equipment Leaks of Volatile Organic Compounds in Synthetic Organic Chemical Manufacturing Industry	X		X	
WW	Beverage Can Surface Coating Industry	X	X	X	
XX	Bulk Gasoline Terminals	X	X	X	
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X		X	
HHH	Synthetic Fiber Production Facilities	X		X	
JJJ	Petroleum Dry Cleaners	X	X	X	
KKK	Equipment Leaks of VOC from Onshore Natural Gas Processing Plants				
LLL	Onshore Natural Gas Processing Plants; SO <sub>2</sub> Emissions		X		
OOO	Nonmetallic Mineral Processing Plants		X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants		X	X	

(33) State of New Mexico: New Mexico Environment Department, P.O. Box 5469, Santa Fe, New Mexico 87502-5469. Note: For a list of delegated standards for New Mexico (excluding Bernalillo County and Indian country), see paragraph (e)(1) of this section.

(i) Albuquerque-Bernalillo County Air Quality Control Board, c/o Environmental Health Department, P.O. Box 1293, Albuquerque, New Mexico 87103.

(ii) [Reserved]

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(34) New York: New York State Department of Environmental Conservation, 50 Wolf Road Albany, New York 12233, attention: Division of Air Resources.

(35) State of North Carolina: North Carolina Department of Environmental Quality, Division of Air Quality, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641 or local agencies, Forsyth County Office of Environmental Assistance and Protection, 201 North Chestnut Street, Winston-Salem, North Carolina 27101-4120; Mecklenburg County Land Use and Environmental Services Agency, Air Quality, 2145 Suttle Avenue, Charlotte, North Carolina 28208; Western North Carolina Regional Air Quality Agency, 125 S. Lexington Ave., Suite 101, Asheville, North Carolina 28801-3661.

(36) State of North Dakota, Division of Air Quality, North Dakota Department of Health, P.O. Box 5520, Bismarck, ND 58506-5520.

NOTE: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(37) State of Ohio:

(i) Medina, Summit and Portage Counties; Director, Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308.

(ii) Stark County; Director, Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

(iii) Butler, Clermont, Hamilton, and Warren Counties; Director, Hamilton County Department of Environmental Services, 250 William Howard Taft Road, Cincinnati, Ohio 45219-2660.

(iv) Cuyahoga County; Commissioner, Cleveland Department of Public Health, Division of Air Quality, 75 Erieview Plaza 2nd Floor, Cleveland, Ohio 44114.

(v) Clark, Darke, Greene, Miami, Montgomery, and Preble Counties; Director, Regional Air Pollution Control Agency, 117 South Main Street, Dayton, Ohio 45422-1280.

(vi) Lucas County and the City of Rossford (in Wood County); Director, City of Toledo, Division of Environmental Services, 348 South Erie Street, Toledo, OH 43604.

(vii) Adams, Brown, Lawrence, and Scioto Counties; Portsmouth Local Air Agency, 605 Washington Street, Third Floor, Portsmouth, OH 45662.

(viii) Allen, Ashland, Auglaize, Crawford, Defiance, Erie, Fulton, Hancock, Hardin, Henry, Huron, Marion, Mercer, Ottawa, Paulding, Putnam, Richland, Sandusky, Seneca, Van Wert Williams, Wood (Except City of Rossford), and Wyandot Counties; Ohio Environmental Protection Agency, Northwest District Office, Air Pollution Control, 347 North Dunbridge Road, Bowling Green, Ohio 43402.

(ix) Ashtabula, Carroll, Columbiana, Holmes, Lorain, and Wayne Counties; Ohio Environmental Protection Agency, Northeast District Office, Air Pollution Unit, 2110 East Aurora Road, Twinsburg, OH 44087.

(x) Athens, Belmont, Coshocton, Gallia, Guemsey, Harrison, Hocking, Jackson, Jefferson, Meigs, Monroe, Morgan, Muskingum, Noble, Perry, Pike, Ross, Tuscarawas, Vinton, and Washington Counties; Ohio Environmental Protection Agency, Southeast District Office, Air Pollution Unit, 2195 Front Street, Logan, OH 43138.

(xi) Champaign, Clinton, Highland, Logan, and Shelby Counties; Ohio Environmental Protection Agency, Southwest District Office, Air Pollution Unit, 401 East Fifth Street, Dayton, Ohio 45402-2911.

(xii) Delaware, Fairfield, Fayette, Franklin, Knox, Licking, Madison, Morrow, Pickaway, and Union Counties; Ohio Environmental Protection Agency, Central District Office, Air Pollution control, 50 West Town Street, Suite 700, Columbus, Ohio 43215.

(xiii) Geauga and Lake Counties; Lake County General Health District, Air Pollution Control, 33 Mill Street, Painesville, OH 44077.

(xiv) Mahoning and Trumbull Counties; Mahoning-Trumbull Air Pollution Control Agency, 345 Oak Hill Avenue, Suite 200, Youngstown, OH 44502.

(38) State of Oklahoma, Oklahoma State Department of Health, Air Quality Service, P.O. Box 53551, Oklahoma City, OK 73152.

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(i) Oklahoma City and County: Director, Oklahoma City-County Health Department, 921 Northeast 23rd Street, Oklahoma City, OK 73105.

(ii) Tulsa County: Tulsa City-County Health Department, 4616 East Fifteenth Street, Tulsa, OK 74112.

(39) State of Oregon. (i) Oregon Department of Environmental Quality (ODEQ), 811 SW Sixth Avenue, Portland, OR 97204-1390, <http://www.deq.state.or.us>.

(ii) Lane Regional Air Pollution Authority (LRAPA), 1010 Main Street, Springfield, Oregon 97477, <http://www.lrapa.org>.

(40)(i) City of Philadelphia, Department of Public Health, Air Management Services, 321 University Avenue, Philadelphia, Pennsylvania 19104.

(ii) Commonwealth of Pennsylvania, Department of Environmental Protection, Bureau of Air Quality Control, P.O. Box 8468, 400 Market Street, Harrisburg, Pennsylvania 17105.

(iii) Allegheny County Health Department, Bureau of Environmental Quality, Division of Air Quality, 301 39th Street, Pittsburgh, Pennsylvania 15201.

(41) State of Rhode Island, Division of Air and Hazardous Materials, Department of Environmental Management, 291 Promenade Street, Providence, RI 02908.

(42) State of South Carolina: South Carolina Department of Health and Environmental Control, 2600 Bull Street, Columbia, South Carolina 29201.

(43) State of South Dakota, Air Quality Program, Department of Environment and Natural Resources, Joe Foss Building, 523 East Capitol, Pierre, SD 57501-3181.

NOTE: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(44) State of Tennessee: Tennessee Department of Environment and Conservation, Division of Air Pollution Control, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 15th Floor, Nashville, Tennessee 37243, or local agencies, Knox County Air Quality Management—Department of Public Health, 140 Dameron Avenue, Knoxville, Tennessee 37917; Metro Public Health Department, Pollution Control Division, 2500 Charlotte Ave., Nashville, Tennessee 37209; Chattanooga-Hamilton County Air Pollution Control Bureau, 6125 Preservation Drive, Chattanooga, Tennessee 37416; Shelby County Health Department, Pollution Control Section, 814 Jefferson Avenue, Memphis, Tennessee 38105.

(45) State of Texas, Texas Air Control Board, 6330 Highway 290 East, Austin, TX 78723.

(46) State of Utah, Division of Air Quality, Department of Environmental Quality, P.O. Box 144820, Salt Lake City, UT 84114-4820.

NOTE: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(47) State of Vermont, Air Pollution Control Division, Agency of Natural Resources, Building 3 South, 103 South Main Street, Waterbury, VT 05676.

(48) Commonwealth of Virginia, Department of Environmental Quality, 629 East Main Street, Richmond, Virginia 23219.

(49) *State of Washington.* (i) Washington State Department of Ecology (Ecology), P.O. Box 47600, Olympia, WA 98504-7600, <http://www.ecy.wa.gov/>

(ii) Benton Clean Air Authority (BCAA), 650 George Washington Way, Richland, WA 99352-4289, <http://www.bcaa.net/>

(iii) Northwest Air Pollution Control Authority (NWAPA), 1600 South Second St., Mount Vernon, WA 98273-5202, <http://www.nwair.org/>

(iv) Olympic Regional Clean Air Agency (ORCAA), 909 Sleater-Kinney Road S.E., Suite 1, Lacey, WA 98503-1128, <http://www.orcaa.org/>

(v) Puget Sound Clean Air Agency (PSCAA), 110 Union Street, Suite 500, Seattle, WA 98101-2038, <http://www.pscleanair.org/>

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

(vi) Spokane County Air Pollution Control Authority (SCAPCA), West 1101 College, Suite 403, Spokane, WA 99201,  
<http://www.scapca.org/>

(vii) Southwest Clean Air Agency (SWCAA), 1308 NE. 134th St., Vancouver, WA 98685-2747,  
<http://www.swcleanair.org/>

(viii) Yakima Regional Clean Air Authority (YRCAA), 6 South 2nd Street, Suite 1016, Yakima, WA 98901,  
<http://co.yakima.wa.us/cleanair/default.htm>

(ix) The following table lists the delegation status of the New Source Performance Standards for the State of Washington. An “X” indicates the subpart has been delegated, subject to all the conditions and limitations set forth in Federal law and the letters granting delegation. Some authorities cannot be delegated and are retained by EPA. Refer to the letters granting delegation for a discussion of these retained authorities. The dates noted at the end of the table indicate the effective dates of Federal rules that have been delegated. Authority for implementing and enforcing any amendments made to these rules after these effective dates are not delegated.

**NSPS SUBPARTS DELEGATED TO WASHINGTON AIR AGENCIES**

Subpart <sup>1</sup>	Washington							
	Ecology <sup>2</sup>	BCAA <sup>3</sup>	NWAPA <sup>4</sup>	ORCAA <sup>5</sup>	PSCAA <sup>6</sup>	SCAPCA <sup>7</sup>	SWCAA <sup>8</sup>	YRCAA <sup>9</sup>
A General Provisions	X	X	X	X	X	X	X	X
B Adoption and Submittal of State Plans for Designated Facilities								
C Emission Guidelines and Compliance Times								
Cb Large Municipal Waste Combustors that are Constructed on or before September 20, 1994 (Emission Guidelines and Compliance Times)								
Cc Municipal Solid Waste Landfills (Emission Guidelines and Compliance Times)								
Cd Sulfuric Acid Production Units (Emission Guidelines and Compliance Times)								
Ce Hospital/Medical/Infectious Waste Incinerators (Emission Guidelines and Compliance Times)								
D Fossil-Fuel-Fired Steam Generators for which Construction is Commenced after August 17, 1971	X	X	X	X	X	X	X	X
Da Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978	X	X	X	X	X	X	X	X
Db Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X	X	X	X	X
Dc Small Industrial-	X	X	X	X	X	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

Commercial-Institutional Steam Generating Units								
E Incinerators	X	X	X	X	X	X	X	X
Ea Municipal Waste Combustors for which Construction is Commenced after December 20, 1989 and on or before September 20, 1994	X	X	X	X	X	X	X	X
Eb—Large Municipal Waste Combustors		X		X	X	X		
Ec—Hospital/Medical/Infectious Waste Incinerators	X	X	X	X	X	X		
F Portland Cement Plants	X	X	X	X	X	X	X	X
G Nitric Acid Plants	X	X	X	X	X	X	X	X
H Sulfuric Acid Plants	X	X	X	X	X	X	X	X
I Hot Mix Asphalt Facilities	X	X	X	X	X	X	X	X
J Petroleum Refineries	X	X	X	X	X	X	X	X
K Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after June 11, 1973 and prior to May 19, 1978	X	X	X	X	X	X	X	X
Ka Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced after May 18, 1978 and prior to July 23, 1984	X	X	X	X	X	X	X	X
Kb VOC Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	X	X	X	X	X	X	X	X
L Secondary Lead Smelters	X	X	X	X	X	X	X	X
M Secondary Brass and Bronze Production Plants	X	X	X	X	X	X	X	X
N Primary Emissions from Basic Oxygen Process Furnaces for which Construction is Commenced after June 11, 1973	X	X	X	X	X	X	X	X
Na Secondary Emissions from Basic Oxygen Process Steel-making Facilities for which Construction is Commenced after January 20, 1983	X	X	X	X	X	X	X	X
O Sewage Treatment Plants	X	X	X	X	X	X	X	X
P Primary Copper Smelters	X	X	X	X	X	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

Q Primary Zinc Smelters	X	X	X	X	X	X	X	X
R Primary Lead Smelters	X	X	X	X	X	X	X	X
S Primary Aluminum Reduction Plants <sup>10</sup>	X							
T Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X	X	X	X	X
U Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X	X	X	X	X
V Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X	X	X	X	X
W Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X	X	X	X	X
X Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	X	X	X	X	X
Y Coal Preparation Plants	X	X	X	X	X	X	X	X
Z Ferroalloy Production Facilities	X	X	X	X	X	X	X	X
AA Steel Plants: Electric Arc Furnaces Constructed after October 21, 1974 and on or before August 17, 1983	X	X	X	X	X	X	X	X
AAa Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed after August 7, 1983	X	X	X	X	X	X	X	X
BB Kraft Pulp Mills <sup>11</sup>	X							
CC Glass Manufacturing Plants	X	X	X	X	X	X	X	X
DD Grain Elevators	X	X	X	X	X	X	X	X
EE Surface Coating of Metal Furniture	X	X	X	X	X	X	X	X
GG Stationary Gas Turbines	X	X	X	X	X	X	X	X
HH Lime Manufacturing Plants	X	X	X	X	X	X	X	X
KK Lead-Acid Battery Manufacturing Plants	X	X	X	X	X	X	X	X
LL Metallic Mineral Processing Plants	X	X	X	X	X	X	X	X
MM Automobile and Light Duty Truck Surface Coating Operations	X	X	X	X	X	X	X	X
NN Phosphate Rock Plants	X	X	X	X	X	X	X	X
PP Ammonium Sulfate Manufacture	X	X	X	X	X	X	X	X
QQ Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	X	X	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

RR Pressure Sensitive Tape and Label Surface Coating Standards	X	X	X	X	X	X	X	X
SS Industrial Surface Coating: Large Appliances	X	X	X	X	X	X	X	X
TT Metal Coil Surface Coating	X	X	X	X	X	X	X	X
UU Asphalt Processing and Asphalt Roof Manufacture	X	X	X	X	X	X	X	X
VV Equipment Leaks of VOC in Synthetic Organic Chemical Manufacturing Industry	X	X	X	X	X	X	X	X
WW Beverage Can Surface Coating Industry	X	X	X	X	X	X	X	X
XX Bulk Gasoline Terminals	X	X	X	X	X	X	X	X
AAA New Residential Wood Heaters								
BBB Rubber Tire Manufacturing Industry	X	X	X	X	X	X	X	X
DDD VOC Emissions from Polymer Manufacturing Industry	X	X	X	X	X	X	X	X
FFF Flexible Vinyl and Urethane Coating and Printing	X	X	X	X	X	X	X	X
GGG Equipment Leaks of VOC in Petroleum Refineries	X	X	X	X	X	X	X	X
HHH Synthetic Fiber Production Facilities	X	X	X	X	X	X	X	X
III VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Air Oxidation Unit Processes	X	X	X	X	X	X	X	X
JJJ Petroleum Dry Cleaners	X	X	X	X	X	X	X	X
KKK Equipment Leaks of VOC from Onshore Natural Gas Processing Plants	X	X	X	X	X	X	X	X
LLL Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	X	X	X	X	X	X	X	X
NNN VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations	X	X	X	X	X	X	X	X
OOO Nonmetallic Mineral Processing Plants			X		X		X	
PPP Wool Fiberglass Insulation Manufacturing Plants	X	X	X	X	X	X	X	X
QQQ VOC Emissions from Petroleum Refinery Wastewater Systems	X	X	X	X	X	X	X	X
RRR VOCs from Synthetic Organic Chemical Manufacturing Industry	X	X	X	X	X	X	X	X



**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

Reactor Processes								
SSS Magnetic Tape Coating Facilities	X	X	X	X	X	X	X	X
TTT Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	X	X	X	X	X
UUU Calciners and Dryers in Mineral Industries	X	X	X	X	X	X	X	X
VVV Polymeric Coating of Supporting Substrates Facilities	X	X	X	X	X	X	X	X
WWW Municipal Solid Waste Landfills	X	X	X	X	X	X	X	X
AAAA Small Municipal Waste Combustion Units for which Construction is Commenced after August 30, 1999 or for which Modification or Reconstruction is Commenced after June 6, 2001	X	X		X	X	X		X
BBBB Small Municipal Waste Combustion Units Constructed on or before August 30, 1999 (Emission Guidelines and Compliance Times)								
CCCC Commercial and Industrial Solid Waste Incineration Units for which Construction is Commenced after November, 30, 1999 or for which Modification or Reconstruction is Commenced on or after June 1, 2001	X	X		X	X	X		X
DDDD Commercial and Industrial Solid Waste Incineration Units that Commenced Construction on or before November 30, 1999 (Emission Guidelines and Compliance Times)								

<sup>1</sup>Any authority within any subpart of this part that is not delegable, is not delegated. Please refer to Attachment B to the delegation letters for a listing of the NSPS authorities excluded from delegation.

<sup>2</sup>Washington State Department of Ecology, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

<sup>3</sup>Benton Clean Air Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

<sup>4</sup>Northwest Air Pollution Authority, for all NSPS delegated, as in effect on July 1, 2000.

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## APPENDIX NSPS, SUBPART A

### 40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.

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<sup>5</sup>Olympic Regional Clean Air Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

<sup>6</sup>Puget Sound Clean Air Authority, for all NSPS delegated, as in effect on July 1, 2002.

<sup>7</sup>Spokane County Air Pollution Control Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

<sup>8</sup>Southwest Clean Air Agency, for all NSPS delegated, as in effect on July 1, 2000.

<sup>9</sup>Yakima Regional Clean Air Authority, for 40 CFR 60.17(h)(1), (h)(2), (h)(3) and 40 CFR part 60, subpart AAAA, as in effect on June 6, 2001; for 40 CFR part 60, subpart CCCC, as in effect on June 1, 2001; and for all other NSPS delegated, as in effect February 20, 2001.

<sup>10</sup>Subpart S of this part is not delegated to local agencies in Washington because the Washington State Department of Ecology retains sole authority to regulate Primary Aluminum Plants, pursuant to Washington Administrative Code 173-415-010.

<sup>11</sup>Subpart BB of this part is not delegated to local agencies in Washington because the Washington State Department of Ecology retains sole authority to regulate Kraft and Sulfite Pulp Mill, pursuant to Washington State Administrative Code 173-405-012 and 173-410-012.

(50) State of West Virginia, Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE., Charleston, West Virginia 25304.

(51) State of Wisconsin: Wisconsin Department of Natural Resources, 101 South Webster St., P.O. Box 7921, Madison, Wisconsin 53707-7921.

(52) State of Wyoming, Department of Environmental Quality, Air Quality Division, Herschler Building, 122 West 25th Street, Cheyenne, WY 82002.

NOTE: For a table listing Region VIII's NSPS delegation status, see paragraph (c) of this section.

(53) Territory of Guam: Guam Environmental Protection Agency, P.O. Box 22439 GMF, Barrigada, Guam 96921.

NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(54) Commonwealth of Puerto Rico: Commonwealth of Puerto Rico Environmental Quality Board, P.O. Box 11488, Santurce, PR 00910, Attention: Air Quality Area Director (see table under §60.4(b)(FF)(1)).

(55) U.S. Virgin Islands: U.S. Virgin Islands Department of Conservation and Cultural Affairs, P.O. Box 578, Charlotte Amalie, St. Thomas, VI 00801.

(56) American Samoa: American Samoa Environmental Protection Agency, P.O. Box PPA, Pago Pago, American Samoa 96799.

NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(57) Commonwealth of the Northern Mariana Islands: CNMI Division of Environmental Quality, P.O. Box 501304, Saipan, MP 96950.

NOTE: For tables listing the delegation status of agencies in Region IX, see paragraph (d) of this section.

(c) The delegation status table for New Source Performance Standards for Region VIII can be found online at <http://www2.epa.gov/region8/air-program>.

(d) The following tables list the specific part 60 standards that have been delegated unchanged to the air pollution control agencies in Region IX. The (X) symbol is used to indicate each standard that has been delegated. The following provisions of this subpart are not delegated: §§60.4(b), 60.8(b), 60.9, 60.11(b), 60.11(e), 60.13(a), 60.13(d)(2), 60.13(g), 60.13(i).

(1) *Arizona*. The following table identifies delegations for Arizona:

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR ARIZONA**

	Subpart	Air pollution control agency			
		Arizona DEQ	Maricopa County	Pima County	Pinal County
A	General Provisions	X	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	X	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
Dc	Small Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
E	Incinerators	X	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X	X	X	X
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994	X	X	X	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X	X	X	
F	Portland Cement Plants	X	X	X	X
G	Nitric Acid Plants	X	X	X	X
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011		X	X	
H	Sulfuric Acid Plant	X	X	X	X
I	Hot Mix Asphalt Facilities	X	X	X	X
J	Petroleum Refineries	X	X	X	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007		X	X	
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	X	X
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	X	X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	X	X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X	X	X	X
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	X
Q	Primary Zinc Smelters	X	X	X	X
R	Primary Lead Smelters	X	X	X	X
S	Primary Aluminum Reduction Plants	X	X	X	X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate	X	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

	Storage Facilities				
Y	Coal Preparation and Processing Plants	X	X	X	X
Z	Ferroalloy Production Facilities	X	X	X	X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	X	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X	X	X	X
BB	Kraft Pulp Mills	X	X	X	X
BBa	Kraft Pulp Mill Sources for which Construction, Reconstruction or Modification Commenced after May 23, 2013		X	X	
CC	Glass Manufacturing Plants	X	X	X	X
DD	Grain Elevators	X	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X	X
FF	(Reserved)				
Ga	Nitric Acid Plants for which Construction, Reconstruction or Modification Commenced after October 14, 2011		X		
GG	Stationary Gas Turbines	X	X	X	X
HH	Lime Manufacturing Plants	X	X	X	X
KK	Lead-Acid Battery Manufacturing Plants	X	X	X	X
LL	Metallic Mineral Processing Plants	X	X	X	X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X	X
NN	Phosphate Rock Plants	X	X	X	X
PP	Ammonium Sulfate Manufacture	X	X	X	X
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	X
SS	Industrial Surface Coating: Large Appliances	X	X	X	X
TT	Metal Coil Surface Coating	X	X	X	X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	X
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing	X	X	X	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006	X	X	X	
WW	Beverage Can Surface Coating Industry	X	X	X	X
XX	Bulk Gasoline Terminals	X	X	X	X
AAA	New Residential Wood Heaters	X	X	X	X
BBB	Rubber Tire Manufacturing Industry	X	X	X	X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X	X	X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	X
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	X	X
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	X	X	X	
HHH	Synthetic Fiber Production Facilities	X	X	X	X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X	X	X	X
JJJ	Petroleum Dry Cleaners	X	X	X	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

LLL	Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	X	X	X	X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X	X	X
OOO	Nonmetallic Mineral Processing Plants	X	X	X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	X	X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X	X	X	X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X	X		
SSS	Magnetic Tape Coating Facilities	X	X	X	X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	X
UUU	Calciners and Dryers in Mineral Industries	X	X	X	
VVV	Polymeric Coating of Supporting Substrates Facilities	X	X	X	X
WWW	Municipal Solid Waste Landfills	X	X	X	
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	X	X	X	
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001	X	X	X	
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	X	X	X	
GGGG	(Reserved)				
HHHH	(Reserved)				
III	Stationary Compression Ignition Internal Combustion Engines	X	X	X	
JJJ	Stationary Spark Ignition Internal Combustion Engines		X	X	
KKKK	Stationary Combustion Turbines	X	X	X	
LLLL	New Sewage Sludge Incineration Units			X	
MMMM	Emissions Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units	X			
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution		X	X	
QQQQ	Standards of Performance for New Residential Hydronic Heaters and Forced-Air Furnaces		X	X	
TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units		X		

(2) *California*. The following tables identify delegations for each of the local air pollution control agencies of California.

(i) Delegations for Amador County Air Pollution Control District, Antelope Valley Air Quality Management District, Bay Area Air Quality Management District, and Butte County Air Quality Management District are shown in the following table:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR AMADOR COUNTY APCD, ANTELOPE VALLEY AQMD, BAY AREA AQMD, AND BUTTE COUNTY AQMD**

	Subpart	Air pollution control agency			
		Amador County APCD	Antelope Valley AQMD	Bay Area AQMD	Butte County AQMD

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

A	General Provisions		X		
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971		X	X	
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978		X	X	
Db	Industrial-Commercial-Institutional Steam Generating Units		X	X	
Dc	Small Industrial-Commercial-Institutional Steam Generating Units		X	X	
E	Incinerators		X	X	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994		X	X	
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994		X		
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996		X		
F	Portland Cement Plants		X	X	
G	Nitric Acid Plants		X	X	
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011				
H	Sulfuric Acid Plant		X	X	
I	Hot Mix Asphalt Facilities		X	X	
J	Petroleum Refineries		X	X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007		X		
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978		X	X	
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X	X	
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984		X	X	
L	Secondary Lead Smelters		X	X	
M	Secondary Brass and Bronze Production Plants		X	X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973		X	X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983		X	X	
O	Sewage Treatment Plants		X	X	
P	Primary Copper Smelters		X	X	
Q	Primary Zinc Smelters		X	X	
R	Primary Lead Smelters		X	X	
S	Primary Aluminum Reduction Plants		X	X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X		
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X	X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X	X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X	X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities		X	X	

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

Y	Coal Preparation and Processing Plants		X	X	
Z	Ferroalloy Production Facilities		X	X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983		X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983		X	X	
BB	Kraft Pulp Mills		X	X	
CC	Glass Manufacturing Plants		X	X	
DD	Grain Elevators		X	X	
EE	Surface Coating of Metal Furniture		X	X	
FF	(Reserved)				
GG	Stationary Gas Turbines		X	X	
HH	Lime Manufacturing Plants		X	X	
KK	Lead-Acid Battery Manufacturing Plants		X	X	
LL	Metallic Mineral Processing Plants		X	X	
MM	Automobile and Light Duty Trucks Surface Coating Operations		X	X	
NN	Phosphate Rock Plants		X	X	
PP	Ammonium Sulfate Manufacture		X	X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing		X	X	
RR	Pressure Sensitive Tape and Label Surface Coating Operations		X	X	
SS	Industrial Surface Coating: Large Appliances		X	X	
TT	Metal Coil Surface Coating		X	X	
UU	Asphalt Processing and Asphalt Roofing Manufacture		X	X	
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing		X	X	
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006		X		
WW	Beverage Can Surface Coating Industry		X	X	
XX	Bulk Gasoline Terminals				
AAA	New Residential Wood Heaters		X	X	
BBB	Rubber Tire Manufacturing Industry		X	X	
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry		X	X	
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing		X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries		X	X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006		X		
HHH	Synthetic Fiber Production Facilities		X	X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes		X		
JJJ	Petroleum Dry Cleaners		X	X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants		X	X	
LLL	Onshore Natural Gas Processing: SO <sub>2</sub> Emissions		X		
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic		X	X	

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

	Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations				
OOO	Nonmetallic Mineral Processing Plants		X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants		X	X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems		X		
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes		X		
SSS	Magnetic Tape Coating Facilities		X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		X	X	
UUU	Calciners and Dryers in Mineral Industries		X	X	
VVV	Polymeric Coating of Supporting Substrates Facilities		X	X	
WWW	Municipal Solid Waste Landfills		X		
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001		X		
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001		X		
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006		X		
GGGG	(Reserved)				
HHHH	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines		X		
JJJJ	Stationary Spark Ignition Internal Combustion Engines		X		
KKKK	Stationary Combustion Turbines		X		
LLLL	New Sewage Sludge Incineration Units				
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution				

(ii) [Reserved]

(iii) Delegations for Glenn County Air Pollution Control District, Great Basin Unified Air Pollution Control District, Imperial County Air Pollution Control District, and Kern County Air Pollution Control District are shown in the following table:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR GLENN COUNTY APCD, GREAT BASIN UNIFIED APCD, IMPERIAL COUNTY APCD, AND KERN COUNTY APCD**

	Subpart	Air pollution control agency			
		Glenn County APCD	Great Basin Unified APCD	Imperial County APCD	Kern County APCD
A	General Provisions		X		X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971		X		X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978		X		X



**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

Db	Industrial-Commercial-Institutional Steam Generating Units		X		X
Dc	Small Industrial Steam Generating Units		X		X
E	Incinerators		X		X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994		X		
Eb	Municipal Waste Combustors Constructed After September 20, 1994				
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				
F	Portland Cement Plants		X		X
G	Nitric Acid Plants		X		X
H	Sulfuric Acid Plants		X		
I	Hot Mix Asphalt Facilities		X		X
J	Petroleum Refineries		X		X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978		X		X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X		X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984		X		X
L	Secondary Lead Smelters		X		X
M	Secondary Brass and Bronze Production Plants		X		X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973		X		X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983		X		X
O	Sewage Treatment Plants		X		X
P	Primary Copper Smelters		X		X
Q	Primary Zinc Smelters		X		X
R	Primary Lead Smelters		X		X
S	Primary Aluminum Reduction Plants		X		X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X		X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X		X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X		X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X		X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities		X		X
Y	Coal Preparation Plants		X		X
Z	Ferroalloy Production Facilities		X		X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983		X		X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983		X		X
BB	Kraft pulp Mills		X		X
CC	Glass Manufacturing Plants		X		X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

DD	Grain Elevators		X		X
EE	Surface Coating of Metal Furniture		X		X
FF	(Reserved)				
GG	Stationary Gas Turbines		X		X
HH	Lime Manufacturing Plants		X		X
KK	Lead-Acid Battery Manufacturing Plants		X		X
LL	Metallic Mineral Processing Plants		X		X
MM	Automobile and Light Duty Trucks Surface Coating Operations		X		X
NN	Phosphate Rock Plants		X		X
PP	Ammonium Sulfate Manufacture		X		X
QQ	Graphic Arts Industry: Publication Rotogravure Printing		X		X
RR	Pressure Sensitive Tape and Label Surface Coating Operations		X		X
SS	Industrial Surface Coating: Large Appliances		X		X
TT	Metal Coil Surface Coating		X		X
UU	Asphalt Processing and Asphalt Roofing Manufacture		X		X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry		X		X
WW	Beverage Can Surface Coating Industry		X		X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters		X		X
BBB	Rubber Tire Manufacturing Industry		X		X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry		X		X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing		X		X
GGG	Equipment Leaks of VOC in Petroleum Refineries		X		X
HHH	Synthetic Fiber Production Facilities		X		X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes		X		X
JJJ	Petroleum Dry Cleaners		X		X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants		X		X
LLL	Onshore Natural Gas Processing: SO2 Emissions				X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations		X		X
OOO	Nonmetallic Mineral Processing Plants		X		X
PPP	Wool Fiberglass Insulation Manufacturing Plants		X		X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems		X		X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes				X
SSS	Magnetic Tape Coating Facilities		X		X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		X	X	
UUU	Calciners and Dryers in Mineral Industries		X		X
VVV	Polymeric Coating of Supporting Substrates Facilities		X		X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

WWW	Municipal Solid Waste Landfills				X
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(iv) Delegations for Lake County Air Quality Management District, Lassen County Air Pollution Control District, Mariposa County Air Pollution Control District, and Mendocino County Air Pollution Control District are shown in the following table:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR LAKE COUNTY AIR QUALITY MANAGEMENT DISTRICT, LASSEN COUNTY AIR POLLUTION CONTROL DISTRICT, MARIPOSA COUNTY AIR POLLUTION CONTROL DISTRICT, AND MENDOCINO COUNTY AIR POLLUTION CONTROL DISTRICT**

	Subpart	Air pollution control agency			
		Lake County AQMD	Lassen County APCD	Mariposa County AQMD	Mendocino County AQMD
A	General Provisions	X			X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X			X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X			X
Db	Industrial-Commercial-Institutional Steam Generating Units	X			
Dc	Small Industrial Steam Generating Units	X			X
E	Incinerators	X			X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X			X
Eb	Municipal Waste Combustors Constructed After September 20, 1994				
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				
F	Portland Cement Plants	X			X
G	Nitric Acid Plants	X			X
H	Sulfuric Acid Plants	X			X
I	Hot Mix Asphalt Facilities	X			X
J	Petroleum Refineries	X			X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X			X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X			X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X			X
L	Secondary Lead Smelters	X			X
M	Secondary Brass and Bronze Production Plants	X			X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X			X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is	X			X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

	Commenced After January 20, 1983				
O	Sewage Treatment Plants	X			X
P	Primary Copper Smelters	X			X
Q	Primary Zinc Smelters	X			X
R	Primary Lead Smelters	X			X
S	Primary Aluminum Reduction Plants	X			X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X			X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X			X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X			X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X			X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X			X
Y	Coal Preparation Plants	X			X
Z	Ferroalloy Production Facilities	X			X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X			X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X			X
BB	Kraft Pulp Mills	X			X
CC	Glass Manufacturing Plants	X			X
DD	Grain Elevators	X			X
EE	Surface Coating of Metal Furniture	X			X
FF	(Reserved)				
GG	Stationary Gas Turbines	X			X
HH	Lime Manufacturing Plants	X			X
KK	Lead-Acid Battery Manufacturing Plants	X			X
LL	Metallic Mineral Processing Plants	X			X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X			X
NN	Phosphate Rock Plants	X			X
PP	Ammonium Sulfate Manufacture	X			X
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X			X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X			X
SS	Industrial Surface Coating: Large Appliances	X			X
TT	Metal Coil Surface Coating	X			X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X			X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X			X
WW	Beverage Can Surface Coating Industry	X			X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters	X			X
BBB	Rubber Tire Manufacturing Industry	X			X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X			X
EEE	(Reserved)				

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

FFF	Flexible Vinyl and Urethane Coating and Printing	X			X
GGG	Equipment Leaks of VOC in Petroleum Refineries	X			X
HHH	Synthetic Fiber Production Facilities	X			X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X			X
JJJ	Petroleum Dry Cleaners	X			X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X			X
LLL	Onshore Natural Gas Processing: SO2 Emissions	X			X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X			X
OOO	Nonmetallic Mineral Processing Plants	X			X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X			X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X			X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X			
SSS	Magnetic Tape Coating Facilities	X			X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines				
UUU	Calciners and Dryers in Mineral Industries	X			X
VVV	Polymeric Coating of Supporting Substrates Facilities	X			X
WWW	Municipal Solid Waste Landfills	X			

(v) Delegations for Modoc Air Pollution Control District, Mojave Desert Air Quality Management District, Monterey Bay Unified Air Pollution Control District and North Coast Unified Air Quality Management District are shown in the following table:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR MODOC COUNTY APCD, MOJAVE DESERT AQMD, MONTEREY BAY UNIFIED APCD, AND NORTH COAST UNIFIED AQMD**

	Subpart	Air pollution control agency			
		Modoc County APCD	Mojave Desert AQMD	Monterey Bay Unified APCD	North Coast Unified AQMD
A	General Provisions	X	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	X	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
Dc	Small Industrial-Commercial-Institutional Steam Generating Units		X	X	
E	Incinerators	X	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994		X		
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994		X		
Ec	Hospital/Medical/Infectious Waste Incinerators for Which		X		

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

	Construction is Commenced After June 20, 1996				
F	Portland Cement Plants	X	X	X	X
G	Nitric Acid Plants	X	X	X	X
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011				
H	Sulfuric Acid Plant	X	X	X	X
I	Hot Mix Asphalt Facilities	X	X	X	X
J	Petroleum Refineries	X	X	X	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007		X		
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	X	X
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	X	X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	X	X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X	X	X	X
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	X
Q	Primary Zinc Smelters	X	X	X	X
R	Primary Lead Smelters	X	X	X	X
S	Primary Aluminum Reduction Plants	X	X	X	X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	X
Y	Coal Preparation and Processing Plants	X	X	X	X
Z	Ferroalloy Production Facilities	X	X	X	X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	X	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7,	X	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

	1983				
BB	Kraft Pulp Mills	X	X	X	X
CC	Glass Manufacturing Plants	X	X	X	X
DD	Grain Elevators	X	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X	X
FF	(Reserved)				
GG	Stationary Gas Turbines	X	X	X	X
HH	Lime Manufacturing Plants	X	X	X	X
KK	Lead-Acid Battery Manufacturing Plants	X	X	X	X
LL	Metallic Mineral Processing Plants	X	X	X	X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X	X
NN	Phosphate Rock Plants	X	X	X	X
PP	Ammonium Sulfate Manufacture	X	X	X	X
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	X
SS	Industrial Surface Coating: Large Appliances	X	X	X	X
TT	Metal Coil Surface Coating	X	X	X	X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	X
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing	X	X	X	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006		X		
WW	Beverage Can Surface Coating Industry	X	X	X	X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wood Heaters	X	X	X	X
BBB	Rubber Tire Manufacturing Industry	X	X	X	X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X	X	
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	X
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	X	X
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006		X		
HHH	Synthetic Fiber Production Facilities	X	X	X	X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes		X		
JJJ	Petroleum Dry Cleaners	X	X	X	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	X	X
LLL	Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	X	X	X	X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X	X	
OOO	Nonmetallic Mineral Processing Plants	X	X	X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X	X	X	X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes		X		
SSS	Magnetic Tape Coating Facilities	X	X	X	X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	X
UUU	Calciners and Dryers in Mineral Industries		X	X	
VVV	Polymeric Coating of Supporting Substrates Facilities		X	X	X
WWW	Municipal Solid Waste Landfills		X		
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001		X		
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001		X		
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006		X		
GGGG	(Reserved)				
HHHH	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines		X		
JJJJ	Stationary Spark Ignition Internal Combustion Engines		X		
KKKK	Stationary Combustion Turbines		X		
LLLL	New Sewage Sludge Incineration Units				
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution				

(vi) Delegations for Northern Sierra Air Quality Management District, Northern Sonoma County Air Pollution Control District, Placer County Air Pollution Control District, and Sacramento Metropolitan Air Quality Management District are shown in the following table:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR NORTHERN SIERRA AIR QUALITY MANAGEMENT DISTRICT, NORTHERN SONOMA COUNTY AIR POLLUTION CONTROL DISTRICT, PLACER COUNTY AIR POLLUTION CONTROL DISTRICT, AND SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT**

	Subpart	Air pollution control agency			
		Northern Sierra AQMD	Northern Sonoma County APCD	Placer County APCD	Sacramento Metropolitan AQMD
A	General Provisions		X		X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971		X		X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978		X		X
Db	Industrial-Commercial-Institutional Steam Generating Units				X
Dc	Small Industrial Steam Generating Units				X
E	Incinerators		X		X



**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994				X
Eb	Municipal Waste Combustors Constructed After September 20, 1994				X
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996				X
F	Portland Cement Plants		X		X
G	Nitric Acid Plants		X		X
H	Sulfuric Acid Plants		X		X
I	Hot Mix Asphalt Facilities		X		X
J	Petroleum Refineries		X		X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978		X		X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984		X		X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984				X
L	Secondary Lead Smelters		X		X
M	Secondary Brass and Bronze Production Plants		X		X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973		X		X
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983				X
O	Sewage Treatment Plants		X		X
P	Primary Copper Smelters		X		X
Q	Primary Zinc Smelters		X		X
R	Primary Lead Smelters		X		X
S	Primary Aluminum Reduction Plants		X		X
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants		X		X
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants		X		X
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants		X		X
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants		X		X
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities		X		X
Y	Coal Preparation Plants		X		X
Z	Ferroalloy Production Facilities		X		X
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983		X		X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983				X
BB	Kraft pulp Mills		X		X
CC	Glass Manufacturing Plants		X		X
DD	Grain Elevators		X		X
EE	Surface Coating of Metal Furniture				X
FF	(Reserved)				
GG	Stationary Gas Turbines		X		X
HH	Lime Manufacturing Plants		X		X
KK	Lead-Acid Battery Manufacturing Plants				X
LL	Metallic Mineral Processing Plants				X
MM	Automobile and Light Duty Trucks Surface Coating Operations		X		X
NN	Phosphate Rock Plants				X
PP	Ammonium Sulfate Manufacture		X		X
QQ	Graphic Arts Industry: Publication Rotogravure Printing				X
RR	Pressure Sensitive Tape and Label Surface Coating Operations				X
SS	Industrial Surface Coating: Large Appliances				X
TT	Metal Coil Surface Coating				X
UU	Asphalt Processing and Asphalt Roofing Manufacture				X
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry				X
WW	Beverage Can Surface Coating Industry				X
XX	Bulk Gasoline Terminals				
AAA	New Residential Wool Heaters				X
BBB	Rubber Tire Manufacturing Industry				X
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry				X
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing				X
GGG	Equipment Leaks of VOC in Petroleum Refineries				X
HHH	Synthetic Fiber Production Facilities				X
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes				X
JJJ	Petroleum Dry Cleaners				X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants				X
LLL	Onshore Natural Gas Processing: SO2 Emissions				X
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations				X
OOO	Nonmetallic Mineral Processing Plants				X
PPP	Wool Fiberglass Insulation Manufacturing Plants				X
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems				X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes				X
SSS	Magnetic Tape Coating Facilities				X
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines				X
UUU	Calciners and Dryers in Mineral Industries				X
VVV	Polymeric Coating of Supporting Substrates Facilities				X
WWW	Municipal Solid Waste Landfills				X

(vii) Delegations for San Diego County Air Pollution Control District, San Joaquin Valley Unified Air Pollution Control District, San Luis Obispo County Air Pollution Control District, and Santa Barbara County Air Pollution Control District are shown in the following table:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR SAN DIEGO COUNTY APCD, SAN JOAQUIN VALLEY UNIFIED APCD, SAN LUIS OBISPO COUNTY APCD, AND SANTA BARBARA COUNTY APCD**

	Subpart	Air pollution control agency			
		San Diego County APCD	San Joaquin Valley Unified APCD	San Luis Obispo County APCD	Santa Barbara County APCD
A	General Provisions	X	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	X	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
Dc	Small Industrial-Commercial-Institutional Steam Generating Units	X	X	X	X
E	Incinerators	X	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X	X	X	
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994	X	X		X
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X			X
F	Portland Cement Plants	X	X	X	
G	Nitric Acid Plants	X	X	X	
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011				
H	Sulfuric Acid Plant	X	X	X	
I	Hot Mix Asphalt Facilities	X	X	X	X
J	Petroleum Refineries	X	X	X	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007				X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19,	X	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

	1978				
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	X	X
L	Secondary Lead Smelters	X	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	X	X
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X	X	X	
O	Sewage Treatment Plants	X	X	X	X
P	Primary Copper Smelters	X	X	X	
Q	Primary Zinc Smelters	X	X	X	
R	Primary Lead Smelters	X	X	X	
S	Primary Aluminum Reduction Plants	X	X	X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	X	
Y	Coal Preparation and Processing Plants	X	X	X	
Z	Ferroalloy Production Facilities	X	X	X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X	X	X	
BB	Kraft Pulp Mills	X	X	X	
CC	Glass Manufacturing Plants	X	X	X	X
DD	Grain Elevators	X	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X	
FF	(Reserved)				
GG	Stationary Gas Turbines	X	X	X	X
HH	Lime Manufacturing Plants	X	X	X	
KK	Lead-Acid Battery Manufacturing Plants	X	X	X	
LL	Metallic Mineral Processing Plants	X	X	X	
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X	
NN	Phosphate Rock Plants	X	X	X	
PP	Ammonium Sulfate Manufacture	X	X	X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X	

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	X	
SS	Industrial Surface Coating: Large Appliances	X	X	X	
TT	Metal Coil Surface Coating	X	X	X	
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X	
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing	X	X	X	
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006				X
WW	Beverage Can Surface Coating Industry	X	X	X	
XX	Bulk Gasoline Terminals				
AAA	New Residential Wood Heaters	X	X	X	X
BBB	Rubber Tire Manufacturing Industry	X	X	X	
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X		
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006				X
HHH	Synthetic Fiber Production Facilities	X	X	X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X	X		
JJJ	Petroleum Dry Cleaners	X	X	X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	X	
LLL	Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	X	X	X	
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X		
OOO	Nonmetallic Mineral Processing Plants	X	X	X	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X	X	X	
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X	X	X	
SSS	Magnetic Tape Coating Facilities	X	X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X	
UUU	Calciners and Dryers in Mineral Industries	X	X	X	X
VVV	Polymeric Coating of Supporting Substrates Facilities	X	X	X	X
WWW	Municipal Solid Waste Landfills	X	X	X	X
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	X			X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001	X			X
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	X			X
GGGG	(Reserved)				
HHHH	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines				X
JJJJ	Stationary Spark Ignition Internal Combustion Engines				X
KKKK	Stationary Combustion Turbines	X			X
LLLL	New Sewage Sludge Incineration Units				
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution				

(viii) Delegations for Shasta County Air Quality Management District, Siskiyou County Air Pollution Control District, South Coast Air Quality Management District, and Tehama County Air Pollution Control District are shown in the following table:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR SHASTA COUNTY AQMD, SISKIYOU COUNTY APCD, SOUTH COAST AQMD, AND TEHAMA COUNTY APCD**

	Subpart	Air pollution control agency			
		Shasta County AQMD	Siskiyou County APCD	South Coast AQMD	Tehama County APCD
A	General Provisions	X	X	X	
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X		X	
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978			X	
Db	Industrial-Commercial-Institutional Steam Generating Units			X	
Dc	Small Industrial-Commercial-Institutional Steam Generating Units			X	
E	Incinerators	X		X	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994			X	
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994			X	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996			X	
F	Portland Cement Plants	X		X	
G	Nitric Acid Plants	X		X	
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011				
H	Sulfuric Acid Plant	X		X	
I	Hot Mix Asphalt Facilities	X		X	
J	Petroleum Refineries	X		X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007			X	
K	Storage Vessels for Petroleum Liquids for Which	X		X	

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

	Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978				
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984			X	
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984			X	
L	Secondary Lead Smelters	X		X	
M	Secondary Brass and Bronze Production Plants	X		X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X		X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983			X	
O	Sewage Treatment Plants	X		X	
P	Primary Copper Smelters	X		X	
Q	Primary Zinc Smelters	X		X	
R	Primary Lead Smelters	X		X	
S	Primary Aluminum Reduction Plants	X		X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X		X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X		X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X		X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X		X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X		X	
Y	Coal Preparation and Processing Plants	X		X	
Z	Ferroalloy Production Facilities	X		X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X		X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983			X	
BB	Kraft Pulp Mills	X		X	
CC	Glass Manufacturing Plants			X	
DD	Grain Elevators	X		X	
EE	Surface Coating of Metal Furniture			X	
FF	(Reserved)				
GG	Stationary Gas Turbines			X	
HH	Lime Manufacturing Plants	X		X	
KK	Lead-Acid Battery Manufacturing Plants			X	
LL	Metallic Mineral Processing Plants			X	
MM	Automobile and Light Duty Trucks Surface Coating Operations			X	
NN	Phosphate Rock Plants			X	
PP	Ammonium Sulfate Manufacture			X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing			X	
RR	Pressure Sensitive Tape and Label Surface Coating Operations			X	
SS	Industrial Surface Coating: Large Appliances			X	
TT	Metal Coil Surface Coating			X	
UU	Asphalt Processing and Asphalt Roofing Manufacture			X	

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing			X	
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006			X	
WW	Beverage Can Surface Coating Industry			X	
XX	Bulk Gasoline Terminals				
AAA	New Residential Wood Heaters		X	X	
BBB	Rubber Tire Manufacturing Industry		X	X	
CCC	(Reserved)				
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry			X	
EEE	(Reserved)				
FFF	Flexible Vinyl and Urethane Coating and Printing			X	
GGG	Equipment Leaks of VOC in Petroleum Refineries			X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006			X	
HHH	Synthetic Fiber Production Facilities			X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes			X	
JJJ	Petroleum Dry Cleaners			X	
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants			X	
LLL	Onshore Natural Gas Processing: SO <sub>2</sub> Emissions			X	
MMM	(Reserved)				
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations			X	
OOO	Nonmetallic Mineral Processing Plants			X	
PPP	Wool Fiberglass Insulation Manufacturing Plants			X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems		X	X	
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes			X	
SSS	Magnetic Tape Coating Facilities		X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines		X	X	
UUU	Calciners and Dryers in Mineral Industries			X	
VVV	Polymeric Coating of Supporting Substrates Facilities			X	
WWW	Municipal Solid Waste Landfills			X	
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	X	X	X	
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001			X	
EEEE	Other Solid Waste Incineration Units for Which Construction			X	



**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

	is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006				
GGGG	(Reserved)				
HHHH	(Reserved)				
IIII	Stationary Compression Ignition Internal Combustion Engines			X	
JJJJ	Stationary Spark Ignition Internal Combustion Engines			X	
KKKK	Stationary Combustion Turbines			X	
LLLL	New Sewage Sludge Incineration Units				
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution				

(ix) Delegations for Tuolumne County Air Pollution Control District, Ventura County Air Pollution Control District, and Yolo-Solano Air Quality Management District are shown in the following table:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR TUOLUMNE COUNTY AIR POLLUTION CONTROL DISTRICT, VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT, AND YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT**

	<b>Subpart</b>	<b>Air Pollution Control Agency</b>		
		<b>Tuolumne County APCD</b>	<b>Ventura County APCD</b>	<b>Yolo-Solano AQMD</b>
A	General Provisions	X	X	
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X		
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	
Dc	Small Industrial Steam Generating Units	X		
E	Incinerators	X		
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X		
Eb	Municipal Waste Combustors Constructed After September 20, 1994	X		
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X		
F	Portland Cement Plants	X		
G	Nitric Acid Plants	X		
H	Sulfuric Acid Plants	X		
I	Hot Mix Asphalt Facilities	X	X	
J	Petroleum Refineries	X	X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007			
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X		
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X		
L	Secondary Lead Smelters	X		
M	Secondary Brass and Bronze Production Plants	X		

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X		
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X		
O	Sewage Treatment Plants	X		
P	Primary Copper Smelters	X		
Q	Primary Zinc Smelters	X		
R	Primary Lead Smelters	X		
S	Primary Aluminum Reduction Plants	X		
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X		
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X		
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X		
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X		
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X		
Y	Coal Preparation Plants	X		
Z	Ferroalloy Production Facilities	X		
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X		
BB	Kraft pulp Mills	X		
CC	Glass Manufacturing Plants	X		
DD	Grain Elevators	X		
EE	Surface Coating of Metal Furniture	X		
FF	(Reserved)			
GG	Stationary Gas Turbines	X		
HH	Lime Manufacturing Plants	X		
KK	Lead-Acid Battery Manufacturing Plants	X		
LL	Metallic Mineral Processing Plants	X		
MM	Automobile and Light Duty Trucks Surface Coating Operations	X		
NN	Phosphate Rock Plants	X		
PP	Ammonium Sulfate Manufacture	X		
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X		
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X		
SS	Industrial Surface Coating: Large Appliances	X		
TT	Metal Coil Surface Coating	X		
UU	Asphalt Processing and Asphalt Roofing Manufacture	X		
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X		
VVa	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006			
WW	Beverage Can Surface Coating Industry	X		
XX	Bulk Gasoline Terminals			
AAA	New Residential Wood Heaters	X		
BBB	Rubber Tire Manufacturing Industry	X		
CCC	(Reserved)			
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X		
EEE	(Reserved)			
FFF	Flexible Vinyl and Urethane Coating and Printing	X		

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

GGG	Equipment Leaks of VOC in Petroleum Refineries	X		
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006			
HHH	Synthetic Fiber Production Facilities	X		
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X		
JJJ	Petroleum Dry Cleaners	X		
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X		
LLL	Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	X		
MMM	(Reserved)			
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X		
OOO	Nonmetallic Mineral Processing Plants	X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants	X		
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X		
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X		
SSS	Magnetic Tape Coating Facilities	X		
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X		
UUU	Calciners and Dryers in Mineral Industries	X		
VVV	Polymeric Coating of Supporting Substrates Facilities	X		
WWW	Municipal Solid Waste Landfills	X	X	
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	X		
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001	X		
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006			
GGGG	(Reserved)			
IIII	Stationary Compression Ignition Internal Combustion Engines			
JJJJ	Stationary Spark Ignition Internal Combustion Engines			
KKKK	Stationary Combustion Turbines			

(3) *Hawaii*. The following table identifies delegations for Hawaii:

Delegation Status for New Source Performance Standards for Hawaii:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR HAWAII**

	<b>Subpart</b>	<b>Hawaii</b>
A	General Provisions	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X
Db	Industrial-Commercial-Institutional Steam Generating Units	X
Dc	Small Industrial Steam Generating Units	X
E	Incinerators	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X
Eb	Municipal Waste Combustors Constructed After September 20, 1994	X
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X
F	Portland Cement Plants	X
G	Nitric Acid Plants	
H	Sulfuric Acid Plants	
I	Hot Mix Asphalt Facilities	X
J	Petroleum Refineries	X
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007	
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X
L	Secondary Lead Smelters	
M	Secondary Brass and Bronze Production Plants	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	
O	Sewage Treatment Plants	X
P	Primary Copper Smelters	
Q	Primary Zinc Smelters	
R	Primary Lead Smelters	
S	Primary Aluminum Reduction Plants	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	
Y	Coal Preparation Plants	X
Z	Ferroalloy Production Facilities	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X
BB	Kraft pulp Mills	
CC	Glass Manufacturing Plants	
DD	Grain Elevators	
EE	Surface Coating of Metal Furniture	
FF	(Reserved)	
GG	Stationary Gas Turbines	X
HH	Lime Manufacturing Plants	
KK	Lead-Acid Battery Manufacturing Plants	
LL	Metallic Mineral Processing Plants	
MM	Automobile and Light Duty Trucks Surface Coating Operations	
NN	Phosphate Rock Plants	
PP	Ammonium Sulfate Manufacture	
QQ	Graphic Arts Industry: Publication Rotogravure Printing	

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

RR	Pressure Sensitive Tape and Label Surface Coating Operations	
SS	Industrial Surface Coating: Large Appliances	
TT	Metal Coil Surface Coating	
UU	Asphalt Processing and Asphalt Roofing Manufacture	
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	
WW	Beverage Can Surface Coating Industry	X
XX	Bulk Gasoline Terminals	X
AAA	New Residential Wool Heaters	
BBB	Rubber Tire Manufacturing Industry	
CCC	(Reserved)	
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	
EEE	(Reserved)	
FFF	Flexible Vinyl and Urethane Coating and Printing	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	
HHH	Synthetic Fiber Production Facilities	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	
JJJ	Petroleum Dry Cleaners	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	
LLL	Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	
MMM	(Reserved)	
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X
OOO	Nonmetallic Mineral Processing Plants	X
PPP	Wool Fiberglass Insulation Manufacturing Plants	
QQQ	VOC Emissions From Petroleum Refinery Wastewater	X
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	
SSS	Magnetic Tape Coating Facilities	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	
UUU	Calciners and Dryers in Mineral Industries	X
VVV	Polymeric Coating of Supporting Substrates Facilities	X
WWW	Municipal Solid Waste Landfills	X
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	X
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001	X
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	
GGGG	(Reserved)	
IIII	Stationary Compression Ignition Internal Combustion Engines	
JJJJ	Stationary Spark Ignition Internal Combustion Engines	
KKKK	Stationary Combustion Turbines	

(4) *Nevada*. The following table identifies delegations for Nevada:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR NEVADA**

	<b>Subpart</b>	<b>Air pollution control</b>
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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

		agency		
		Nevada DEP	Clark County	Washoe County
A	General Provisions	X	X	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X	X	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	X	X	
Db	Industrial-Commercial-Institutional Steam Generating Units	X	X	
Dc	Small Industrial-Commercial-Institutional Steam Generating Units	X	X	
E	Incinerators	X	X	X
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	X	X	
Eb	Large Municipal Waste Combustors Constructed After September 20, 1994	X	X	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	X	X	
F	Portland Cement Plants	X	X	X
G	Nitric Acid Plants	X	X	
Ga	Nitric Acid Plants For Which Construction, Reconstruction or Modification Commenced After October 14, 2011	X		
H	Sulfuric Acid Plant	X	X	
I	Hot Mix Asphalt Facilities	X	X	X
J	Petroleum Refineries	X	X	
Ja	Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007	X		
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X	X	X
Ka	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	X	X	X
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	X	X	
L	Secondary Lead Smelters	X	X	X
M	Secondary Brass and Bronze Production Plants	X	X	
N	Primary Emissions from Basic Oxygen Process Furnaces for Which Construction is Commenced After June 11, 1973	X	X	
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities for Which Construction is Commenced After January 20, 1983	X	X	
O	Sewage Treatment Plants	X	X	X
P	Primary Copper Smelters	X	X	X
Q	Primary Zinc Smelters	X	X	X
R	Primary Lead Smelters	X	X	X
S	Primary Aluminum Reduction Plants	X	X	
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Acid Plants	X	X	
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	X	X	
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	X	X	
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	X	X	
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	X	X	
Y	Coal Preparation and Processing Plants	X	X	X
Z	Ferroalloy Production Facilities	X	X	
AA	Steel Plants: Electric Arc Furnaces Constructed After October 21, 1974 and On or Before August 17, 1983	X	X	
AAa	Steel Plants: Electric Arc Furnaces and Argon-Oxygen Decarburization Vessels Constructed After August 7, 1983	X	X	
BB	Kraft Pulp Mills	X	X	

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

CC	Glass Manufacturing Plants	X	X	
DD	Grain Elevators	X	X	X
EE	Surface Coating of Metal Furniture	X	X	X
FF	(Reserved)			
GG	Stationary Gas Turbines	X	X	X
HH	Lime Manufacturing Plants	X	X	X
KK	Lead-Acid Battery Manufacturing Plants	X	X	X
LL	Metallic Mineral Processing Plants	X	X	X
MM	Automobile and Light Duty Trucks Surface Coating Operations	X	X	X
NN	Phosphate Rock Plants	X	X	X
PP	Ammonium Sulfate Manufacture	X	X	
QQ	Graphic Arts Industry: Publication Rotogravure Printing	X	X	X
RR	Pressure Sensitive Tape and Label Surface Coating Operations	X	X	
SS	Industrial Surface Coating: Large Appliances	X	X	X
TT	Metal Coil Surface Coating	X	X	X
UU	Asphalt Processing and Asphalt Roofing Manufacture	X	X	X
VV	Equipment Leaks of VOC in the Synthetic Organic Industry Chemicals Manufacturing	X	X	X
VVa	Equipment Leaks of VOC in the Synthetic Organic Industry for Which Construction, Reconstruction, or Chemicals Manufacturing Modification Commenced After November 7, 2006	X	X	
WW	Beverage Can Surface Coating Industry	X	X	
XX	Bulk Gasoline Terminals	X	X	
AAA	New Residential Wood Heaters		X	
BBB	Rubber Tire Manufacturing Industry	X	X	
CCC	(Reserved)			
DDD	Volatile Organic Compounds (VOC) Emissions from the Polymer Manufacturing Industry	X	X	
EEE	(Reserved)			
FFF	Flexible Vinyl and Urethane Coating and Printing	X	X	
GGG	Equipment Leaks of VOC in Petroleum Refineries	X	X	
GGGa	Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006	X	X	
HHH	Synthetic Fiber Production Facilities	X	X	
III	Volatile Organic Compound (VOC) Emissions From the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	X	X	
JJJ	Petroleum Dry Cleaners	X	X	X
KKK	Equipment Leaks of VOC From Onshore Natural Gas Processing Plants	X	X	
LLL	Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	X	X	
MMM	(Reserved)			
NNN	Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations	X	X	
OOO	Nonmetallic Mineral Processing Plants	X	X	
PPP	Wool Fiberglass Insulation Manufacturing Plants	X	X	
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	X	X	
RRR	Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	X	X	
SSS	Magnetic Tape Coating Facilities	X	X	
TTT	Industrial Surface Coating: Surface Coating of Plastic Parts for Business Machines	X	X	X
UUU	Calciners and Dryers in Mineral Industries	X	X	X
VVV	Polymeric Coating of Supporting Substrates Facilities	X	X	X
WWW	Municipal Solid Waste Landfills	X	X	X
AAAA	Small Municipal Waste Combustion Units for Which Construction is Commenced	X	X	X

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

	After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001			
CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction Is Commenced After November 30, 1999 or for Which Modification or Reconstruction Is Commenced on or After June 1, 2001	X	X	X
EEEE	Other Solid Waste Incineration Units for Which Construction is Commenced After December 9, 2004, or for Which Modification or Reconstruction is Commenced on or After June 16, 2006	X	X	X
GGGG	(Reserved)			
HHHH	(Reserved)			
IIII	Stationary Compression Ignition Internal Combustion Engines	X	X	X
JJJJ	Stationary Spark Ignition Internal Combustion Engines	X	X	X
KKKK	Stationary Combustion Turbines	X	X	X
LLLL	New Sewage Sludge Incineration Units		X	
OOOO	Crude Oil and Natural Gas Production, Transmission, and Distribution	X		

(5) *Guam*. The following table identifies delegations as of June 15, 2001:

**DELEGATION STATUS FOR NEW SOURCE PERFORMANCE STANDARDS FOR GUAM**

	<b>Subpart</b>	<b>Guam</b>
A	General Provisions	X
D	Fossil-Fuel Fired Steam Generators Constructed After August 17, 1971	X
Da	Electric Utility Steam Generating Units Constructed After September 18, 1978	
Db	Industrial-Commercial-Institutional Steam Generating Units	
Dc	Small Industrial Steam Generating Units	
E	Incinerators	
Ea	Municipal Waste Combustors Constructed After December 20, 1989 and On or Before September 20, 1994	
Eb	Municipal Waste Combustors Constructed After September 20, 1994	
Ec	Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996	
F	Portland Cement Plants	X
G	Nitric Acid Plants	
H	Sulfuric Acid Plants	
I	Hot Mix Asphalt Facilities	X
J	Petroleum Refineries	X
K	Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	X

(e) The following lists the specific part 60 standards that have been delegated unchanged to the air pollution control agencies in Region 6.

(1) *New Mexico*. The New Mexico Environment Department has been delegated all part 60 standards promulgated by EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters; and subpart HHHH—Emission Guidelines and Compliance Times for Coal-Fired Electric Steam Generating Units, as amended in the FEDERAL REGISTER through September 23, 2013.

(2) *Louisiana*. The Louisiana Department of Environmental Quality has been delegated all part 60 standards promulgated by EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters, as amended in the FEDERAL REGISTER through July 1, 2013.

**DELEGATION STATUS FOR PART 60 STANDARDS—STATE OF LOUISIANA**

[Excluding Indian Country]

<b>Subpart</b>	<b>Source category</b>	<b>LDEQ<sup>1</sup></b>
A	General Provisions	Yes
Ce	Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators	Yes
D	Fossil Fueled Steam Generators (>250 MM BTU/hr)	Yes



**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

Da	Electric Utility Steam Generating Units (>250 MM BTU/hr)	Yes
Db	Industrial-Commercial-Institutional Steam Generating Units (100 to 250 MM BTU/hr)	Yes
Dc	Industrial-Commercial-Institutional Small Steam Generating Units (10 to 100 MM BTU/hr)	Yes
E	Incinerators (>50 tons per day)	Yes
Ea	Municipal Waste Combustors	Yes
Eb	Large Municipal Waste Combustors	Yes
Ec	Hospital/Medical/Infectious Waste Incinerators	Yes
F	Portland Cement Plants	Yes
G	Nitric Acid Plants	Yes
Ga	Nitric Acid Plants (after October 14, 2011)	Yes
H	Sulfuric Acid Plants	Yes
I	Hot Mix Asphalt Facilities	Yes
J	Petroleum Refineries	Yes
Ja	Petroleum Refineries (After May 14, 2007)	Yes
K	Storage Vessels for Petroleum Liquids (After 6/11/73 & Before 5/19/78)	Yes
Ka	Storage Vessels for Petroleum Liquids (After 6/11/73 & Before 5/19/78)	Yes
Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Stg/Vessels) After 7/23/84	Yes
L	Secondary Lead Smelters Yes	Yes
M	Secondary Brass and Bronze Production Plants	Yes
N	Primary Emissions from Basic Oxygen Process Furnaces (Construction Commenced After June 11, 1973)	Yes
Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities Construction is Commenced After January 20, 1983	Yes
O	Sewage Treatment Plants	Yes
P	Primary Copper Smelters	Yes
Q	Primary Zinc Smelters	Yes
R	Primary Lead Smelters	Yes
S	Primary Aluminum Reduction Plants	Yes
T	Phosphate Fertilizer Industry: Wet Process Phosphoric Plants	Yes
U	Phosphate Fertilizer Industry: Superphosphoric Acid Plants	Yes
V	Phosphate Fertilizer Industry: Diammonium Phosphate Plants	Yes
W	Phosphate Fertilizer Industry: Triple Superphosphate Plants	Yes
X	Phosphate Fertilizer Industry: Granular Triple Superphosphate Storage Facilities	Yes
Y	Coal Preparation Plants	Yes
Z	Ferroalloy Production Facilities	Yes
AA	Steel Plants: Electric Arc Furnaces After 10/21/74 & On or Before 8/17/83	Yes
AAa	Steel Plants: Electric Arc Furnaces & Argon-Oxygen Decarburization Vessels After 8/07/83	Yes
BB	Kraft Pulp Mills	Yes
CC	Glass Manufacturing Plants	Yes
DD	Grain Elevators	Yes
EE	Surface Coating of Metal Furniture	Yes
GG	Stationary Gas Turbines	Yes
HH	Lime Manufacturing Plants	Yes
KK	Lead-Acid Battery Manufacturing Plants	Yes
LL	Metallic Mineral Processing Plants	Yes
MM	Automobile & Light Duty Truck Surface Coating Operations	Yes
NN	Phosphate Manufacturing Plants	Yes
PP	Ammonium Sulfate Manufacture	Yes
QQ	Graphic Arts Industry: Publication Rotogravure Printing	Yes
RR	Pressure Sensitive Tape and Label Surface Coating Operations	Yes
SS	Industrial Surface Coating: Large Appliances	Yes
TT	Metal Coil Surface Coating	Yes

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

UU	Asphalt Processing and Asphalt Roofing Manufacture	Yes
VV	VOC Equipment Leaks in the SOCM I Industry	Yes
VVa	VOC Equipment Leaks in the SOCM I Industry (After November 7, 2006)	Yes
XX	Bulk Gasoline Terminals	Yes
AAA	New Residential Wood Heaters	No
BBB	Rubber Tire Manufacturing Industry	Yes
DDD	Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry	Yes
FFF	Flexible Vinyl and Urethane Coating and Printing	Yes
GGG	VOC Equipment Leaks in Petroleum Refineries	Yes
HHH	Synthetic Fiber Production	Yes
III	VOC Emissions from the SOCM I Air Oxidation Unit Processes	Yes
JJJ	Petroleum Dry Cleaners	Yes
KKK	VOC Equipment Leaks From Onshore Natural Gas Processing Plants	Yes
LLL	Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	Yes
NNN	VOC Emissions from SOCM I Distillation Operations	Yes
OOO	Nonmetallic Mineral Processing Plants	Yes
PPP	Wool Fiberglass Insulation Manufacturing Plants	Yes
QQQ	VOC Emissions From Petroleum Refinery Wastewater Systems	Yes
RRR	VOC Emissions from SOCM I Reactor Processes	Yes
SSS	Magnetic Tape Coating Operations	Yes
TTT	Industrial Surface Coating: Plastic Parts for Business Machines	Yes
UUU	Calciners and Dryers in Mineral Industries	Yes
VVV	Polymeric Coating of Supporting Substrates Facilities	Yes
WWW	Municipal Solid Waste Landfills	Yes
AAAA	Small Municipal Waste Combustion Units (Construction is Commenced After 8/30/99 or Modification/Reconstruction is Commenced After 6/06/2001)	Yes
CCCC	Commercial & Industrial Solid Waste Incineration Units (Construction is Commenced After 11/30/1999 or Modification/Reconstruction is Commenced on or After 6/01/2001)	Yes
DDDD	Emission Guidelines & Compliance Times for Commercial & Industrial Solid Waste Incineration Units (Commenced Construction On or Before 11/30/1999)	Yes
EEEE	Other Solid Waste Incineration Units (Constructed after 12/09/2004 or Modification/Reconstruction is commenced on or after 06/16/2004)	Yes
IIII	Stationary Compression Ignition Internal Combustion Engines	Yes
JJJJ	Stationary Spark Ignition Internal Combustion Engines	Yes
KKKK	Stationary Combustion Turbines (Construction Commenced After 02/18/2005)	Yes
LLLL	New Sewage Sludge Incineration Units	Yes
MMMM	Emission Guidelines and Compliance Times for Existing Sewage Sludge Incineration Units	Yes
OOOO	Crude Oil and Natural Gas Production, Transmission and Distribution	Yes

<sup>1</sup>The Louisiana Department of Environmental Quality (LDEQ) has been delegated all Part 60 standards promulgated by EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters—as amended in the FEDERAL REGISTER through July 1, 2013.

(3) *Albuquerque-Bernalillo County Air Quality Control Board*. The Albuquerque-Bernalillo County Air Quality Control Board has been delegated all part 60 standards promulgated by EPA, except subpart AAA—Standards of Performance for New Residential Wood Heaters, as amended in the FEDERAL REGISTER through September 13, 2013.

[40 FR 18169, Apr. 25, 1975]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §60.4, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.fdsys.gov](http://www.fdsys.gov).

**§60.5 Determination of construction or modification.**

(a) When requested to do so by an owner or operator, the Administrator will make a determination of whether action taken or intended to be taken by such owner or operator constitutes construction (including reconstruction) or modification or the commencement thereof within the meaning of this part.

(b) The Administrator will respond to any request for a determination under paragraph (a) of this section within 30 days of receipt of such request.

[40 FR 58418, Dec. 16, 1975]

**§60.6 Review of plans.**

(a) When requested to do so by an owner or operator, the Administrator will review plans for construction or modification for the purpose of providing technical advice to the owner or operator.

(b)(1) A separate request shall be submitted for each construction or modification project.

(2) Each request shall identify the location of such project, and be accompanied by technical information describing the proposed nature, size, design, and method of operation of each affected facility involved in such project, including information on any equipment to be used for measurement or control of emissions.

(c) Neither a request for plans review nor advice furnished by the Administrator in response to such request shall (1) relieve an owner or operator of legal responsibility for compliance with any provision of this part or of any applicable State or local requirement, or (2) prevent the Administrator from implementing or enforcing any provision of this part or taking any other action authorized by the Act.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974]

**§60.7 Notification and record keeping.**

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

(1) A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(2) [Reserved]

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with §60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

(6) A notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by §60.8 in lieu of Method 9 observation data as allowed by §60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

(b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

## APPENDIX NSPS, SUBPART A

### 40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.

(c) Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(d) The summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in §60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in §60.7(c) shall both be submitted.

FIGURE 1—SUMMARY REPORT—GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

Pollutant (Circle One—SO<sub>2</sub>/NO<sub>x</sub>/TRS/H<sub>2</sub>S/CO/Opacity)

Reporting period dates: From \_\_\_\_\_ to \_\_\_\_\_

Company:

Emission Limitation

Address:

Monitor Manufacturer and Model No.

Date of Latest CMS Certification or Audit

Process Unit(s) Description:

Total source operating time in reporting period<sup>1</sup>

Emission data summary <sup>1</sup>		CMS performance summary <sup>1</sup>	
1. Duration of excess emissions in reporting period due to:		1. CMS downtime in reporting period due to:	
a. Startup/shutdown		a. Monitor equipment malfunctions	
b. Control equipment problems		b. Non-Monitor equipment malfunctions	
c. Process problems		c. Quality assurance calibration	
d. Other known causes		d. Other known causes	
e. Unknown causes		e. Unknown causes	
2. Total duration of excess emission		2. Total CMS Downtime	
3. Total duration of excess emissions × (100) [Total source	% <sup>2</sup>	3. [Total CMS Downtime] × (100) [Total source	% <sup>2</sup>

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

operating time]		operating time]	
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<sup>1</sup>For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup>For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

Name

Signature

Title

Date

(e)(1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the applicable standard; and

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.

(f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system

performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:

(1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(g) If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.

(h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

[36 FR 24877, Dec. 28, 1971, as amended at 40 FR 46254, Oct. 6, 1975; 40 FR 58418, Dec. 16, 1975; 45 FR 5617, Jan. 23, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 52 FR 9781, Mar. 26, 1987; 55 FR 51382, Dec. 13, 1990; 59 FR 12428, Mar. 16, 1994; 59 FR 47265, Sep. 15, 1994; 64 FR 7463, Feb. 12, 1999]

#### **§60.8 Performance tests.**

(a) Except as specified in paragraphs (a)(1), (a)(2), (a)(3), and (a)(4) of this section, within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

(1) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.

(2) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.

(3) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.

(4) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(1), (2), and (3) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. 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 (or delegated State or local agency) 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 (or delegated State or local agency) by mutual agreement.

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method.

(1) Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

(2) Contents of report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include the elements identified in paragraphs (f)(2)(i) through (vi) of this section.

(i) General identification information for the facility including a mailing address, the physical address, the owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility.

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(ii) Purpose of the test including the applicable regulation(s) requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard and any process parameter component, and a brief process description.

(iii) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location.

(iv) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.

(v) Where a test method requires you record or report, the following shall be included: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.

(vi) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test program including his/her email address.

(g) The performance testing shall include a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. Gaseous audit samples are designed to audit the performance of the sampling system as well as the analytical system and must be collected by the sampling system during the compliance test just as the compliance samples are collected. If a liquid or solid audit sample is designed to audit the sampling system, it must also be collected by the sampling system during the compliance test. If multiple sampling systems or sampling trains are used during the compliance test for any of the test methods, the tester is only required to use one of the sampling systems per method to collect the audit sample. The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system and at the same time as the compliance samples. Retests are required when there is a failure to produce acceptable results for an audit sample. However, if the audit results do not affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. Acceptance of the test results shall constitute a waiver of the reanalysis requirement, further audits, or retests. The compliance authority may also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample. For pollutants that exist in the gas phase at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in air or nitrogen that can be introduced into the sampling system of the test method at or near the same entry point as a sample from the emission source. If no gas phase audit samples are available, an acceptable alternative is a sample of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. For samples that exist only in a liquid or solid form at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. An accredited audit sample provider (AASP) is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.

(1) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. No audit samples are required for the following test methods: Methods 3A and 3C of appendix A-3 of part 60, Methods 6C, 7E, 9, and 10 of appendix A-4 of part 60, Methods 18 and 19 of appendix A-6 of part 60, Methods 20, 22, and 25A of appendix A-7 of part 60, Methods 30A and 30B of appendix A-8 of part 60, and Methods 303, 318, 320, and 321 of appendix A of part 63 of this chapter. If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test. The compliance authority responsible for the compliance test may waive the requirement to include an audit sample if they believe that an audit sample is not necessary. "Commercially available" means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, [www.epa.gov/ttn/emc](http://www.epa.gov/ttn/emc), to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test. When ordering an audit sample, the source owner, operator, or representative shall give the sample provider an estimate for the concentration of each pollutant that is emitted by the source or the estimated



**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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concentration of each pollutant based on the permitted level and the name, address, and phone number of the compliance authority. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the AASP. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The tester may request and the compliance authority may grant a waiver to the requirement that a representative of the compliance authority must be present at the testing site during the field analysis of an audit sample. The source owner, operator, or representative may report the results of the audit sample to the compliance authority and report the results of the audit sample to the AASP prior to collecting any emission samples. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

(2) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:

(i) Preparing the sample;

(ii) Confirming the true concentration of the sample;

(iii) Defining the acceptance limits for the results from a well qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range.

(iv) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;

(v) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;

(vi) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;

(vii) The AASP shall report the results from each audit sample in a timely manner to the compliance authority and then to the source owner, operator, or representative. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.

(viii) Evaluating the acceptance limits of samples at least once every two years to determine in cooperation with the voluntary consensus standard body if they should be changed;

(ix) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.

(3) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria document that describes how audit samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:

(i) Checking audit samples to confirm their true value as reported by the AASP;

(ii) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years;

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**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(iii) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.

(4) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). The VCSB shall operate in accordance with the procedures and requirements in the Office of Management and Budget Circular A-119. A copy of Circular A-119 is available upon request by writing the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, by calling (202) 395-6880 or downloading online at [http://standards.gov/standards\\_gov/a119.cfm](http://standards.gov/standards_gov/a119.cfm). The VCSB shall approve all accrediting bodies. The Administrator will review all technical criteria documents. If the technical criteria documents do not meet the minimum technical requirements in paragraphs (g)(2) through (4) of this section, the technical criteria documents are not acceptable and the proposed audit sample program is not capable of producing audit samples of sufficient quality to be used in a compliance test. All acceptable technical criteria documents shall be posted on the EPA Web site at the following URL, <http://www.epa.gov/ttn/emc>.

(h) Unless otherwise specified in the applicable subpart, each test location must be verified to be free of cyclonic flow and evaluated for the existence of emission gas stratification and the required number of sampling traverse points. If other procedures are not specified in the applicable subpart to the regulations, use the appropriate procedures in Method 1 to check for cyclonic flow and Method 7E to evaluate emission gas stratification and selection of sampling points.

(i) Whenever the use of multiple calibration gases is required by a test method, performance specification, or quality assurance procedure in a part 60 standard or appendix, Method 205 of 40 CFR part 51, appendix M of this chapter, "Verification of Gas Dilution Systems for Field Instrument Calibrations," may be used.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974; 42 FR 57126, Nov. 1, 1977; 44 FR 33612, June 11, 1979; 54 FR 6662, Feb. 14, 1989; 54 FR 21344, May 17, 1989; 64 FR 7463, Feb. 12, 1999; 72 FR 27442, May 16, 2007; 75 FR 55646, Sept. 13, 2010; 79 FR 11241, Feb. 27, 2014; 81 FR 59809, Aug. 30, 2016]

#### **§60.9 Availability of information.**

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter. (Information submitted voluntarily to the Administrator for the purposes of §§60.5 and 60.6 is governed by §§2.201 through 2.213 of this chapter and not by §2.301 of this chapter.)

#### **§60.10 State authority.**

The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from:

(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.

(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.

#### **§60.11 Compliance with standards and maintenance requirements.**

(a) Compliance with standards in this part, other than opacity standards, shall be determined in accordance with performance tests established by §60.8, unless otherwise specified in the applicable standard.

(b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include,

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**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(e)(1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in §60.8 unless one of the following conditions apply. If no performance test under §60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under §60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in §60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under §60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in paragraph (e)(5) of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of this part, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under §60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall be included in the notification required in §60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.

(4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by §60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and §60.8 performance test results.

(5) An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under §60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under §60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under §60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under §60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under §60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in §60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance

with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard.

(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by §60.8, the opacity observation results and observer certification required by §60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by §60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with §60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.

(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the FEDERAL REGISTER.

(f) Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.

(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[38 FR 28565, Oct. 15, 1973, as amended at 39 FR 39873, Nov. 12, 1974; 43 FR 8800, Mar. 3, 1978; 45 FR 23379, Apr. 4, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 51 FR 1790, Jan. 15, 1986; 52 FR 9781, Mar. 26, 1987; 62 FR 8328, Feb. 24, 1997; 65 FR 61749, Oct. 17, 2000]

#### **§60.12 Circumvention.**

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[39 FR 9314, Mar. 8, 1974]

#### **§60.13 Monitoring requirements.**

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under §60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under §60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under §60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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continuous emission monitoring system (CEMS) during any performance test required under §60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under §60.8 and as described in §60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of this section at least 10 days before the performance test required under §60.8 is conducted.

(2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d)(1) Owners and operators of a CEMS installed in accordance with the provisions of this part, must check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once each operating day in accordance with a written procedure. The zero and span must, at a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of this part must check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is defined in the applicable version of PS-1 in appendix B of this part. For a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by paragraph (c) of this section for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of this part shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

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**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(h)(1) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in §60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.

(2) For continuous monitoring systems other than opacity, 1-hour averages shall be computed as follows, except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations:

(i) Except as provided under paragraph (h)(2)(iii) of this section, for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, *i.e.*, one data point in each of the 15-minute quadrants of the hour.

(ii) Except as provided under paragraph (h)(2)(iii) of this section, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.

(iii) For any operating hour in which required maintenance or quality-assurance activities are performed:

(A) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or

(B) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.

(iv) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of paragraph (h)(2)(iii) of this section are met, based solely on valid data recorded after the successful calibration.

(v) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.

(vi) Except as provided under paragraph (h)(2)(vii) of this section, data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.

(vii) Owners and operators complying with the requirements of §60.7(f)(1) or (2) must include any data recorded during periods of monitor breakdown or malfunction in the data averages.

(viii) When specified in an applicable subpart, hourly averages for certain partial operating hours shall not be computed or included in the emission averages (e.g., hours with < 30 minutes of unit operation under §60.47b(d)).

(ix) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant).

(3) All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.

(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

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**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.

(j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:

(1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in Section 8.4 of Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in §60.8 of this subpart or other tests performed following the criteria in §60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).

(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., §§60.45(g) (2) and (3), 60.73(e), and 60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in Section 8.4 of Performance Specification 2.

[40 FR 46255, Oct. 6, 1975]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §60.13, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at [www.fdsys.gov](http://www.fdsys.gov).

**§60.14 Modification.**

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors," EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and §60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by §60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.



(j)(1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.

(2) This exemption shall not apply to any new unit that:

(i) Is designated as a replacement for an existing unit;

(ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and

(iii) Is located at a different site than the existing unit.

(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A *temporary clean coal control technology demonstration project*, for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

[40 FR 58419, Dec. 16, 1975, as amended at 43 FR 34347, Aug. 3, 1978; 45 FR 5617, Jan. 23, 1980; 57 FR 32339, July 21, 1992; 65 FR 61750, Oct. 17, 2000]

**§60.15 Reconstruction.**

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) “Reconstruction” means the replacement of components of an existing facility 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 entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) “Fixed capital cost” means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under paragraph (e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[40 FR 58420, Dec. 16, 1975]

**§60.16 Priority list.**

**PRIORITIZED MAJOR SOURCE CATEGORIES**

<b>Priority Number<sup>1</sup></b>	<b>Source Category</b>
1.	Synthetic Organic Chemical Manufacturing Industry (SOCMI) and Volatile Organic Liquid Storage Vessels and Handling Equipment
	(a) SOCMI unit processes
	(b) Volatile organic liquid (VOL) storage vessels and handling equipment
	(c) SOCMI fugitive sources
	(d) SOCMI secondary sources
2.	Industrial Surface Coating: Cans
3.	Petroleum Refineries: Fugitive Sources
4.	Industrial Surface Coating: Paper
5.	Dry Cleaning
	(a) Perchloroethylene
	(b) Petroleum solvent
6.	Graphic Arts
7.	Polymers and Resins: Acrylic Resins
8.	Mineral Wool (Deleted)
9.	Stationary Internal Combustion Engines
10.	Industrial Surface Coating: Fabric
11.	Industrial-Commercial-Institutional Steam Generating Units.
12.	Incineration: Non-Municipal (Deleted)
13.	Non-Metallic Mineral Processing
14.	Metallic Mineral Processing
15.	Secondary Copper (Deleted)
16.	Phosphate Rock Preparation
17.	Foundries: Steel and Gray Iron
18.	Polymers and Resins: Polyethylene
19.	Charcoal Production
20.	Synthetic Rubber
	(a) Tire manufacture
	(b) SBR production
21.	Vegetable Oil
22.	Industrial Surface Coating: Metal Coil
23.	Petroleum Transportation and Marketing
24.	By-Product Coke Ovens
25.	Synthetic Fibers
26.	Plywood Manufacture
27.	Industrial Surface Coating: Automobiles
28.	Industrial Surface Coating: Large Appliances
29.	Crude Oil and Natural Gas Production

**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

30.	Secondary Aluminum
31.	Potash (Deleted)
32.	Lightweight Aggregate Industry: Clay, Shale, and Slate <sup>2</sup>
33.	Glass
34.	Gypsum
35.	Sodium Carbonate
36.	Secondary Zinc (Deleted)
37.	Polymers and Resins: Phenolic
38.	Polymers and Resins: Urea-Melamine
39.	Ammonia (Deleted)
40.	Polymers and Resins: Polystyrene
41.	Polymers and Resins: ABS-SAN Resins
42.	Fiberglass
43.	Polymers and Resins: Polypropylene
44.	Textile Processing
45.	Asphalt Processing and Asphalt Roofing Manufacture
46.	Brick and Related Clay Products
47.	Ceramic Clay Manufacturing (Deleted)
48.	Ammonium Nitrate Fertilizer
49.	Castable Refractories (Deleted)
50.	Borax and Boric Acid (Deleted)
51.	Polymers and Resins: Polyester Resins
52.	Ammonium Sulfate
53.	Starch
54.	Perlite
55.	Phosphoric Acid: Thermal Process (Deleted)
56.	Uranium Refining
57.	Animal Feed Defluorination (Deleted)
58.	Urea (for fertilizer and polymers)
59.	Detergent (Deleted)
<i>Other Source Categories</i>	
Lead acid battery manufacture <sup>3</sup>	
Organic solvent cleaning <sup>3</sup>	
Industrial surface coating: metal furniture <sup>3</sup>	
Stationary gas turbines <sup>4</sup>	
Municipal solid waste landfills <sup>4</sup>	

<sup>1</sup>Low numbers have highest priority, e.g., No. 1 is high priority, No. 59 is low priority.

<sup>2</sup>Formerly titled "Sintering: Clay and Fly Ash".

<sup>3</sup>Minor source category, but included on list since an NSPS is being developed for that source category.

<sup>4</sup>Not prioritized, since an NSPS for this major source category has already been promulgated.

[47 FR 951, Jan. 8, 1982, as amended at 47 FR 31876, July 23, 1982; 51 FR 42796, Nov. 25, 1986; 52 FR 11428, Apr. 8, 1987; 61 FR 9919, Mar. 12, 1996]

**§60.17 Incorporations by reference.**

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the EPA must publish notice of change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at the EPA Docket Center, Public Reading Room, EPA WJC West, Room 3334, 1301 Constitution Ave. NW., Washington, DC, telephone number 202-566-1744, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030 or go to

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(b) American Gas Association, available through ILI Infodisk, 610 Winters Avenue, Paramus, New Jersey 07652:

(1) American Gas Association Report No. 3: Orifice Metering for Natural Gas and Other Related Hydrocarbon Fluids, Part 1: General Equations and Uncertainty Guidelines (1990), IBR approved for §60.107a(d).

(2) American Gas Association Report No. 3: Orifice Metering for Natural Gas and Other Related Hydrocarbon Fluids, Part 2: Specification and Installation Requirements (2000), IBR approved for §60.107a(d).

(3) American Gas Association Report No. 11: Measurement of Natural Gas by Coriolis Meter (2003), IBR approved for §60.107a(d).

(4) American Gas Association Transmission Measurement Committee Report No. 7: Measurement of Gas by Turbine Meters (Revised February 2006), IBR approved for §60.107a(d).

(c) American Hospital Association (AHA) Service, Inc., Post Office Box 92683, Chicago, Illinois 60675-2683. You may inspect a copy at the EPA's Air and Radiation Docket and Information Center (Docket A-91-61, Item IV-J-124), Room M-1500, 1200 Pennsylvania Ave. NW., Washington, DC 20460.

(1) An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities. American Society for Health Care Environmental Services of the American Hospital Association. Chicago, Illinois. 1993. AHA Catalog No. 057007. ISBN 0-87258-673-5. IBR approved for §§60.35e and 60.55c.

(2) [Reserved]

(d) The following material is available for purchase from the American National Standards Institute (ANSI), 25 W. 43rd Street, 4th Floor, New York, NY 10036, Telephone (212) 642-4980, and is also available at the following Web site: <http://www.ansi.org>.

(1) ANSI No. C12.20-2010 American National Standard for Electricity Meters—0.2 and 0.5 Accuracy Classes (Approved August 31, 2010), IBR approved for §60.5535(d).

(2) [Reserved]

(e) American Petroleum Institute (API), 1220 L Street NW., Washington, DC 20005.

(1) API Publication 2517, Evaporation Loss from External Floating Roof Tanks, Second Edition, February 1980, IBR approved for §§60.111(i), 60.111a(f), and 60.116b(e).

(2) API Manual of Petroleum Measurement Standards, Chapter 22—Testing Protocol, Section 2—Differential Pressure Flow Measurement Devices, First Edition, August 2005, IBR approved for §60.107a(d).

(f) American Public Health Association, 1015 18th Street NW., Washington, DC 20036.

(1) “Standard Methods for the Examination of Water and Wastewater,” 16th edition, 1985. Method 303F: “Determination of Mercury by the Cold Vapor Technique.” Incorporated by reference for appendix A-8 to part 60, Method 29, §§9.2.3, 10.3, and 11.1.3.

(2) 2540 G. Total, Fixed, and Volatile Solids in Solid and Semisolid Samples, in Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, IBR approved for §60.154(b).

(g) The following material is available for purchase from the American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990, Telephone (800) 843-2763, and is also available at the following Web site: <http://www.asme.org>.

(1) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th Edition (1971), IBR approved for §§60.58a(h), 60.58b(i), 60.1320(a), and 60.1810(a).

(2) ASME MFC-3M-2004, Measurement of Fluid Flow in Pipes Using Orifice, Nozzle, and Venturi, IBR approved for §60.107a(d).

(3) ASME/ANSI MFC-4M-1986 (Reaffirmed 2008), Measurement of Gas Flow by Turbine Meters, IBR approved for §60.107a(d).

(4) ASME/ANSI MFC-5M-1985 (Reaffirmed 2006), Measurement of Liquid Flow in Closed Conduits Using Transit-Time Ultrasonic Flowmeters, IBR approved for §60.107a(d).

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**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(5) ASME MFC-6M-1998 (Reaffirmed 2005), Measurement of Fluid Flow in Pipes Using Vortex Flowmeters, IBR approved for §60.107a(d).

(6) ASME/ANSI MFC-7M-1987 (Reaffirmed 2006), Measurement of Gas Flow by Means of Critical Flow Venturi Nozzles, IBR approved for §60.107a(d).

(7) ASME/ANSI MFC-9M-1988 (Reaffirmed 2006), Measurement of Liquid Flow in Closed Conduits by Weighing Method, IBR approved for §60.107a(d).

(8) ASME MFC-11M-2006, Measurement of Fluid Flow by Means of Coriolis Mass Flowmeters, IBR approved for §60.107a(d).

(9) ASME MFC-14M-2003, Measurement of Fluid Flow Using Small Bore Precision Orifice Meters, IBR approved for §60.107a(d).

(10) ASME MFC-16-2007, Measurement of Liquid Flow in Closed Conduits with Electromagnetic Flowmeters, IBR approved for §60.107a(d).

(11) ASME MFC-18M-2001, Measurement of Fluid Flow Using Variable Area Meters, IBR approved for §60.107a(d).

(12) ASME MFC-22-2007, Measurement of Liquid by Turbine Flowmeters, IBR approved for §60.107a(d).

(13) ASME PTC 4.1-1964 (Reaffirmed 1991), Power Test Codes: Test Code for Steam Generating Units (with 1968 and 1969 Addenda), IBR approved for §§60.46b, 60.58a(h), 60.58b(i), 60.1320(a), and 60.1810(a).

(14) ASME/ANSI PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], (Issued August 31, 1981), IBR approved for §§60.56c(b), 60.63(f), 60.106(e), 60.104a(d), (h), (i), and (j), 60.105a(d), (f), and (g), §60.106a(a), §60.107a(a), (c), and (d), tables 1 and 3 to subpart EEEE, tables 2 and 4 to subpart FFFF, table 2 to subpart JJJJ, §60.285a(f), §60.4415(a), 60.2145(s) and (t), 60.2710(s), (t), and (w), 60.2730(q), 60.4900(b), 60.5220(b), tables 1 and 2 to subpart LLLL, tables 2 and 3 to subpart MMMM, 60.5406(c), 60.5406a(c), 60.5407a(g), 60.5413(b), 60.5413a(b) and 60.5413a(d).

(15) ASME PTC 22-2014, Gas Turbines: Performance Test Codes, (Issued December 31, 2014), IBR approved for §60.5580.

(16) ASME PTC 46-1996, Performance Test Code on Overall Plant Performance, (Issued October 15, 1997), IBR approved for §60.5580.

(17) ASME QRO-1-1994, Standard for the Qualification and Certification of Resource Recovery Facility Operators, IBR approved for §§60.54b(a) and (b), 60.56a, 60.1185(a) and (c), and 60.1675(a) and (c).

(h) The following material is available for purchase from ASTM International, 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-2959, (800) 262-1373, <http://www.astm.org>.

(1) ASTM A99-76, Standard Specification for Ferromanganese, IBR approved for §60.261.

(2) ASTM A99-82 (Reapproved 1987), Standard Specification for Ferromanganese, IBR approved for §60.261.

(3) ASTM A100-69, Standard Specification for Ferrosilicon, IBR approved for §60.261.

(4) ASTM A100-74, Standard Specification for Ferrosilicon, IBR approved for §60.261.

(5) ASTM A100-93, Standard Specification for Ferrosilicon, IBR approved for §60.261.

(6) ASTM A101-73, Standard Specification for Ferrochromium, IBR approved for §60.261.

(7) ASTM A101-93, Standard Specification for Ferrochromium, IBR approved for §60.261.

(8) ASTM A482-76, Standard Specification for Ferrochromesilicon, IBR approved for §60.261.

(9) ASTM A482-93, Standard Specification for Ferrochromesilicon, IBR approved for §60.261.

(10) ASTM A483-64, Standard Specification for Silicomanganese, IBR approved for §60.261.

(11) ASTM A483-74 (Reapproved 1988), Standard Specification for Silicomanganese, IBR approved for §60.261.

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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- (12) ASTM A495-76, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved for §60.261.
- (13) ASTM A495-94, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved for §60.261.
- (14) ASTM D86-78, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).
- (15) ASTM D86-82, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).
- (16) ASTM D86-90, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).
- (17) ASTM D86-93, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).
- (18) ASTM D86-95, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).
- (19) ASTM D86-96, Distillation of Petroleum Products, (Approved April 10, 1996), IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h), 60.5401(f), 60.5401a(f).
- (20) ASTM D129-64, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§60.106(j) and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
- (21) ASTM D129-78, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§60.106(j) and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
- (22) ASTM D129-95, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§60.106(j) and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
- (23) ASTM D129-00, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §60.335(b).
- (24) ASTM D129-00 (Reapproved 2005), Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §60.4415(a).
- (25) ASTM D240-76, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for §§60.46(c), 60.296(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
- (26) ASTM D240-92, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for §§60.46(c), 60.296(b), and appendix A-7: Method 19, Section 12.5.2.2.3.
- (27) ASTM D240-02 (Reapproved 2007), Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, (Approved May 1, 2007), IBR approved for §60.107a(d).
- (28) ASTM D270-65, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.1.
- (29) ASTM D270-75, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.1.
- (30) ASTM D323-82, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for §§60.111(l), 60.111a(g), 60.111b, and 60.116b(f).
- (31) ASTM D323-94, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for §§60.111(l), 60.111a(g), 60.111b, and 60.116b(f).
- (32) ASTM D388-77, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.
- (33) ASTM D388-90, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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- (34) ASTM D388-91, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.
- (35) ASTM D388-95, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.
- (36) ASTM D388-98a, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.
- (37) ASTM D388-99 (Reapproved 2004)<sup>e1</sup> Standard Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, 60.251, and 60.5580.
- (38) ASTM D396-78, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), and 60.111a(b).
- (39) ASTM D396-89, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), and 60.111a(b).
- (40) ASTM D396-90, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), and 60.111a(b).
- (41) ASTM D396-92, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), and 60.111a(b).
- (42) ASTM D396-98, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), 60.111a(b), and 60.5580.
- (43) ASTM D975-78, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.111(b) and 60.111a(b).
- (44) ASTM D975-96, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.111(b) and 60.111a(b).
- (45) ASTM D975-98a, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.111(b) and 60.111a(b).
- (46) ASTM D975-08a, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.41b 60.41c, and 60.5580.
- (47) ASTM D1072-80, Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.335(b).
- (48) ASTM D1072-90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.335(b).
- (49) ASTM D1072-90 (Reapproved 1999), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.4415(a).
- (50) ASTM D1137-53, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved for §60.45(f).
- (51) ASTM D1137-75, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved for §60.45(f).
- (52) ASTM D1193-77, Standard Specification for Reagent Water, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; appendix A-4 to part 60: Method 6, Section 7.1.1; Method 7, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; appendix A-5 to part 60: Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; appendix A-8 to part 60: Method 26, Section 7.1.2; Method 26A, Section 7.1.2; and Method 29, Section 7.2.2.
- (53) ASTM D1193-91, Standard Specification for Reagent Water, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; appendix A-4 to part 60: Method 6, Section 7.1.1; Method 7, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; appendix A-5 to part 60: Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; appendix A-8 to part 60: Method 26, Section 7.1.2; Method 26A, Section 7.1.2; and Method 29, Section 7.2.2.
- (54) ASTM D1266-87, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§60.106(j) and 60.335(b).

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(55) ASTM D1266-91, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§60.106(j) and 60.335(b).

(56) ASTM D1266-98, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§60.106(j) and 60.335(b).

(57) ASTM D1266-98 (Reapproved 2003)<sup>6.1</sup> Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §60.4415(a).

(58) ASTM D1475-60 (Reapproved 1980), Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for §60.435(d), appendix A-8 to part 60: Method 24, Section 6.1; and Method 24A, Sections 6.5 and 7.1.

(59) ASTM D1475-90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for §60.435(d), appendix A-8 to part 60: Method 24, Section 6.1; and Method 24A, §§6.5 and 7.1.

(60) ASTM D1552-83, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§60.106(j), 60.335(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(61) ASTM D1552-95, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§60.106(j), 60.335(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(62) ASTM D1552-01, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§60.106(j), 60.335(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.

(63) ASTM D1552-03, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §60.4415(a).

(64) ASTM D1826-77, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved for §§60.45(f), 60.46(c), 60.296(b), and appendix A-7 to part 60: Method 19, Section 12.3.2.4.

(65) ASTM D1826-94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved for §§60.45(f), 60.46(c), 60.296(b), and appendix A-7 to part 60: Method 19, Section 12.3.2.4.

(66) ASTM D1826-94 (Reapproved 2003), Standard Test Method for Calorific (Heating) Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, (Approved May 10, 2003), IBR approved for §60.107a(d).

(67) ASTM D1835-87, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da, 60.41b, and 60.41c.

(68) ASTM D1835-91, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da, 60.41b, and 60.41c.

(69) ASTM D1835-97, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da, 60.41b, and 60.41c.

(70) ASTM D1835-03a, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da, 60.41b, and 60.41c.

(71) ASTM D1945-64, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f).

(72) ASTM D1945-76, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f).

(73) ASTM D1945-91, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f).

(74) ASTM D1945-96, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f).



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**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(75) ASTM D1945-03 (Reapproved 2010), Standard Method for Analysis of Natural Gas by Gas Chromatography, (Approved January 1, 2010), IBR approved for §§60.107a(d), 60.5413(d), 60.5413a(d).

(76) ASTM D1946-77, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§60.18(f), 60.45(f), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).

(77) ASTM D1946-90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§60.18(f), 60.45(f), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).

(78) ASTM D1946-90 (Reapproved 2006), Standard Method for Analysis of Reformed Gas by Gas Chromatography, (Approved June 1, 2006), IBR approved for §60.107a(d).

(79) ASTM D2013-72, Standard Method of Preparing Coal Samples for Analysis, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(80) ASTM D2013-86, Standard Method of Preparing Coal Samples for Analysis, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(81) ASTM D2015-77 (Reapproved 1978), Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved for §§60.45(f), 60.46(c), and appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(82) ASTM D2015-96, Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved for §§60.45(f), 60.46(c), and appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(83) ASTM D2016-74, Standard Test Methods for Moisture Content of Wood, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.

(84) ASTM D2016-83, Standard Test Methods for Moisture Content of Wood, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.

(85) ASTM D2234-76, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.

(86) ASTM D2234-96, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.

(87) ASTM D2234-97b, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.

(88) ASTM D2234-98, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.

(89) ASTM D2369-81, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.

(90) ASTM D2369-87, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.

(91) ASTM D2369-90, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.

(92) ASTM D2369-92, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.

(93) ASTM D2369-93, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.

(94) ASTM D2369-95, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.

(95) ASTM D2382-76, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§60.18(f), 60.485(g), 60.485a(g), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(96) ASTM D2382-88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§60.18(f), 60.485(g), 60.485a(g), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).

(97) ASTM D2504-67, Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§60.485(g) and 60.485a(g).

(98) ASTM D2504-77, Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§60.485(g) and 60.485a(g).

(99) ASTM D2504-88 (Reapproved 1993), Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§60.485(g) and 60.485a(g).

(100) ASTM D2584-68(Reapproved 1985), Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved for §60.685(c).

(101) ASTM D2584-94, Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved for §60.685(c).

(102) ASTM D2597-94 (Reapproved 1999), Standard Test Method for Analysis of Demethanized Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography, IBR approved for §60.335(b).

(103) ASTM D2622-87, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§60.106(j) and 60.335(b).

(104) ASTM D2622-94, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§60.106(j) and 60.335(b).

(105) ASTM D2622-98, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§60.106(j) and 60.335(b).

(106) ASTM D2622-05, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a).

(107) ASTM D2879-83 Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§60.111b(f)(3), 60.116b(e), 60.116b(f), 60.485(e), and 60.485a(e).

(108) ASTM D2879-96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§60.111b(f)(3), 60.116b(e), 60.116b(f), 60.485(e), and 60.485a(e).

(109) ASTM D2879-97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§60.111b(f)(3), 60.116b(e), 60.116b(f), 60.485(e), and 60.485a(e).

(110) ASTM D2880-78, Standard Specification for Gas Turbine Fuel Oils, IBR approved for §§60.111(b), 60.111a(b), and 60.335(d).

(111) ASTM D2880-96, Standard Specification for Gas Turbine Fuel Oils, IBR approved for §§60.111(b), 60.111a(b), and 60.335(d).

(112) ASTM D2908-74, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for §60.564(j).

(113) ASTM D2908-91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for §60.564(j).

(114) ASTM D2986-71, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.1; appendix A-5 to part 60: Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.

(115) ASTM D2986-78, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.1; appendix A-5 to part 60: Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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- (116) ASTM D2986-95a, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Diocetyl Phthalate) Smoke Test, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.1; appendix A-5 to part 60: Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.
- (117) ASTM D3173-73, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
- (118) ASTM D3173-87, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
- (119) ASTM D3176-74, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved for §60.45(f)(5)(i) and appendix A-7 to part 60: Method 19, Section 12.3.2.3.
- (120) ASTM D3176-89, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved for §60.45(f)(5)(i) and appendix A-7 to part 60: Method 19, Section 12.3.2.3.
- (121) ASTM D3177-75, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
- (122) ASTM D3177-89, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
- (123) ASTM D3178-73 (Reapproved 1979), Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved for §60.45(f).
- (124) ASTM D3178-89, Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved for §60.45(f).
- (125) ASTM D3246-81, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.335(b).
- (126) ASTM D3246-92, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.335(b).
- (127) ASTM D3246-96, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.335(b).
- (128) ASTM D3246-05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.4415(a)(1).
- (129) ASTM D3270-73T, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.
- (130) ASTM D3270-80, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.
- (131) ASTM D3270-91, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.
- (132) ASTM D3270-95, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.
- (133) ASTM D3286-85, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
- (134) ASTM D3286-96, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
- (135) ASTM D3370-76, Standard Practices for Sampling Water, IBR approved for §60.564(j).
- (136) ASTM D3370-95a, Standard Practices for Sampling Water, IBR approved for §60.564(j).
- (137) ASTM D3588-98 (Reapproved 2003), Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels, (Approved May 10, 2003), IBR approved for §§60.107a(d), 60.5413(d), and 60.5413a(d).

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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- (138) ASTM D3699-08, Standard Specification for Kerosine, including Appendix X1, (Approved September 1, 2008), IBR approved for §§60.41b, 60.41c, and 60.5580.
- (139) ASTM D3792-79, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A-7 to part 60: Method 24, Section 6.3.
- (140) ASTM D3792-91, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A-7 to part 60: Method 24, Section 6.3.
- (141) ASTM D4017-81, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A-7 to part 60: Method 24, Section 6.4.
- (142) ASTM D4017-90, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A-7 to part 60: Method 24, Section 6.4.
- (143) ASTM D4017-96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A-7 to part 60: Method 24, Section 6.4.
- (144) ASTM D4057-81, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
- (145) ASTM D4057-95, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
- (146) ASTM D4057-95 (Reapproved 2000), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a).
- (147) ASTM D4084-82, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §60.334(h).
- (148) ASTM D4084-94, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §60.334(h).
- (149) ASTM D4084-05, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §§60.4360 and 60.4415(a).
- (150) ASTM D4177-95, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.1.
- (151) ASTM D4177-95 (Reapproved 2000), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a).
- (152) ASTM D4239-85, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
- (153) ASTM D4239-94, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
- (154) ASTM D4239-97, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
- (155) ASTM D4294-02, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.335(b).
- (156) ASTM D4294-03, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a).
- (157) ASTM D4442-84, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.
- (158) ASTM D4442-92, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.
- (159) ASTM D4444-92, Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(160) ASTM D4457-85 (Reapproved 1991), Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph, IBR approved for appendix A-7 to part 60: Method 24, Section 6.5.

(161) ASTM D4468-85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, IBR approved for §§60.335(b) and 60.4415(a).

(162) ASTM D4468-85 (Reapproved 2006), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, (Approved June 1, 2006), IBR approved for §60.107a(e).

(163) ASTM D4629-02, Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection, IBR approved for §§60.49b(e) and 60.335(b).

(164) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §§60.18(f), 60.485(g), 60.485a(g), 60.564(f), 60.614(d), 60.664(e), and 60.704(d).

(165) ASTM D4809-06, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), (Approved December 1, 2006), IBR approved for §60.107a(d).

(166) ASTM D4810-88 (Reapproved 1999), Standard Test Method for Hydrogen Sulfide in Natural Gas Using Length of Stain Detector Tubes, IBR approved for §§60.4360 and 60.4415(a).

(167) ASTM D4891-89 (Reapproved 2006) Standard Test Method for Heating Value of Gases in Natural Gas Range by Stoichiometric Combustion, (Approved June 1, 2006), IBR approved for §§60.107a(d), 60.5413(d), and 60.5413a(d).

(168) ASTM D5287-97 (Reapproved 2002), Standard Practice for Automatic Sampling of Gaseous Fuels, IBR approved for §60.4415(a).

(169) ASTM D5403-93, Standard Test Methods for Volatile Content of Radiation Curable Materials, IBR approved for appendix A-7 to part 60: Method 24, Section 6.6.

(170) ASTM D5453-00, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for §60.335(b).

(171) ASTM D5453-05, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for §60.4415(a).

(172) ASTM D5504-01, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, IBR approved for §§60.334(h) and 60.4360.

(173) ASTM D5504-08, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, (Approved June 15, 2008), IBR approved for §§60.107a(e) and 60.5413(d).

(174) ASTM D5762-02, Standard Test Method for Nitrogen in Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence, IBR approved for §60.335(b).

(175) ASTM D5865-98, Standard Test Method for Gross Calorific Value of Coal and Coke, IBR approved for §§60.45(f) and 60.46(c), and appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(176) ASTM D5865-10, Standard Test Method for Gross Calorific Value of Coal and Coke, (Approved January 1, 2010), IBR approved for §§60.45(f), 60.46(c), and appendix A-7 to part 60: Method 19, section 12.5.2.1.3.

(177) ASTM D6216-98, Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications, IBR approved for appendix B to part 60: Performance Specification 1.

(178) ASTM D6228-98, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §60.334(h).

(179) ASTM D6228-98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §§60.4360 and 60.4415.

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(180) ASTM D6348-03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, (Approved October 1, 2003), IBR approved for §60.73a(b), table 7 to subpart IIII, table 2 to subpart JJJJ, and §60.4245(d).

(181) ASTM D6366-99, Standard Test Method for Total Trace Nitrogen and Its Derivatives in Liquid Aromatic Hydrocarbons by Oxidative Combustion and Electrochemical Detection, IBR approved for §60.335(b)(9).

(182) ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, (Approved October 1, 2004), IBR approved for §60.107a(d) and table 2 to subpart JJJJ.

(183) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for §60.335(a).

(184) ASTM D6522-00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, (Approved October 1, 2005), IBR approved for table 2 to subpart JJJJ, §§60.5413(b) and (d), and 60.5413a(b).

(185) ASTM D6522-11 Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers (Approved December 1, 2011), IBR approved for §60.37f(a), 60.766(a).

(186) ASTM D6667-01, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.335(b).

(187) ASTM D6667-04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.4415(a).

(188) ASTM D6751-11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, including Appendices X1 through X3, (Approved July 15, 2011), IBR approved for §§60.41b, 60.41c, and 60.5580.

(189) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), IBR approved for §60.56c(b) and appendix B to part 60: Performance Specification 12A, Section 8.6.2.

(190) ASTM D6784-02 (Reapproved 2008) Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), (Approved April 1, 2008), IBR approved for §§60.2165(j) and 60.2730(j), tables 1, 5, 6 and 8 to subpart CCCC, and tables 2, 6, 7, and 9 to subpart DDDD, §§60.4900(b), 60.5220(b), tables 1 and 2 to subpart LLLL, and tables 2 and 3 to subpart MMMM.

(191) ASTM D6911-15, Standard Guide for Packaging and Shipping Environmental Samples for Laboratory Analysis, approved January 15, 2015, IBR approved for appendix A-8: Method 30B.

(192) ASTM D7467-10, Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20), including Appendices X1 through X3, (Approved August 1, 2010), IBR approved for §§60.41b, 60.41c, and 60.5580.

(193) ASTM E168-67, General Techniques of Infrared Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).

(194) ASTM E168-77, General Techniques of Infrared Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).

(195) ASTM E168-92, General Techniques of Infrared Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), 60.632(f), 60.5400, 60.5400a(f).

(196) ASTM E169-63, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f) .

(197) ASTM E169-77, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), and 60.593a(b), 60.632(f).

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(198) ASTM E169-93, General Techniques of Ultraviolet Quantitative Analysis, (Approved May 15, 1993), IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), 60.632(f), 60.5400(f), and 60.5400a(f).

(199) ASTM E260-73, General Gas Chromatography Procedures, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).

(200) ASTM E260-91, General Gas Chromatography Procedures, (IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).

(201) ASTM E260-96, General Gas Chromatography Procedures, (Approved April 10, 1996), IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), 60.632(f), 60.5400(f), 60.5400a(f), 60.5406(b), and 60.5406a(b)(3).

(202) ASTM E617-13, Standard Specification for Laboratory Weights and Precision Mass Standards, approved May 1, 2013, IBR approved for appendix A-3: Methods 4, 5, 5H, 5I, and appendix A-8: Method 29.

(203) ASTM E871-82 (Reapproved 2013), Standard Test Method for Moisture Analysis of Particulate Wood Fuels, (Approved August 15, 2013), IBR approved for appendix A-8: method 28R.

(204) ASTM E1584-11, Standard Test Method for Assay of Nitric Acid, (Approved August 1, 2011), IBR approved for §60.73a(c).

(205) ASTM E2515-11, Standard Test Method for Determination of Particulate Matter Emissions Collected by a Dilution Tunnel, (Approved November 1, 2011), IBR approved for §60.534 and §60.5476.

(206) ASTM E2618-13 Standard Test Method for Measurement of Particulate Matter Emissions and Heating Efficiency of Outdoor Solid Fuel-Fired Hydronic Heating Appliances, (Approved September 1, 2013), IBR approved for §60.5476.

(207) ASTM E2779-10, Standard Test Method for Determining Particulate Matter Emissions from Pellet Heaters, (Approved October 1, 2010), IBR approved for §60.534.

(208) ASTM E2780-10, Standard Test Method for Determining Particulate Matter Emissions from Wood Heaters, (Approved October 1, 2010), IBR approved for appendix A: method 28R.

(209) ASTM UOP539-97, Refinery Gas Analysis by Gas Chromatography, (Copyright 1997), IBR approved for §60.107a(d).

(i) Association of Official Analytical Chemists, 1111 North 19th Street, Suite 210, Arlington, VA 22209.

(1) AOAC Method 9, Official Methods of Analysis of the Association of Official Analytical Chemists (AOAC), 11th edition, 1970, pp. 11-12, IBR approved for §§60.204(b), 60.214(b), 60.224(b), and 60.234(b).

(2) [Reserved]

(j) U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460, (202) 272-0167, <http://www.epa.gov>.

(1) EPA-454/R-98-015, Office of Air Quality Planning and Standards (OAQPS) Fabric Filter Bag Leak Detection Guidance, September 1997, IBR approved for §§60.2145(r), 60.2710(r), 60.4905(b), and 60.5225(b).

(2) EPA-600/R-12/531, EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, May 2012, IBR approved for §§60.5413(d) and 60.5413a(d).

(k) The Gas Processors Association, 6526 East 60th Street, Tulsa, OK 74145; also available through Information Handling Services, 15 Inverness Way East, PO Box 1154, Englewood, CO 80150-1154. You may inspect a copy at the EPA's Air and Radiation Docket and Information Center, Room 3334, 1301 Constitution Ave. NW., Washington, DC 20460.

(1) Gas Processors Association Standard 2172-09, Calculation of Gross Heating Value, Relative Density, Compressibility and Theoretical Hydrocarbon Liquid Content for Natural Gas Mixtures for Custody Transfer (2009), IBR approved for §60.107a(d).

(2) Gas Processors Association Standard 2261-00, Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography (2000), IBR approved for §60.107a(d).

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(3) Gas Processors Association Standard 2377-86, Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes, 1986 Revision, IBR approved for §§60.105(b), 60.107a(b), 60.334(h), 60.4360, and 60.4415(a).

(l) International Organization for Standardization (ISO) available through IHS Inc., 15 Inverness Way East, Englewood, CO 80112.

(1) ISO 8178-4: 1996(E), Reciprocating Internal Combustion Engines—Exhaust Emission Measurement—part 4: Test Cycles for Different Engine Applications, IBR approved for §60.4241(b).

(2) [Reserved]

(m) International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, + 41 22 749 01 11, <http://www.iso.org/iso/home.htm>.

(1) ISO 2314:2009(E), Gas turbines-Acceptance tests, Third edition (December 15, 2009), IBR approved for §60.5580.

(2) ISO 8316: Measurement of Liquid Flow in Closed Conduits—Method by Collection of the Liquid in a Volumetric Tank (1987-10-01)—First Edition, IBR approved for §60.107a(d).

(n) This material is available for purchase from the National Technical Information Services (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. You may inspect a copy at the EPA's Air and Radiation Docket and Information Center (Docket A-91-61, Item IV-J-125), Room M-1500, 1200 Pennsylvania Ave. NW., Washington, DC 20460.

(1) OMB Bulletin No. 93-17: Revised Statistical Definitions for Metropolitan Areas. Office of Management and Budget, June 30, 1993. NTIS No. PB 93-192-664. IBR approved for §60.31e.

(2) [Reserved]

(o) North American Electric Reliability Corporation, 1325 G Street NW., Suite 600, Washington, DC 20005-3801, <http://www.nerc.com>.

(1) North American Electric Reliability Corporation Reliability Standard EOP-002-3, Capacity and Energy Emergencies, updated November 19, 2012, IBR approved for §§60.4211(f) and 60.4243(d). Also available online: [http://www.nerc.com/files/EOP-002-3\\_1.pdf](http://www.nerc.com/files/EOP-002-3_1.pdf).

(2) [Reserved]

(p) The following material is available for purchase from the Technical Association of the Pulp and Paper Industry (TAPPI), 15 Technology Parkway South, Suite 115, Peachtree Corners, GA 30092, Telephone (800) 332-8686, and is also available at the following Web site: <http://www.tappi.org>.

(1) TAPPI Method T 624 cm-11, (Copyright 2011), IBR approved, for §§60.285(d) and 60.285a(d).

(2) [Reserved]

(q) Underwriter's Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062.

(1) UL 103, Sixth Edition revised as of September 3, 1986, Standard for Chimneys, Factory-built, Residential Type and Building Heating Appliance, IBR approved for appendix A-8 to part 60.

(2) [Reserved]

(r) Water Pollution Control Federation (WPCF), 2626 Pennsylvania Avenue NW., Washington, DC 20037.

(1) Method 209A, Total Residue Dried at 103-105 °C, in Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980, IBR approved for §60.683(b).

(2) [Reserved]

(s) West Coast Lumber Inspection Bureau, 6980 SW. Barnes Road, Portland, OR 97223.

(1) West Coast Lumber Standard Grading Rules No. 16, pages 5-21, 90 and 91, September 3, 1970, revised 1984, IBR approved for appendix A-8 to part 60.

(2) [Reserved]



(t) This material is available for purchase from the Canadian Standards Association (CSA), 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6, Telephone: 800-463-6727.

(1) CSA B415.1-10, Performance Testing of Solid-fuel-burning Heating Appliances, (March 2010), IBR approved for §60.534 and §60.5476. (The standard is also available at <http://shop.csa.ca/en/canada/fuel-burning-equipment/b4151-10/invnt/27013322010>)

(2) [Reserved]

(u) This European National (EN) standards material is available for purchase at European Committee for Standardization, Management Centre, Avenue Marnix 17, B-1000 Brussels, Belgium, Telephone: + 32 2 550 08 11.

(1) DIN EN 303-5:2012E (EN 303-5), Heating boilers—Part 5: Heating boilers for solid fuels, manually and automatically stoked, nominal heat output of up to 500 kW—Terminology, requirements, testing and marking, (October 2012), IBR approved for §60.5476. (The standard is also available at [http://www.en-standard.eu/csn-en-303-5-heating-boilers-part-5-heating-boilers-for-solid-fuels-manually-and-automatically-stoked-nominal-heat-output-of-up-to-500-kw-terminology-requirements-testing-and-marking/?gclid=CJXI2P\\_97MMCFdcccQodan8ATA](http://www.en-standard.eu/csn-en-303-5-heating-boilers-part-5-heating-boilers-for-solid-fuels-manually-and-automatically-stoked-nominal-heat-output-of-up-to-500-kw-terminology-requirements-testing-and-marking/?gclid=CJXI2P_97MMCFdcccQodan8ATA))

(2) [Reserved]

[79 FR 11242, Feb. 27, 2014, as amended at 79 FR 18965, Apr. 4, 2014; 80 FR 13701, Mar. 16, 2015; 80 FR 64648, Oct. 23, 2015; 81 FR 35895, June 3, 2016; 81 FR 59313, 59368, Aug. 29, 2016; 81 FR 59809, Aug. 30, 2016; 82 FR 28562, June 23, 2017]

§60.18 General control device and work practice requirements.

(a) *Introduction.* (1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(2) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(b) *Flares.* Paragraphs (c) through (f) apply to flares.

(c)(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i)(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity,  $V_{\max}$ , as determined by the following equation:

$$V_{\max} = (X_{H_2} - K_1) * K_2$$

Where:

$V_{\max}$  = Maximum permitted velocity, m/sec.

$K_1$  = Constant, 6.0 volume-percent hydrogen.

$K_2$  = Constant, 3.9(m/sec)/volume-percent hydrogen.

$X_{H_2}$  = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

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**APPENDIX NSPS, SUBPART A****40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4)(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity,  $V_{\max}$ , as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity,  $V_{\max}$ , as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f)(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

where:

$H_T$  = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \text{Constant}, \frac{1}{1.740 \times 10^{-7}} \left( \frac{1}{\text{ppm}} \right) \left( \frac{\text{g mole}}{\text{scm}} \right) \left( \frac{\text{MJ}}{\text{kcal}} \right)$$

where the standard temperature for  $\left( \frac{\text{g mole}}{\text{scm}} \right)$  is 20°C;

$C_i$  = Concentration of sample component  $i$  in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and

$H_i$  = Net heat of combustion of sample component  $i$ , kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

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**APPENDIX NSPS, SUBPART A**

**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(5) The maximum permitted velocity,  $V_{\max}$ , for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

$$\text{Log}_{10}(V_{\max}) = (H_T + 28.8)/31.7$$

$V_{\max}$  = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

$H_T$  = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity,  $V_{\max}$ , for air-assisted flares shall be determined by the following equation.

$$V_{\max} = 8.706 + 0.7084(H_T)$$

$V_{\max}$  = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

$H_T$  = The net heating value as determined in paragraph (f)(3).

(g) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (g), (h), and (i) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, appendix A-7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (g), (h), and (i) of this section apply to this standard. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (g)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (g), (h), and (i) of this section.

(1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, or 65 that requires monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.

(4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.

(5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.

(6) *Leak* means:

(i) Any emissions imaged by the optical gas instrument;

(ii) Indications of liquids dripping;

(iii) Indications by a sensor that a seal or barrier fluid system has failed; or

(iv) Screening results using a 40 CFR part 60, appendix A-7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.

(h) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(1) An owner or operator of an affected source subject to CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (i) of this section instead of using the 40 CFR part 60, appendix A-7,

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.

(2) Any leak detected when following the leak survey procedure in paragraph (i)(3) of this section must be identified for repair as required in the applicable subpart.

(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart to which the equipment is subject.

(4) The schedule for repair is as required in the applicable subpart.

(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.

(6) When this alternative work practice is used for detecting leaking equipment the following are not applicable for the equipment being monitored:

- (i) Skip period leak detection and repair;
- (ii) Quality improvement plans; or
- (iii) Complying with standards for allowable percentage of valves and pumps to leak.

(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (h)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.

(i) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (i)(1) through (i)(5) of this section.

(1) Instrument Specifications. The optical gas imaging instrument must comply with the requirements in (i)(1)(i) and (i)(1)(ii) of this section.

(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (i)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.

(ii) Provide a date and time stamp for video records of every monitoring event.

(2) Daily Instrument Check. On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (i)(2)(i) of this section in accordance with the procedure specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (i)(2)(v) of this section.

(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (i)(2)(i)(A) and (i)(2)(i)(B) of this section.

(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.

(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (i)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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$$E_{dic} = (E_{sds}) \sum_{i=1}^k x_i$$

Where:

$E_{dic}$  = Mass flow rate for the daily instrument check, grams per hour

$x_i$  = Mass fraction of detectable chemical(s)  $i$  seen by the optical gas imaging instrument, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level,  $E_{sds}$ .

$E_{sds}$  = Standard detection sensitivity level from Table 1 to subpart A, grams per hour

$k$  = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.

(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.

(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.

(iv) Establish a mass flow rate by using the following procedures:

(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.

(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.

(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate specified in paragraph (i)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.

(v) Repeat the procedures specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.

(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under §60.13(i).

(3) Leak Survey Procedure. Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.

(4) Recordkeeping. You must keep the records described in paragraphs (i)(4)(i) through (i)(4)(vii) of this section:

(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.

(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.

(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (i)(2)(i)(A) of this section.

(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (i)(2)(i)(B) of this section.

(v) The daily instrument check. Record the distance, per paragraph (i)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (i)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.

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**APPENDIX NSPS, SUBPART A**  
**40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(vi) Recordkeeping requirements in the applicable subpart. A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.

(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subpart.

(5) Reporting. Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to *CCG-AWP@EPA.GOV*.

[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000; 73 FR 78209, Dec. 22, 2008]

**§60.19 General notification and reporting requirements.**

(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.

(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.

(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(f)(1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

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**APPENDIX NSPS, SUBPART A****40 CFR 60, NSPS SUBPART A – GENERAL PROVISIONS.**

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(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

[59 FR 12428, Mar. 16, 1994, as amended at 64 FR 7463, Feb. 12, 1998]

Table 1 to Subpart A of Part 60—Detection Sensitivity Levels (grams per hour)

<b>Monitoring frequency per subpart<sup>a</sup></b>	<b>Detection sensitivity level</b>
Bi-Monthly	60
Semi-Quarterly	85
Monthly	100

<sup>a</sup>When this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.

[73 FR 78211, Dec. 22, 2008]

[Table of Contents](#)

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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

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e-CFR data is current as of May 24, 2018

**Subpart WWW—Standards of Performance for Municipal Solid Waste Landfills**

**Contents**

- §60.750 Applicability, designation of affected facility, and delegation of authority.
- §60.751 Definitions.
- §60.752 Standards for air emissions from municipal solid waste landfills.
- §60.753 Operational standards for collection and control systems.
- §60.754 Test methods and procedures.
- §60.755 Compliance provisions.
- §60.756 Monitoring of operations.
- §60.757 Reporting requirements.
- §60.758 Recordkeeping requirements.
- §60.759 Specifications for active collection systems.

Source: 61 FR 9919, Mar. 12, 1996, unless otherwise noted.

**§60.750 Applicability, designation of affected facility, and delegation of authority.**

(a) The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction or modification on or after May 30, 1991. Physical or operational changes made to an existing MSW landfill solely to comply with subpart Cc of this part are not considered construction, reconstruction, or modification for the purposes of this section.

(b) The following authorities shall be retained by the Administrator and not transferred to the State: §60.754(a)(5).

(c) Activities required by or conducted pursuant to a CERCLA, RCRA, or State remedial action are not considered construction, reconstruction, or modification for purposes of this subpart.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32750, June 16, 1998]

**§60.751 Definitions.**

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of this part.

Active collection system means a gas collection system that uses gas mover equipment.

Active landfill means a landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under §60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed.

Closure means that point in time when a landfill becomes a closed landfill.

Commercial solid waste means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

Controlled landfill means any landfill at which collection and control systems are required under this subpart as a result of the nonmethane organic compounds emission rate. The landfill is considered controlled at the time a collection and control system design plan is submitted in compliance with §60.752(b)(2)(i).

Design capacity means the maximum amount of solid waste a landfill can accept, as indicated in terms of volume or mass in the most recent permit issued by the State, local, or Tribal agency responsible for regulating the landfill, plus any in-place waste not accounted for in the most recent permit. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, the calculation must include a site specific density, which must be recalculated annually.

Disposal facility means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.



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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

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Emission rate cutoff means the threshold annual emission rate to which a landfill compares its estimated emission rate to determine if control under the regulation is required.

Enclosed combustor means an enclosed firebox which maintains a relatively constant limited peak temperature generally using a limited supply of combustion air. An enclosed flare is considered an enclosed combustor.

Flare means an open combustor without enclosure or shroud.

Gas mover equipment means the equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

Household waste means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

Industrial solid waste means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act, parts 264 and 265 of this title. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

Interior well means any well or similar collection component located inside the perimeter of the landfill waste. A perimeter well located outside the landfilled waste is not an interior well.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under §257.2 of this title.

Lateral expansion means a horizontal expansion of the waste boundaries of an existing MSW landfill. A lateral expansion is not a modification unless it results in an increase in the design capacity of the landfill.

Modification means an increase in the permitted volume design capacity of the landfill by either horizontal or vertical expansion based on its permitted design capacity as of May 30, 1991. Modification does not occur until the owner or operator commences construction on the horizontal or vertical expansion.

Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes (§257.2 of this title) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion.

Municipal solid waste landfill emissions or MSW landfill emissions means gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.

NMOC means nonmethane organic compounds, as measured according to the provisions of §60.754.

Nondegradable waste means any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to, concrete, municipal waste combustor ash, and metals.

Passive collection system means a gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

Sludge means any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

Solid waste means any garbage, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or

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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

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dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C 2011 et seq.).

Sufficient density means any number, spacing, and combination of collection system components, including vertical wells, horizontal collectors, and surface collectors, necessary to maintain emission and migration control as determined by measures of performance set forth in this part.

Sufficient extraction rate means a rate sufficient to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions, for the life of the blower.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32750, June 16, 1998; 64 FR 9262, Feb. 24, 1999]

**§60.752 Standards for air emissions from municipal solid waste landfills.**

(a) Each owner or operator of an MSW landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume shall submit an initial design capacity report to the Administrator as provided in §60.757(a). The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions shall be documented and submitted with the report. Submittal of the initial design capacity report shall fulfill the requirements of this subpart except as provided for in paragraphs (a)(1) and (a)(2) of this section.

(1) The owner or operator shall submit to the Administrator an amended design capacity report, as provided for in §60.757(a)(3).

(2) When an increase in the maximum design capacity of a landfill exempted from the provisions of §60.752(b) through §60.759 of this subpart on the basis of the design capacity exemption in paragraph (a) of this section results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator shall comply with the provision of paragraph (b) of this section.

(b) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, shall either comply with paragraph (b)(2) of this section or calculate an NMOC emission rate for the landfill using the procedures specified in §60.754. The NMOC emission rate shall be recalculated annually, except as provided in §60.757(b)(1)(ii) of this subpart. The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to part 70 or 71 permitting requirements.

(1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:

(i) Submit an annual emission report to the Administrator, except as provided for in §60.757(b)(1)(ii); and

(ii) Recalculate the NMOC emission rate annually using the procedures specified in §60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.

(A) If the NMOC emission rate, upon recalculation required in paragraph (b)(1)(ii) of this section, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with paragraph (b)(2) of this section.

(B) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in §60.757(d).

(2) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:

(i) Submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year:

(A) The collection and control system as described in the plan shall meet the design requirements of paragraph (b)(2)(ii) of this section.

(B) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§60.753 through 60.758 proposed by the owner or operator.

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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

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(C) The collection and control system design plan shall either conform with specifications for active collection systems in §60.759 or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to §60.759.

(D) The Administrator shall review the information submitted under paragraphs (b)(2)(i) (A),(B) and (C) of this section and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.

(ii) Install a collection and control system that captures the gas generated within the landfill as required by paragraphs (b)(2)(ii)(A) or (B) and (b)(2)(iii) of this section within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in §60.757(c)(1) or (2).

(A) An active collection system shall:

(1) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;

(2) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of:

(i) 5 years or more if active; or

(ii) 2 years or more if closed or at final grade.

(3) Collect gas at a sufficient extraction rate;

(4) Be designed to minimize off-site migration of subsurface gas.

(B) A passive collection system shall:

(1) Comply with the provisions specified in paragraphs (b)(2)(ii)(A)(1), (2), and (2)(ii)(A)(4) of this section.

(2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under §258.40.

(iii) Route all the collected gas to a control system that complies with the requirements in either paragraph (b)(2)(iii) (A), (B) or (C) of this section.

(A) An open flare designed and operated in accordance with §60.18 except as noted in §60.754(e);

(B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.754(d).

(1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.

(2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in §60.756;

(C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph (b)(2)(iii) (A) or (B) of this section.

(iv) Operate the collection and control device installed to comply with this subpart in accordance with the provisions of §§60.753, 60.755 and 60.756.

(v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (b)(2)(v) (A), (B), and (C) of this section are met:

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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

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(A) The landfill shall be a closed landfill as defined in §60.751 of this subpart. A closure report shall be submitted to the Administrator as provided in §60.757(d);

(B) The collection and control system shall have been in operation a minimum of 15 years; and

(C) Following the procedures specified in §60.754(b) of this subpart, the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

(c) For purposes of obtaining an operating permit under title V of the Act, the owner or operator of a MSW landfill subject to this subpart with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not subject to the requirement to obtain an operating permit for the landfill under part 70 or 71 of this chapter, unless the landfill is otherwise subject to either part 70 or 71. For purposes of submitting a timely application for an operating permit under part 70 or 71, the owner or operator of a MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters, and not otherwise subject to either part 70 or 71, becomes subject to the requirements of §§70.5(a)(1)(i) or 71.5(a)(1)(i) of this chapter, regardless of when the design capacity report is actually submitted, no later than:

(1) June 10, 1996 for MSW landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996;

(2) Ninety days after the date of commenced construction, modification, or reconstruction for MSW landfills that commence construction, modification, or reconstruction on or after March 12, 1996.

(d) When a MSW landfill subject to this subpart is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met:

(1) The landfill was never subject to the requirement for a control system under paragraph (b)(2) of this section; or

(2) The owner or operator meets the conditions for control system removal specified in paragraph (b)(2)(v) of this section.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32751, June 16, 1998; 65 FR 18908, Apr. 10, 2000; 71 FR 55127, Sept. 21, 2006]

**§60.753 Operational standards for collection and control systems.**

Each owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of §60.752(b)(2)(ii) of this subpart shall:

(a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

(1) 5 years or more if active; or

(2) 2 years or more if closed or at final grade;

(b) Operate the collection system with negative pressure at each wellhead except under the following conditions:

(1) A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in §60.757(f)(1);

(2) Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan;

(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator;

(c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.

**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

- (1) The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by §60.752(b)(2)(i) of this subpart.
- (2) Unless an alternative test method is established as allowed by §60.752(b)(2)(i) of this subpart, the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that:
- (i) The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
  - (ii) A data recorder is not required;
  - (iii) Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
  - (iv) A calibration error check is not required;
  - (v) The allowable sample bias, zero drift, and calibration drift are  $\pm 10$  percent.
- (d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.
- (e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with §60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; and
- (f) Operate the control or treatment system at all times when the collected gas is routed to the system.
- (g) If monitoring demonstrates that the operational requirements in paragraphs (b), (c), or (d) of this section are not met, corrective action shall be taken as specified in §60.755(a)(3) through (5) or §60.755(c) of this subpart. If corrective actions are taken as specified in §60.755, the monitored exceedance is not a violation of the operational requirements in this section.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32751, June 16, 1998; 65 FR 61778, Oct. 17, 2000]

**§60.754 Test methods and procedures.**

- (a)(1) The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (a)(1)(i) of this section or the equation provided in paragraph (a)(1)(ii) of this section. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in paragraph (a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for  $k$ , 170 cubic meters per megagram for  $L_o$ , and 4,000 parts per million by volume as hexane for the CNMOC. For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the  $k$  value to be used is 0.02 per year.
- (i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^n 2 k L_o M_i (e^{-kt} - e^{-k(t-1)}) (C_{NMOC}) (3.6 \times 10^{-9})$$

where,

$M_{NMOC}$  = Total NMOC emission rate from the landfill, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**


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$M_i$  = mass of solid waste in the  $i$ th section, megagrams

$t_i$  = age of the  $i$ th section, years

CNMOC = concentration of NMOC, parts per million by volume as hexane

$3.6 \times 10^{-9}$  = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for  $M_i$  if documentation of the nature and amount of such wastes is maintained

(ii) The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2L_o R (e^{-kc} - e^{-kt}) C_{NMOC} (3.6 \times 10^{-9})$$

Where:

$M_{NMOC}$  = mass emission rate of NMOC, megagrams per year

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$R$  = average annual acceptance rate, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$t$  = age of landfill, years

CNMOC = concentration of NMOC, parts per million by volume as hexane

$c$  = time since closure, years; for active landfill  $c = 0$  and  $e^{-kc} = 1$

$3.6 \times 10^{-9}$  = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of  $R$ , if documentation of the nature and amount of such wastes is maintained.

(2) Tier 1. The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

(i) If the NMOC emission rate calculated in paragraph (a)(1) of this section is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in §60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under §60.752(b)(1).

(ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with §60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in paragraph (a)(3) of this section.

(3) Tier 2. The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of appendix A of this part. Method 18 of appendix A of this part may be used to analyze the samples collected by the Method 25 or 25C sampling procedure. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If using Method 18, the owner or operator must identify all compounds in the sample and, as a minimum, test for those compounds published in the most recent Compilation of Air Pollutant Emission Factors (AP-42), minus carbon monoxide, hydrogen sulfide, and mercury. As a minimum, the instrument must be calibrated for each of the compounds on the list.

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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FO MUNICIPAL SOLID WASTE LANDFILLS.**


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Convert the concentration of each Method 18 compound to CNMOC as hexane by multiplying by the ratio of its carbon atoms divided by six. If more than the required number of samples are taken, all samples must be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C of appendix A of this part by six to convert from CNMOC as carbon to CNMOC as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe before the gas moving or condensate removal equipment. For these systems, a minimum of three samples must be collected from the header pipe.

- (i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in paragraph (a)(1) of this section.
  - (ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with §60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in paragraph (a)(4) of this section.
  - (iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in §60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in this section.
- (4) Tier 3. The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of appendix A of this part. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using a site-specific methane generation rate constant  $k$ , and the site-specific NMOC concentration as determined in paragraph (a)(3) of this section instead of the default values provided in paragraph (a)(1) of this section. The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.
- (i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with §60.752(b)(2).
  - (ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in §60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in §60.757(b)(1) using the equations in paragraph (a)(1) of this section and using the site-specific methane generation rate constant and NMOC concentration obtained in paragraph (a)(3) of this section. The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.
- (5) The owner or operator may use other methods to determine the NMOC concentration or a site-specific  $k$  as an alternative to the methods required in paragraphs (a)(3) and (a)(4) of this section if the method has been approved by the Administrator.
- (b) After the installation of a collection and control system in compliance with §60.755, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in §60.752(b)(2)(v), using the following equation:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

where,

$M_{\text{NMOC}}$  = mass emission rate of NMOC, megagrams per year

$Q_{\text{LFG}}$  = flow rate of landfill gas, cubic meters per minute

$C_{\text{NMOC}}$  = NMOC concentration, parts per million by volume as hexane

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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**


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- (1) The flow rate of landfill gas, QLFG, shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of appendix A of this part.
- (2) The average NMOC concentration, CNMOC, shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of appendix A of this part. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C of appendix A of this part by six to convert from CNMOC as carbon to CNMOC as hexane.
- (3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.
- (c) When calculating emissions for PSD purposes, the owner or operator of each MSW landfill subject to the provisions of this subpart shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in §§51.166 or 52.21 of this chapter using AP-42 or other approved measurement procedures.
- (d) For the performance test required in §60.752(b)(2)(iii)(B), Method 25, 25C, or Method 18 of appendix A of this part must be used to determine compliance with the 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by §60.752(b)(2)(i)(B). Method 3 or 3A shall be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8 ppm NMOC as hexane), Method 25A should be used in place of Method 25. If using Method 18 of appendix A of this part, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}})$$

where,

NMOC<sub>in</sub> = mass of NMOC entering control device

NMOC<sub>out</sub> = mass of NMOC exiting control device

- (e) For the performance test required in §60.752(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4).

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32751, June 16, 1998; 65 FR 18908, Apr. 10, 2000; 65 FR 61778, Oct. 17, 2000; 71 FR 55127, Sept. 21, 2006]

#### **§60.755 Compliance provisions.**

- (a) Except as provided in §60.752(b)(2)(i)(B), the specified methods in paragraphs (a)(1) through (a)(6) of this section shall be used to determine whether the gas collection system is in compliance with §60.752(b)(2)(ii).
- (1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with §60.752(b)(2)(ii)(A)(1), one of the following equations shall be used. The k and Lo kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in §60.754(a)(4), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.
- (i) For sites with unknown year-to-year solid waste acceptance rate:



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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**


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$$Q_m = 2L_o R (e^{-kc} - e^{-kt})$$

where,

$Q_m$  = maximum expected gas generation flow rate, cubic meters per year

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$R$  = average annual acceptance rate, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$t$  = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure,  $t$  is the age of the landfill at installation, years

$c$  = time since closure, years (for an active landfill  $c = 0$  and  $e^{-kc} = 1$ )

(ii) For sites with known year-to-year solid waste acceptance rate:

$$Q_M = \sum_{i=1}^n 2 k L_o M_i (e^{-k t_i})$$

where,

$Q_M$  = maximum expected gas generation flow rate, cubic meters per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of solid waste in the  $i$ th section, megagrams

$t_i$  = age of the  $i$ th section, years

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs (a)(1) (i) and (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in paragraphs (a)(1) (i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

(2) For the purposes of determining sufficient density of gas collectors for compliance with §60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with §60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under §60.753(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

(4) Owners or operators are not required to expand the system as required in paragraph (a)(3) of this section during the first 180 days after gas collection system startup.

**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

(5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in §60.753(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Administrator for approval.

(6) An owner or operator seeking to demonstrate compliance with §60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in §60.759 shall provide information satisfactory to the Administrator as specified in §60.752(b)(2)(i)(C) demonstrating that off-site migration is being controlled.

(b) For purposes of compliance with §60.753(a), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in §60.752(b)(2)(i). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

(1) 5 years or more if active; or

(2) 2 years or more if closed or at final grade.

(c) The following procedures shall be used for compliance with the surface methane operational standard as provided in §60.753(d).

(1) After installation of the collection system, the owner or operator shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) of this section.

(2) The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

(3) Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of appendix A of this part, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions.

(4) Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in paragraphs (c)(4) (i) through (v) of this section shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of §60.753(d).

(i) The location of each monitored exceedance shall be marked and the location recorded.

(ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance.

(iii) If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph (c)(4)(v) of this section shall be taken, and no further monitoring of that location is required until the action specified in paragraph (c)(4)(v) has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph (c)(4) (ii) or (iii) of this section shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in paragraph (c)(4) (iii) or (v) shall be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

(5) The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

(d) Each owner or operator seeking to comply with the provisions in paragraph (c) of this section shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(1) The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of this part, except that “methane” shall replace all references to VOC.

(2) The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air.

(3) To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of this part shall be used.

(4) The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately before commencing a surface monitoring survey.

(e) The provisions of this subpart apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32752, June 16, 1998]

**§60.756 Monitoring of operations.**

Except as provided in §60.752(b)(2)(i)(B),

(a) Each owner or operator seeking to comply with §60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

(1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in §60.755(a)(3); and

(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in §60.755(a)(5); and

(3) Monitor temperature of the landfill gas on a monthly basis as provided in §60.755(a)(5).

(b) Each owner or operator seeking to comply with §60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment.

(1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of  $\pm 1$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 0.5$  degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.

(2) A device that records flow to or bypass of the control device. The owner or operator shall either:

(i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(c) Each owner or operator seeking to comply with §60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.

(2) A device that records flow to or bypass of the flare. The owner or operator shall either:

(i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or

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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

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(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(d) Each owner or operator seeking to demonstrate compliance with §60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor shall provide information satisfactory to the Administrator as provided in §60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator shall review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.

(e) Each owner or operator seeking to install a collection system that does not meet the specifications in §60.759 or seeking to monitor alternative parameters to those required by §§60.753 through 60.756 shall provide information satisfactory to the Administrator as provided in §60.752(b)(2)(i) (B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures.

(f) Each owner or operator seeking to demonstrate compliance with §60.755(c), shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in §60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32752, June 16, 1998; 65 FR 18909, Apr. 10, 2000]

**§60.757 Reporting requirements.**

Except as provided in §60.752(b)(2)(i)(B),

(a) Each owner or operator subject to the requirements of this subpart shall submit an initial design capacity report to the Administrator.

(1) The initial design capacity report shall fulfill the requirements of the notification of the date construction is commenced as required by §60.7(a)(1) and shall be submitted no later than:

(i) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991 but before March 12, 1996 or

(ii) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.

(2) The initial design capacity report shall contain the following information:

(i) A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the State, local, or tribal agency responsible for regulating the landfill.

(ii) The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the State, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters as part of the report. The State, Tribal, local agency or Administrator may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.

(3) An amended design capacity report shall be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in §60.758(f).

(b) Each owner or operator subject to the requirements of this subpart shall submit an NMOC emission rate report to the Administrator initially and annually thereafter, except as provided for in paragraphs (b)(1)(ii) or (b)(3) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.

**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

- (1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in §60.754(a) or (b), as applicable.
- (i) The initial NMOC emission rate report may be combined with the initial design capacity report required in paragraph (a) of this section and shall be submitted no later than indicated in paragraphs (b)(1)(i)(A) and (B) of this section. Subsequent NMOC emission rate reports shall be submitted annually thereafter, except as provided for in paragraphs (b)(1)(ii) and (b)(3) of this section.
- (A) June 10, 1996, for landfills that commenced construction, modification, or reconstruction on or after May 30, 1991, but before March 12, 1996, or
- (B) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction on or after March 12, 1996.
- (ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.
- (2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.
- (3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements of paragraphs (b)(1) and (2) of this section, after the installation of a collection and control system in compliance with §60.752(b)(2), during such time as the collection and control system is in operation and in compliance with §§60.753 and 60.755.
- (c) Each owner or operator subject to the provisions of §60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report required under paragraph (b) of this section in which the emission rate equals or exceeds 50 megagrams per year, except as follows:
- (1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in §60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year.
- (2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in §60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of §60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.
- (d) Each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under §60.7(a)(4).
- (e) Each owner or operator of a controlled landfill shall submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.

**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

(1) The equipment removal report shall contain all of the following items:

(i) A copy of the closure report submitted in accordance with paragraph (d) of this section;

(ii) A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and

(iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.

(2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in §60.752(b)(2)(v) have been met.

(f) Each owner or operator of a landfill seeking to comply with §60.752(b)(2) using an active collection system designed in accordance with §60.752(b)(2)(ii) shall submit to the Administrator annual reports of the recorded information in (f)(1) through (f)(6) of this paragraph. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under §60.8. For enclosed combustion devices and flares, reportable exceedances are defined under §60.758(c).

(1) Value and length of time for exceedance of applicable parameters monitored under §60.756(a), (b), (c), and (d).

(2) Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756.

(3) Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.

(4) All periods when the collection system was not operating in excess of 5 days.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in §60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.

(6) The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of §60.755.

(g) Each owner or operator seeking to comply with §60.752(b)(2)(iii) shall include the following information with the initial performance test report required under §60.8:

(1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

(2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

(3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

(4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and

(5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

(6) The provisions for the control of off-site migration.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32752, June 16, 1998; 65 FR 18909, Apr. 10, 2000]

**§60.758 Recordkeeping requirements.**

(a) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of §60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered §60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

(b) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in paragraphs (b)(1) through (b)(4) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal.

(1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(ii):

(i) The maximum expected gas generation flow rate as calculated in §60.755(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.

(ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in §60.759(a)(1).

(2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:

(i) The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test.

(ii) The percent reduction of NMOC determined as specified in §60.752(b)(2)(iii)(B) achieved by the control device.

(3) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.

(4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.752(b)(2)(iii)(A) through use of an open flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

(c) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in §60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that shall be recorded and reported under §60.757(f):

(i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 °C below the average combustion temperature during the most recent performance test at which compliance with §60.752(b)(2)(iii) was determined.

(ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under paragraph (b)(3) of this section.

(2) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under §60.756.

(3) Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with §60.752(b)(2)(iii) shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other State, local, Tribal, or Federal regulatory requirements.)

(4) Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under §60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

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**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FO MUNICIPAL SOLID WASTE LANDFILLS.**


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(d) Except as provided in §60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of this subpart shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under §60.755(b).

(2) Each owner or operator subject to the provisions of this subpart shall keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in §60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in §60.759(a)(3)(ii).

(e) Except as provided in §60.752(b)(2)(i)(B), each owner or operator subject to the provisions of this subpart shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in §60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

(f) Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of “design capacity”, shall keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32752, June 16, 1998; 65 FR 18909, Apr. 10, 2000]

**§60.759 Specifications for active collection systems.**

(a) Each owner or operator seeking to comply with §60.752(b)(2)(i) shall site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in §60.752(b)(2)(i)(C) and (D):

(1) The collection devices within the interior and along the perimeter areas shall be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues shall be addressed in the design: depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat.

(2) The sufficient density of gas collection devices determined in paragraph (a)(1) of this section shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

(3) The placement of gas collection devices determined in paragraph (a)(1) of this section shall control all gas producing areas, except as provided by paragraphs (a)(3)(i) and (a)(3)(ii) of this section.

(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under §60.758(d). The documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Administrator upon request.

(ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Administrator upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill. Emissions from each section shall be computed using the following equation:

$$Q_i = 2 k L_o M_i (e^{-kt} i) (C_{NMOC}) (3.6 \times 10^{-9})$$

where,



**40 CFR 60, NSPS SUBPART WWW – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS.**

$Q_i$  = NMOC emission rate from the  $i$ th section, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of the degradable solid waste in the  $i$ th section, megagram

$t_i$  = age of the solid waste in the  $i$ th section, years

CNMOC = concentration of nonmethane organic compounds, parts per million by volume

$3.6 \times 10^{-9}$  = conversion factor

(iii) The values for  $k$  and CNMOC determined in field testing shall be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for  $k$ ,  $L_o$  and CNMOC provided in §60.754(a)(1) or the alternative values from §60.754(a)(5) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in paragraph (a)(3)(i) of this section.

(b) Each owner or operator seeking to comply with §60.752(b)(2)(i)(A) shall construct the gas collection devices using the following equipment or procedures:

(1) The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration.

(2) Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

(c) Each owner or operator seeking to comply with §60.752(b)(2)(i)(A) shall convey the landfill gas to a control system in compliance with §60.752(b)(2)(iii) through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (c)(2) of this section shall be used.

(2) For new collection systems, the maximum flow rate shall be in accordance with §60.755(a)(1).

[61 FR 9919, Mar. 12, 1996, as amended at 63 FR 32753, June 16, 1998; 64 FR 9262, Feb. 24, 1999; 65 FR 18909, Apr. 10, 2000]

[Table of Contents](#)

**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

e-CFR data is current as of May 24, 2018

**Subpart XXX—Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014**

**Contents**

- §60.760 Applicability, designation of affected source, and delegation of authority.
- §60.761 Definitions.
- §60.762 Standards for air emissions from municipal solid waste landfills.
- §60.763 Operational standards for collection and control systems.
- §60.764 Test methods and procedures.
- §60.765 Compliance provisions.
- §60.766 Monitoring of operations.
- §60.767 Reporting requirements.
- §60.768 Recordkeeping requirements.
- §60.769 Specifications for active collection systems.

Source: 81 FR 59368, Aug. 29, 2016, unless otherwise noted.

**§60.760 Applicability, designation of affected source, and delegation of authority.**

(a) The provisions of this subpart apply to each municipal solid waste landfill that commenced construction, reconstruction, or modification after July 17, 2014. Physical or operational changes made to an MSW landfill solely to comply with subparts Cc, Cf, or WWW of this part are not considered construction, reconstruction, or modification for the purposes of this section.

(b) The following authorities are retained by the Administrator and are not transferred to the state: §60.764(a)(5).

(c) Activities required by or conducted pursuant to a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), or state remedial action are not considered construction, reconstruction, or modification for purposes of this subpart.

**§60.761 Definitions.**

As used in this subpart, all terms not defined herein have the meaning given them in the Act or in subpart A of this part.

Active collection system means a gas collection system that uses gas mover equipment.

Active landfill means a landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

Closed area means a separately lined area of an MSW landfill in which solid waste is no longer being placed. If additional solid waste is placed in that area of the landfill, that landfill area is no longer closed. The area must be separately lined to ensure that the landfill gas does not migrate between open and closed areas.

Closed landfill means a landfill in which solid waste is no longer being placed, and in which no additional solid wastes will be placed without first filing a notification of modification as prescribed under §60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed.

Closure means that point in time when a landfill becomes a closed landfill.

Commercial solid waste means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.

Controlled landfill means any landfill at which collection and control systems are required under this subpart as a result of the nonmethane organic compounds emission rate. The landfill is considered controlled at the time a collection and control system design plan is submitted in compliance with §60.762(b)(2)(i).

Corrective action analysis means a description of all reasonable interim and long-term measures, if any, that are available, and an explanation of why the selected corrective action(s) is/are the best alternative(s), including, but not limited to, considerations of cost effectiveness, technical feasibility, safety, and secondary impacts.

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**APPENDIX NSPS, SUBPART XXX**

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**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE  
LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER  
JULY 17, 2014.**

Design capacity means the maximum amount of solid waste a landfill can accept, as indicated in terms of volume or mass in the most recent permit issued by the state, local, or tribal agency responsible for regulating the landfill, plus any in-place waste not accounted for in the most recent permit. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, the calculation must include a site-specific density, which must be recalculated annually.

Disposal facility means all contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

Emission rate cutoff means the threshold annual emission rate to which a landfill compares its estimated emission rate to determine if control under the regulation is required.

Enclosed combustor means an enclosed firebox which maintains a relatively constant limited peak temperature generally using a limited supply of combustion air. An enclosed flare is considered an enclosed combustor.

Flare means an open combustor without enclosure or shroud.

Gas mover equipment means the equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

Gust means the highest instantaneous wind speed that occurs over a 3-second running average.

Household waste means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas). Household waste does not include fully segregated yard waste. Segregated yard waste means vegetative matter resulting exclusively from the cutting of grass, the pruning and/or removal of bushes, shrubs, and trees, the weeding of gardens, and other landscaping maintenance activities. Household waste does not include construction, renovation, or demolition wastes, even if originating from a household.

Industrial solid waste means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act, parts 264 and 265 of this chapter. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

Interior well means any well or similar collection component located inside the perimeter of the landfill waste. A perimeter well located outside the landfilled waste is not an interior well.

Landfill means an area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under §257.2 of this title.

Lateral expansion means a horizontal expansion of the waste boundaries of an existing MSW landfill. A lateral expansion is not a modification unless it results in an increase in the design capacity of the landfill.

Leachate recirculation means the practice of taking the leachate collected from the landfill and reapplying it to the landfill by any of one of a variety of methods, including pre-wetting of the waste, direct discharge into the working face, spraying, infiltration ponds, vertical injection wells, horizontal gravity distribution systems, and pressure distribution systems.

Modification means an increase in the permitted volume design capacity of the landfill by either lateral or vertical expansion based on its permitted design capacity as of July 17, 2014. Modification does not occur until the owner or operator commences construction on the lateral or vertical expansion.

Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes (§257.2 of this title) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and

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**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

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industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion.

Municipal solid waste landfill emissions or MSW landfill emissions means gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.

NMOC means nonmethane organic compounds, as measured according to the provisions of §60.764.

Nondegradable waste means any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to, concrete, municipal waste combustor ash, and metals.

Passive collection system means a gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

Root cause analysis means an assessment conducted through a process of investigation to determine the primary cause, and any other contributing causes, of positive pressure at a wellhead.

Segregated yard waste means vegetative matter resulting exclusively from the cutting of grass, the pruning and/or removal of bushes, shrubs, and trees, the weeding of gardens, and other landscaping maintenance activities.

Sludge means the term sludge as defined in 40 CFR 258.2.

Solid waste means the term solid waste as defined in 40 CFR 258.2.

Sufficient density means any number, spacing, and combination of collection system components, including vertical wells, horizontal collectors, and surface collectors, necessary to maintain emission and migration control as determined by measures of performance set forth in this part.

Sufficient extraction rate means a rate sufficient to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions, for the life of the blower.

Treated landfill gas means landfill gas processed in a treatment system as defined in this subpart.

Treatment system means a system that filters, de-waters, and compresses landfill gas for sale or beneficial use.

Untreated landfill gas means any landfill gas that is not treated landfill gas.

**§60.762 Standards for air emissions from municipal solid waste landfills.**

(a) Each owner or operator of an MSW landfill having a design capacity less than 2.5 million megagrams by mass or 2.5 million cubic meters by volume must submit an initial design capacity report to the Administrator as provided in §60.767(a). The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. Any density conversions must be documented and submitted with the report. Submittal of the initial design capacity report fulfills the requirements of this subpart except as provided for in paragraphs (a)(1) and (2) of this section.

(1) The owner or operator must submit to the Administrator an amended design capacity report, as provided for in §60.767(a)(3).

(2) When an increase in the maximum design capacity of a landfill exempted from the provisions of §§60.762(b) through 60.769 on the basis of the design capacity exemption in paragraph (a) of this section results in a revised maximum design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, the owner or operator must comply with the provisions of paragraph (b) of this section.

(b) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters, must either comply with paragraph (b)(2) of this section or calculate an NMOC emission rate for the landfill using the procedures specified in §60.764. The NMOC emission rate must be recalculated annually, except as provided in §60.767(b)(1)(ii). The owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters is subject to part 70 or 71 permitting requirements.

(1) If the calculated NMOC emission rate is less than 34 megagrams per year, the owner or operator must:

**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE  
LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER  
JULY 17, 2014.**

(i) Submit an annual NMOC emission rate emission report to the Administrator, except as provided for in §60.767(b)(1)(ii); and

(ii) Recalculate the NMOC emission rate annually using the procedures specified in §60.764(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, or the landfill is closed.

(A) If the calculated NMOC emission rate, upon initial calculation or annual recalculation required in paragraph (b) of this section, is equal to or greater than 34 megagrams per year, the owner or operator must either: Comply with paragraph (b)(2) of this section; calculate NMOC emissions using the next higher tier in §60.764; or conduct a surface emission monitoring demonstration using the procedures specified in §60.764(a)(6).

(B) If the landfill is permanently closed, a closure report must be submitted to the Administrator as provided for in §60.767(e).

(2) If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year using Tier 1, 2, or 3 procedures, the owner or operator must either:

(i) Calculated NMOC Emission Rate. Submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year as specified in §60.767(c); calculate NMOC emissions using the next higher tier in §60.764; or conduct a surface emission monitoring demonstration using the procedures specified in §60.764(a)(6). The collection and control system must meet the requirements in paragraphs (b)(2)(ii) and (iii) of this section.

(ii) Collection system. Install and start up a collection and control system that captures the gas generated within the landfill as required by paragraphs (b)(2)(ii)(C) or (D) and (b)(2)(iii) of this section within 30 months after:

(A) The first annual report in which the NMOC emission rate equals or exceeds 34 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the NMOC emission rate is less than 34 megagrams per year, as specified in §60.767(c)(4); or

(B) The most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year based on Tier 2, if the Tier 4 surface emissions monitoring shows a surface methane emission concentration of 500 parts per million methane or greater as specified in §60.767(c)(4)(iii).

(C) An active collection system must:

(1) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control system equipment;

(2) Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 5 years or more if active; or 2 years or more if closed or at final grade.

(3) Collect gas at a sufficient extraction rate;

(4) Be designed to minimize off-site migration of subsurface gas.

(D) A passive collection system must:

(1) Comply with the provisions specified in paragraphs (b)(2)(ii)(C)(1), (2), and (3) of this section.

(2) Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners must be installed as required under 40 CFR 258.40.

(iii) Control system. Route all the collected gas to a control system that complies with the requirements in either paragraph (b)(2)(iii)(A), (B), or (C) of this section.

(A) A non-enclosed flare designed and operated in accordance with the parameters established in §60.18 except as noted in §60.764(e); or

(B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume must be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.764(d). The performance test is not required for boilers and

**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

process heaters with design heat input capacities equal to or greater than 44 megawatts that burn landfill gas for compliance with this subpart.

- (1) If a boiler or process heater is used as the control device, the landfill gas stream must be introduced into the flame zone.
- (2) The control device must be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in §60.766;
- (C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or beneficial use such as fuel for combustion, production of vehicle fuel, production of high-Btu gas for pipeline injection, or use as a raw material in a chemical manufacturing process. Venting of treated landfill gas to the ambient air is not allowed. If the treated landfill gas cannot be routed for subsequent sale or beneficial use, then the treated landfill gas must be controlled according to either paragraph (b)(2)(iii)(A) or (B) of this section.
- (D) All emissions from any atmospheric vent from the gas treatment system are subject to the requirements of paragraph (b)(2)(iii)(A) or (B) of this section. For purposes of this subpart, atmospheric vents located on the condensate storage tank are not part of the treatment system and are exempt from the requirements of paragraph (b)(2)(iii)(A) or (B) of this section.
- (iv) Operation. Operate the collection and control device installed to comply with this subpart in accordance with the provisions of §§60.763, 60.765 and 60.766.
- (v) Removal criteria. The collection and control system may be capped, removed, or decommissioned if the following criteria are met:
  - (A) The landfill is a closed landfill (as defined in §60.761). A closure report must be submitted to the Administrator as provided in §60.767(e).
  - (B) The collection and control system has been in operation a minimum of 15 years or the landfill owner or operator demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flow.
  - (C) Following the procedures specified in §60.764(b), the calculated NMOC emission rate at the landfill is less than 34 megagrams per year on three successive test dates. The test dates must be no less than 90 days apart, and no more than 180 days apart.
- (c) For purposes of obtaining an operating permit under title V of the Clean Air Act, the owner or operator of an MSW landfill subject to this subpart with a design capacity less than 2.5 million megagrams or 2.5 million cubic meters is not subject to the requirement to obtain an operating permit for the landfill under part 70 or 71 of this chapter, unless the landfill is otherwise subject to either part 70 or 71. For purposes of submitting a timely application for an operating permit under part 70 or 71, the owner or operator of an MSW landfill subject to this subpart with a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters, and not otherwise subject to either part 70 or 71, becomes subject to the requirements of §70.5(a)(1)(i) or §71.5(a)(1)(i) of this chapter, regardless of when the design capacity report is actually submitted, no later than:
  - (1) November 28, 2016 for MSW landfills that commenced construction, modification, or reconstruction after July 17, 2014 but before August 29, 2016;
  - (2) Ninety days after the date of commenced construction, modification, or reconstruction for MSW landfills that commence construction, modification, or reconstruction after August 29, 2016.
- (d) When an MSW landfill subject to this subpart is closed as defined in this subpart, the owner or operator is no longer subject to the requirement to maintain an operating permit under part 70 or 71 of this chapter for the landfill if the landfill is not otherwise subject to the requirements of either part 70 or 71 and if either of the following conditions are met:
  - (1) The landfill was never subject to the requirement for a control system under paragraph (b)(2) of this section; or
  - (2) The owner or operator meets the conditions for control system removal specified in paragraph (b)(2)(v) of this section.

**§60.763 Operational standards for collection and control systems.**

Each owner or operator of an MSW landfill with a gas collection and control system used to comply with the provisions of §60.762(b)(2) must:

**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

(a) Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:

- (1) 5 years or more if active; or
- (2) 2 years or more if closed or at final grade;

(b) Operate the collection system with negative pressure at each wellhead except under the following conditions:

- (1) A fire or increased well temperature. The owner or operator must record instances when positive pressure occurs in efforts to avoid a fire. These records must be submitted with the annual reports as provided in §60.767(g)(1);
- (2) Use of a geomembrane or synthetic cover. The owner or operator must develop acceptable pressure limits in the design plan;

(3) A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes must be approved by the Administrator as specified in §60.767(c);

(c) Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius (131 degrees Fahrenheit). The owner or operator may establish a higher operating temperature value at a particular well. A higher operating value demonstration must be submitted to the Administrator for approval and must include supporting data demonstrating that the elevated parameter neither causes fires nor significantly inhibits anaerobic decomposition by killing methanogens. The demonstration must satisfy both criteria in order to be approved (i.e., neither causing fires nor killing methanogens is acceptable).

(d) Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator must conduct surface testing using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in §60.765(d). The owner or operator must conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at no more than 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover and all cover penetrations. Thus, the owner or operator must monitor any openings that are within an area of the landfill where waste has been placed and a gas collection system is required. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan must be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30-meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing.

(e) Operate the system such that all collected gases are vented to a control system designed and operated in compliance with §60.762(b)(2)(iii). In the event the collection or control system is not operating, the gas mover system must be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere must be closed within 1 hour of the collection or control system not operating; and

(f) Operate the control system at all times when the collected gas is routed to the system.

(g) If monitoring demonstrates that the operational requirements in paragraphs (b), (c), or (d) of this section are not met, corrective action must be taken as specified in §60.765(a)(3) and (5) or (c). If corrective actions are taken as specified in §60.765, the monitored exceedance is not a violation of the operational requirements in this section.

**§60.764 Test methods and procedures.**

(a)(1) NMOC Emission Rate. The landfill owner or operator must calculate the NMOC emission rate using either Equation 1 provided in paragraph (a)(1)(i) of this section or Equation 2 provided in paragraph (a)(1)(ii) of this section. Both Equation 1 and Equation 2 may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (a)(1)(i) of this section, for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in paragraph (a)(1)(ii) of this section, for part of the life of the landfill. The values to be used in both Equation 1 and Equation 2 are 0.05 per year for k, 170 cubic meters per megagram for Lo, and 4,000 parts per million by volume as hexane for the CNMOC. For landfills located in geographical areas with a 30-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the k value to be used is 0.02 per year.

**40 CFR 60, NSPS SUBPART XXX — STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

(i)(A) Equation 1 must be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^n 2 k L_o M_i (e^{-k t_i}) (C_{NMOC}) (3.6 \times 10^{-9}) \quad (\text{Eq. 1})$$

Where:

$M_{NMOC}$  = Total NMOC emission rate from the landfill, megagrams per year.

$k$  = Methane generation rate constant, year<sup>-1</sup>.

$L_o$  = Methane generation potential, cubic meters per megagram solid waste.

$M_i$  = Mass of solid waste in the  $i$ th section, megagrams.

$t_i$  = Age of the  $i$ th section, years.

$C_{NMOC}$  = Concentration of NMOC, parts per million by volume as hexane.

$3.6 \times 10^{-9}$  = Conversion factor.

(B) The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for  $M_i$  if documentation of the nature and amount of such wastes is maintained.

(ii)(A) Equation 2 must be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{NMOC} = 2 L_o R (e^{-k c} - e^{-k t}) C_{NMOC} (3.6 \times 10^{-9}) \quad (\text{Eq. 2})$$

Where:

$M_{NMOC}$  = Mass emission rate of NMOC, megagrams per year.

$L_o$  = Methane generation potential, cubic meters per megagram solid waste.

$R$  = Average annual acceptance rate, megagrams per year.

$k$  = Methane generation rate constant, year<sup>-1</sup>.

$t$  = Age of landfill, years.

$C_{NMOC}$  = Concentration of NMOC, parts per million by volume as hexane.

$c$  = Time since closure, years; for active landfill  $c = 0$  and  $e^{-k c} = 1$ .

$3.6 \times 10^{-9}$  = Conversion factor.

(B) The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of  $R$ , if documentation of the nature and amount of such wastes is maintained.

(2) Tier 1. The owner or operator must compare the calculated NMOC mass emission rate to the standard of 34 megagrams per year.

(i) If the NMOC emission rate calculated in paragraph (a)(1) of this section is less than 34 megagrams per year, then the landfill owner or operator must submit an NMOC emission rate report according to §60.767(b), and must recalculate the NMOC mass emission rate annually as required under §60.762(b).

(ii) If the calculated NMOC emission rate as calculated in paragraph (a)(1) of this section is equal to or greater than 34 megagrams per year, then the landfill owner must either:

(A) Submit a gas collection and control system design plan within 1 year as specified in §60.767(c) and install and operate a gas collection and control system within 30 months according to §60.762(b)(2)(ii) and (iii);



**40 CFR 60, NSPS SUBPART XXX — STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

(B) Determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the Tier 2 procedures provided in paragraph (a)(3) of this section; or

(C) Determine a site-specific methane generation rate constant and recalculate the NMOC emission rate using the Tier 3 procedures provided in paragraph (a)(4) of this section.

(3) Tier 2. The landfill owner or operator must determine the site-specific NMOC concentration using the following sampling procedure. The landfill owner or operator must install at least two sample probes per hectare, evenly distributed over the landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The probes should be evenly distributed across the sample area. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator must collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25 or 25C of appendix A of this part. Taking composite samples from different probes into a single cylinder is allowed; however, equal sample volumes must be taken from each probe. For each composite, the sampling rate, collection times, beginning and ending cylinder vacuums, or alternative volume measurements must be recorded to verify that composite volumes are equal. Composite sample volumes should not be less than one liter unless evidence can be provided to substantiate the accuracy of smaller volumes. Terminate compositing before the cylinder approaches ambient pressure where measurement accuracy diminishes. If more than the required number of samples are taken, all samples must be used in the analysis. The landfill owner or operator must divide the NMOC concentration from Method 25 or 25C of appendix A of this part by six to convert from CNMOC as carbon to CNMOC as hexane. If the landfill has an active or passive gas removal system in place, Method 25 or 25C samples may be collected from these systems instead of surface probes provided the removal system can be shown to provide sampling as representative as the two sampling probe per hectare requirement. For active collection systems, samples may be collected from the common header pipe. The sample location on the common header pipe must be before any gas moving, condensate removal, or treatment system equipment. For active collection systems, a minimum of three samples must be collected from the header pipe.

(i) Within 60 days after the date of completing each performance test (as defined in §60.8), the owner or operator must submit the results according to §60.767(i)(1).

(ii) The landfill owner or operator must recalculate the NMOC mass emission rate using Equation 1 or Equation 2 provided in paragraph (a)(1)(i) or (a)(1)(ii) of this section and using the average site-specific NMOC concentration from the collected samples instead of the default value provided in paragraph (a)(1) of this section.

(iii) If the resulting NMOC mass emission rate is less than 34 megagrams per year, then the owner or operator must submit a periodic estimate of NMOC emissions in an NMOC emission rate report according to §60.767(b)(1), and must recalculate the NMOC mass emission rate annually as required under §60.762(b). The site-specific NMOC concentration must be retested every 5 years using the methods specified in this section.

(iv) If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration is equal to or greater than 34 megagrams per year, the landfill owner or operator must either:

(A) Submit a gas collection and control system design plan within 1 year as specified in §60.767(c) and install and operate a gas collection and control system within 30 months according to §60.762(b)(2)(ii) and (iii);

(B) Determine a site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the Tier 3 procedures specified in paragraph (a)(4) of this section; or

(C) Conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in paragraph (a)(6) of this section.

(4) Tier 3. The site-specific methane generation rate constant must be determined using the procedures provided in Method 2E of appendix A of this part. The landfill owner or operator must estimate the NMOC mass emission rate using Equation 1 or Equation 2 in paragraph (a)(1)(i) or (ii) of this section and using a site-specific methane generation rate constant, and the site-specific NMOC concentration as determined in paragraph (a)(3) of this section instead of the default values provided in paragraph (a)(1) of this section. The landfill owner or operator must compare the resulting NMOC mass emission rate to the standard of 34 megagrams per year.

**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE  
LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER  
JULY 17, 2014.**

- (i) If the NMOC mass emission rate as calculated using the Tier 2 site-specific NMOC concentration and Tier 3 site-specific methane generation rate is equal to or greater than 34 megagrams per year, the owner or operator must either:
- (A) Submit a gas collection and control system design plan within 1 year as specified in §60.767(c) and install and operate a gas collection and control system within 30 months according to §60.762(b)(2)(ii) and (iii); or
- (B) Conduct a surface emission monitoring demonstration using the Tier 4 procedures specified in paragraph (a)(6) of this section.
- (ii) If the NMOC mass emission rate is less than 34 megagrams per year, then the owner or operator must recalculate the NMOC mass emission rate annually using Equation 1 or Equation 2 in paragraph (a)(1) of this section and using the site-specific Tier 2 NMOC concentration and Tier 3 methane generation rate constant and submit a periodic NMOC emission rate report as provided in §60.767(b)(1). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test must be used in all subsequent annual NMOC emission rate calculations.
- (5) Other methods. The owner or operator may use other methods to determine the NMOC concentration or a site-specific methane generation rate constant as an alternative to the methods required in paragraphs (a)(3) and (4) of this section if the method has been approved by the Administrator.
- (6) Tier 4. The landfill owner or operator must demonstrate that surface methane emissions are below 500 parts per million. Surface emission monitoring must be conducted on a quarterly basis using the following procedures. Tier 4 is allowed only if the landfill owner or operator can demonstrate that NMOC emissions are greater than or equal to 34 Mg/yr but less than 50 Mg/yr using Tier 1 or Tier 2. If both Tier 1 and Tier 2 indicate NMOC emissions are 50 Mg/yr or greater, then Tier 4 cannot be used. In addition, the landfill must meet the criteria in paragraph (a)(6)(viii) of this section.
- (i) The owner or operator must measure surface concentrations of methane along the entire perimeter of the landfill and along a pattern that traverses the landfill at no more than 30-meter intervals using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in §60.765(d).
- (ii) The background concentration must be determined by moving the probe inlet upwind and downwind at least 30 meters from the waste mass boundary of the landfill.
- (iii) Surface emission monitoring must be performed in accordance with section 8.3.1 of Method 21 of appendix A of this part, except that the probe inlet must be placed no more than 5 centimeters above the landfill surface; the constant measurement of distance above the surface should be based on a mechanical device such as with a wheel on a pole, except as described in paragraph (a)(6)(iii)(A) of this section.
- (A) The owner or operator must use a wind barrier, similar to a funnel, when onsite average wind speed exceeds 4 miles per hour or 2 meters per second or gust exceeding 10 miles per hour. Average on-site wind speed must also be determined in an open area at 5-minute intervals using an on-site anemometer with a continuous recorder and data logger for the entire duration of the monitoring event. The wind barrier must surround the SEM monitor, and must be placed on the ground, to ensure wind turbulence is blocked. SEM cannot be conducted if average wind speed exceeds 25 miles per hour.
- (B) Landfill surface areas where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover, and all cover penetrations must also be monitored using a device meeting the specifications provided in §60.765(d).
- (iv) Each owner or operator seeking to comply with the Tier 4 provisions in paragraph (a)(6) of this section must maintain records of surface emission monitoring as provided in §60.768(g) and submit a Tier 4 surface emissions report as provided in §60.767(c)(4)(iii).
- (v) If there is any measured concentration of methane of 500 parts per million or greater from the surface of the landfill, the owner or operator must submit a gas collection and control system design plan within 1 year of the first measured concentration of methane of 500 parts per million or greater from the surface of the landfill according to §60.767(c) and install and operate a gas collection and control system according to §60.762(b)(2)(ii) and (iii) within 30 months of the most recent NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year based on Tier 2.

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**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

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(vi) If after four consecutive quarterly monitoring periods at a landfill, other than a closed landfill, there is no measured concentration of methane of 500 parts per million or greater from the surface of the landfill, the owner or operator must continue quarterly surface emission monitoring using the methods specified in this section.

(vii) If after four consecutive quarterly monitoring periods at a closed landfill there is no measured concentration of methane of 500 parts per million or greater from the surface of the landfill, the owner or operator must conduct annual surface emission monitoring using the methods specified in this section.

(viii) If a landfill has installed and operates a collection and control system that is not required by this subpart, then the collection and control system must meet the following criteria:

(A) The gas collection and control system must have operated for 6,570 out of 8,760 hours preceding the Tier 4 surface emissions monitoring demonstration.

(B) During the Tier 4 surface emissions monitoring demonstration, the gas collection and control system must operate as it normally would to collect and control as much landfill gas as possible.

(b) After the installation and startup of a collection and control system in compliance with this subpart, the owner or operator must calculate the NMOC emission rate for purposes of determining when the system can be capped, removed or decommissioned as provided in §60.762(b)(2)(v), using Equation 3:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}} \quad (\text{Eq. 3})$$

Where:

$M_{\text{NMOC}}$  = Mass emission rate of NMOC, megagrams per year.

$Q_{\text{LFG}}$  = Flow rate of landfill gas, cubic meters per minute.

$C_{\text{NMOC}}$  = NMOC concentration, parts per million by volume as hexane.

(1) The flow rate of landfill gas,  $Q_{\text{LFG}}$ , must be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control system using a gas flow measuring device calibrated according to the provisions of section 10 of Method 2E of appendix A of this part.

(2) The average NMOC concentration,  $C_{\text{NMOC}}$ , must be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25 or Method 25C. The sample location on the common header pipe must be before any condensate removal or other gas refining units. The landfill owner or operator must divide the NMOC concentration from Method 25 or Method 25C of appendix A of this part by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  as hexane.

(3) The owner or operator may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the Administrator.

(i) Within 60 days after the date of completing each performance test (as defined in §60.8), the owner or operator must submit the results of the performance test, including any associated fuel analyses, according to §60.767(i)(1).

(ii) [Reserved]

(c) When calculating emissions for Prevention of Significant Deterioration purposes, the owner or operator of each MSW landfill subject to the provisions of this subpart must estimate the NMOC emission rate for comparison to the Prevention of Significant Deterioration major source and significance levels in §§51.166 or 52.21 of this chapter using Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources (AP-42) or other approved measurement procedures.

(d) For the performance test required in §60.762(b)(2)(iii)(B), Method 25 or 25C (Method 25C may be used at the inlet only) of appendix A of this part must be used to determine compliance with the 98 weight-percent efficiency or the 20 parts per million by volume outlet concentration level, unless another method to demonstrate compliance has been approved by the Administrator as provided by §60.767(c)(2). Method 3, 3A, or 3C must be used to determine oxygen for correcting the NMOC concentration as hexane to 3 percent. In cases where the outlet concentration is less than 50 ppm NMOC as carbon (8

**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

ppm NMOC as hexane), Method 25A should be used in place of Method 25. Method 18 may be used in conjunction with Method 25A on a limited basis (compound specific, e.g., methane) or Method 3C may be used to determine methane. The methane as carbon should be subtracted from the Method 25A total hydrocarbon value as carbon to give NMOC concentration as carbon. The landowner or operator must divide the NMOC concentration as carbon by 6 to convert from the CNMOC as carbon to CNMOC as hexane. Equation 4 must be used to calculate efficiency:

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}}) / (\text{NMOC}_{\text{in}}) \quad (\text{Eq. 4})$$

Where:

NMOC<sub>in</sub> = Mass of NMOC entering control device.

NMOC<sub>out</sub> = Mass of NMOC exiting control device.

(e) For the performance test required in §60.762(b)(2)(iii)(A), the net heating value of the combusted landfill gas as determined in §60.18(f)(3) is calculated from the concentration of methane in the landfill gas as measured by Method 3C. A minimum of three 30-minute Method 3C samples are determined. The measurement of other organic components, hydrogen, and carbon monoxide is not applicable. Method 3C may be used to determine the landfill gas molecular weight for calculating the flare gas exit velocity under §60.18(f)(4).

(1) Within 60 days after the date of completing each performance test (as defined in §60.8), the owner or operator must submit the results of the performance tests, including any associated fuel analyses, required by §60.764(b) or (d) according to §60.767(i)(1).

(2) [Reserved]

**§60.765 Compliance provisions.**

(a) Except as provided in §60.767(c)(2), the specified methods in paragraphs (a)(1) through (6) of this section must be used to determine whether the gas collection system is in compliance with §60.762(b)(2)(ii).

(1) For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with §60.762(b)(2)(ii)(C)(1), either Equation 5 or Equation 6 must be used. The methane generation rate constant (k) and methane generation potential (Lo) kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in §60.764(a)(4), the value of k determined from the test must be used. A value of no more than 15 years must be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

(i) For sites with unknown year-to-year solid waste acceptance rate:

$$Q_m = 2L_oR (e^{-kc} - e^{-kt}) \quad (\text{Eq. 5})$$

Where:

Q<sub>m</sub> = Maximum expected gas generation flow rate, cubic meters per year.

Lo = Methane generation potential, cubic meters per megagram solid waste.

R = Average annual acceptance rate, megagrams per year.

k = Methane generation rate constant, year<sup>-1</sup>.

t = Age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years.

c = Time since closure, years (for an active landfill c = 0 and e<sup>-kc</sup> = 1).

(ii) For sites with known year-to-year solid waste acceptance rate:

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**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

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$$Q_M = \sum_{i=1}^n 2kL_o M_i (e^{-kt_i}) \quad (\text{Eq. 6})$$

Where:

Q<sub>M</sub> = Maximum expected gas generation flow rate, cubic meters per year.

k = Methane generation rate constant, year<sup>-1</sup>.

L<sub>o</sub> = Methane generation potential, cubic meters per megagram solid waste.

M<sub>i</sub> = Mass of solid waste in the i<sup>th</sup> section, megagrams.

t<sub>i</sub> = Age of the i<sup>th</sup> section, years.

(iii) If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, Equation 5 or Equation 6 in paragraphs (a)(1)(i) and (ii) of this section. If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using Equation 5 or Equation 6 in paragraphs (a)(1)(i) or (ii) of this section or other methods must be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment.

(2) For the purposes of determining sufficient density of gas collectors for compliance with §60.762(b)(2)(ii)(C)(2), the owner or operator must design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Administrator, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.

(3) For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with §60.762(b)(2)(ii)(C)(3), the owner or operator must measure gauge pressure in the gas collection header applied to each individual well, monthly. If a positive pressure exists, action must be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under §60.763(b). Any attempted corrective measure must not cause exceedances of other operational or performance standards.

(i) If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement of positive pressure, the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days after positive pressure was first measured. The owner or operator must keep records according to §60.768(e)(3).

(ii) If corrective actions cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the positive pressure measurement. The owner or operator must submit the items listed in §60.767(g)(7) as part of the next annual report. The owner or operator must keep records according to §60.768(e)(4).

(iii) If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator, according to §60.767(g)(7) and §60.767(j). The owner or operator must keep records according to §60.768(e)(5).

(4) [Reserved]

(5) For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator must monitor each well monthly for temperature as provided in §60.763(c). If a well exceeds the operating parameter for temperature, action must be initiated to correct the exceedance within 5 calendar days. Any attempted corrective measure must not cause exceedances of other operational or performance standards.

(i) If a landfill gas temperature less than 55 degrees Celsius (131 degrees Fahrenheit) cannot be achieved within 15 calendar days of the first measurement of landfill gas temperature greater than 55 degrees Celsius (131 degrees Fahrenheit), the owner or operator must conduct a root cause analysis and correct the exceedance as soon as practicable, but no later than 60 days

**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

after a landfill gas temperature greater than 55 degrees Celsius (131 degrees Fahrenheit) was first measured. The owner or operator must keep records according to §60.768(e)(3).

(ii) If corrective actions cannot be fully implemented within 60 days following the positive pressure measurement for which the root cause analysis was required, the owner or operator must also conduct a corrective action analysis and develop an implementation schedule to complete the corrective action(s) as soon as practicable, but no more than 120 days following the measurement of landfill gas temperature greater than 55 degrees Celsius (131 degrees Fahrenheit). The owner or operator must submit the items listed in §60.767(g)(7) as part of the next annual report. The owner or operator must keep records according to §60.768(e)(4).

(iii) If corrective action is expected to take longer than 120 days to complete after the initial exceedance, the owner or operator must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator, according to §60.767(g)(7) and §60.767(j). The owner or operator must keep records according to §60.768(e)(5).

(6) An owner or operator seeking to demonstrate compliance with §60.762(b)(2)(ii)(C)(4) through the use of a collection system not conforming to the specifications provided in §60.769 must provide information satisfactory to the Administrator as specified in §60.767(c)(3) demonstrating that off-site migration is being controlled.

(b) For purposes of compliance with §60.763(a), each owner or operator of a controlled landfill must place each well or design component as specified in the approved design plan as provided in §60.767(c). Each well must be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of:

(1) Five (5) years or more if active; or

(2) Two (2) years or more if closed or at final grade.

(c) The following procedures must be used for compliance with the surface methane operational standard as provided in §60.763(d).

(1) After installation and startup of the gas collection system, the owner or operator must monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) of this section.

(2) The background concentration must be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells.

(3) Surface emission monitoring must be performed in accordance with section 8.3.1 of Method 21 of appendix A of this part, except that the probe inlet must be placed within 5 to 10 centimeters of the ground. Monitoring must be performed during typical meteorological conditions.

(4) Any reading of 500 parts per million or more above background at any location must be recorded as a monitored exceedance and the actions specified in paragraphs (c)(4)(i) through (v) of this section must be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of §60.763(d).

(i) The location of each monitored exceedance must be marked and the location and concentration recorded.

(ii) Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance must be made and the location must be re-monitored within 10 calendar days of detecting the exceedance.

(iii) If the re-monitoring of the location shows a second exceedance, additional corrective action must be taken and the location must be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in paragraph (c)(4)(v) of this section must be taken, and no further monitoring of that location is required until the action specified in paragraph (c)(4)(v) of this section has been taken.

(iv) Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in paragraph (c)(4)(ii) or (iii) of this section must be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring shows a concentration less than 500 parts per million above

**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month re-monitoring shows an exceedance, the actions specified in paragraph (c)(4)(iii) or (v) of this section must be taken.

(v) For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device must be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval.

(5) The owner or operator must implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

(d) Each owner or operator seeking to comply with the provisions in paragraph (c) of this section or §60.764(a)(6) must comply with the following instrumentation specifications and procedures for surface emission monitoring devices:

(1) The portable analyzer must meet the instrument specifications provided in section 6 of Method 21 of appendix A of this part, except that “methane” replaces all references to “VOC”.

(2) The calibration gas must be methane, diluted to a nominal concentration of 500 parts per million in air.

(3) To meet the performance evaluation requirements in section 8.1 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 8.1 of Method 21 of appendix A of this part must be used.

(4) The calibration procedures provided in sections 8 and 10 of Method 21 of appendix A of this part must be followed immediately before commencing a surface monitoring survey.

(e) The provisions of this subpart apply at all times, including periods of startup, shutdown or malfunction. During periods of startup, shutdown, and malfunction, you must comply with the work practice specified in §60.763(e) in lieu of the compliance provisions in §60.765.

**§60.766 Monitoring of operations.**

Except as provided in §60.767(c)(2):

(a) Each owner or operator seeking to comply with §60.762(b)(2)(ii)(C) for an active gas collection system must install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:

(1) Measure the gauge pressure in the gas collection header on a monthly basis as provided in §60.765(a)(3); and

(2) Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as follows:

(i) The nitrogen level must be determined using Method 3C, unless an alternative test method is established as allowed by §60.767(c)(2).

(ii) Unless an alternative test method is established as allowed by §60.767(c)(2), the oxygen level must be determined by an oxygen meter using Method 3A, 3C, or ASTM D6522-11 (incorporated by reference, see §60.17). Determine the oxygen level by an oxygen meter using Method 3A, 3C, or ASTM D6522-11 (if sample location is prior to combustion) except that:

(A) The span must be set between 10 and 12 percent oxygen;

(B) A data recorder is not required;

(C) Only two calibration gases are required, a zero and span;

(D) A calibration error check is not required;

(E) The allowable sample bias, zero drift, and calibration drift are  $\pm 10$  percent.

(iii) A portable gas composition analyzer may be used to monitor the oxygen levels provided:

(A) The analyzer is calibrated; and

(B) The analyzer meets all quality assurance and quality control requirements for Method 3A or ASTM D6522-11 (incorporated by reference, see §60.17).

**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE  
LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER  
JULY 17, 2014.**

(3) Monitor temperature of the landfill gas on a monthly basis as provided in §60.765(a)(5). The temperature measuring device must be calibrated annually using the procedure in 40 CFR part 60, appendix A-1, Method 2, Section 10.3.

(b) Each owner or operator seeking to comply with §60.762(b)(2)(iii) using an enclosed combustor must calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment:

(1) A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of  $\pm 1$  percent of the temperature being measured expressed in degrees Celsius or  $\pm 0.5$  degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts.

(2) A device that records flow to the control device and bypass of the control device (if applicable). The owner or operator must:

(i) Install, calibrate, and maintain a gas flow rate measuring device that must record the flow to the control device at least every 15 minutes; and

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(c) Each owner or operator seeking to comply with §60.762(b)(2)(iii) using a non-enclosed flare must install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

(1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.

(2) A device that records flow to the flare and bypass of the flare (if applicable). The owner or operator must:

(i) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the control device at least every 15 minutes; and

(ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

(d) Each owner or operator seeking to demonstrate compliance with §60.762(b)(2)(iii) using a device other than a non-enclosed flare or an enclosed combustor or a treatment system must provide information satisfactory to the Administrator as provided in §60.767(c)(2) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator must review the information and either approve it, or request that additional information be submitted. The Administrator may specify additional appropriate monitoring procedures.

(e) Each owner or operator seeking to install a collection system that does not meet the specifications in §60.769 or seeking to monitor alternative parameters to those required by §§60.763 through 60.766 must provide information satisfactory to the Administrator as provided in §60.767(c)(2) and (3) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Administrator may specify additional appropriate monitoring procedures.

(f) Each owner or operator seeking to demonstrate compliance with the 500 parts per million surface methane operational standard in §60.763(d) must monitor surface concentrations of methane according to the procedures in §60.765(c) and the instrument specifications in §60.765(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring.

(g) Each owner or operator seeking to demonstrate compliance with §60.762(b)(2)(iii) using a landfill gas treatment system must maintain and operate all monitoring systems associated with the treatment system in accordance with the site-specific treatment system monitoring plan required in §60.768(b)(5)(ii) and must calibrate, maintain, and operate according to the



**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

manufacturer's specifications a device that records flow to the treatment system and bypass of the treatment system (if applicable). The owner or operator must:

- (1) Install, calibrate, and maintain a gas flow rate measuring device that records the flow to the treatment system at least every 15 minutes; and
  - (2) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism must be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
- (h) The monitoring requirements of paragraphs (b), (c) (d) and (g) of this section apply at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You are required to complete monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.

**§60.767 Reporting requirements.**

(a) Design capacity report. Each owner or operator subject to the requirements of this subpart must submit an initial design capacity report to the Administrator.

(1) Submission. The initial design capacity report fulfills the requirements of the notification of the date construction is commenced as required by §60.7(a)(1) and must be submitted no later than:

- (i) November 28, 2016, for landfills that commenced construction, modification, or reconstruction after July 17, 2014 but before August 29, 2016; or
- (ii) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction after August 29, 2016.

(2) Initial design capacity report. The initial design capacity report must contain the following information:

- (i) A map or plot of the landfill, providing the size and location of the landfill, and identifying all areas where solid waste may be landfilled according to the permit issued by the state, local, or tribal agency responsible for regulating the landfill.
- (ii) The maximum design capacity of the landfill. Where the maximum design capacity is specified in the permit issued by the state, local, or tribal agency responsible for regulating the landfill, a copy of the permit specifying the maximum design capacity may be submitted as part of the report. If the maximum design capacity of the landfill is not specified in the permit, the maximum design capacity must be calculated using good engineering practices. The calculations must be provided, along with the relevant parameters as part of the report. The landfill may calculate design capacity in either megagrams or cubic meters for comparison with the exemption values. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, the calculation must include a site-specific density, which must be recalculated annually. Any density conversions must be documented and submitted with the design capacity report. The state, tribal, local agency or Administrator may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill.

(3) Amended design capacity report. An amended design capacity report must be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to meet or exceed 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in §60.768(f).

(b) NMOC emission rate report. Each owner or operator subject to the requirements of this subpart must submit an NMOC emission rate report following the procedure specified in paragraph (i)(2) of this section to the Administrator initially and annually thereafter, except as provided for in paragraph (b)(1)(ii) of this section. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.

**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX – STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

(1) The NMOC emission rate report must contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in §60.764(a) or (b), as applicable.

(i) The initial NMOC emission rate report may be combined with the initial design capacity report required in paragraph (a) of this section and must be submitted no later than indicated in paragraphs (b)(1)(i)(A) and (B) of this section. Subsequent NMOC emission rate reports must be submitted annually thereafter, except as provided for in paragraph (b)(1)(ii) of this section.

(A) November 28, 2016, for landfills that commenced construction, modification, or reconstruction after July 17, 2014, but before August 29, 2016, or

(B) Ninety days after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction after August 29, 2016.

(ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 34 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit, following the procedure specified in paragraph (i)(2) of this section, an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate must include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based must be provided to the Administrator. This estimate must be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate must be submitted to the Administrator. The revised estimate must cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

(2) The NMOC emission rate report must include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

(3) Each owner or operator subject to the requirements of this subpart is exempted from the requirements to submit an NMOC emission rate report, after installing a collection and control system that complies with §60.762(b)(2), during such time as the collection and control system is in operation and in compliance with §§60.763 and 60.765.

(c) Collection and control system design plan. Each owner or operator subject to the provisions of §60.762(b)(2) must submit a collection and control system design plan to the Administrator for approval according to the schedule in paragraph (c)(4) of this section. The collection and control system design plan must be prepared and approved by a professional engineer and must meet the following requirements:

(1) The collection and control system as described in the design plan must meet the design requirements in §60.762(b)(2).

(2) The collection and control system design plan must include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§60.763 through 60.768 proposed by the owner or operator.

(3) The collection and control system design plan must either conform with specifications for active collection systems in §60.769 or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to §60.769.

(4) Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must submit a collection and control system design plan to the Administrator for approval within 1 year of the first NMOC emission rate report in which the NMOC emission rate equals or exceeds 34 megagrams per year, except as follows:

(i) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in §60.764(a)(3) and the resulting rate is less than 34 megagrams per year, annual periodic reporting must be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 34 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, must be submitted, following the procedures in paragraph (i)(2) of this section, within 180 days of the first calculated exceedance of 34 megagrams per year.

**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

(ii) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant  $k$ , as provided in Tier 3 in §60.764(a)(4), and the resulting NMOC emission rate is less than 34 Mg/yr, annual periodic reporting must be resumed. The resulting site-specific methane generation rate constant  $k$  must be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of §60.764(a)(4) and the resulting site-specific methane generation rate constant  $k$  must be submitted, following the procedure specified in paragraph (i)(2) of this section, to the Administrator within 1 year of the first calculated emission rate equaling or exceeding 34 megagrams per year.

(iii) If the owner or operator elects to demonstrate that site-specific surface methane emissions are below 500 parts per million methane, based on the provisions of §60.764(a)(6), then the owner or operator must submit annually a Tier 4 surface emissions report as specified in this paragraph following the procedure specified in paragraph (i)(2) of this section until a surface emissions readings of 500 parts per million methane or greater is found. If the Tier 4 surface emissions report shows no surface emissions readings of 500 parts per million methane or greater for four consecutive quarters at a closed landfill, then the landfill owner or operator may reduce Tier 4 monitoring from a quarterly to an annual frequency. The Administrator may request such additional information as may be necessary to verify the reported instantaneous surface emission readings. The Tier 4 surface emissions report must clearly identify the location, date and time (to nearest second), average wind speeds including wind gusts, and reading (in parts per million) of any value 500 parts per million methane or greater, other than non-repeatable, momentary readings. For location, you must determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places. The Tier 4 surface emission report must also include the results of the most recent Tier 1 and Tier 2 results in order to verify that the landfill does not exceed 50 Mg/yr of NMOC.

(A) The initial Tier 4 surface emissions report must be submitted annually, starting within 30 days of completing the fourth quarter of Tier 4 surface emissions monitoring that demonstrates that site-specific surface methane emissions are below 500 parts per million methane, and following the procedure specified in paragraph (i)(2) of this section.

(B) The Tier 4 surface emissions report must be submitted within 1 year of the first measured surface exceedance of 500 parts per million methane, following the procedure specified in paragraph (i)(2) of this section.

(5) The landfill owner or operator must notify the Administrator that the design plan is completed and submit a copy of the plan's signature page. The Administrator has 90 days to decide whether the design plan should be submitted for review. If the Administrator chooses to review the plan, the approval process continues as described in paragraph (c)(6) of this section. However, if the Administrator indicates that submission is not required or does not respond within 90 days, the landfill owner or operator can continue to implement the plan with the recognition that the owner or operator is proceeding at their own risk. In the event that the design plan is required to be modified to obtain approval, the owner or operator must take any steps necessary to conform any prior actions to the approved design plan and any failure to do so could result in an enforcement action.

(6) Upon receipt of an initial or revised design plan, the Administrator must review the information submitted under paragraphs (c)(1) through (3) of this section and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems. If the Administrator does not approve or disapprove the design plan, or does not request that additional information be submitted within 90 days of receipt, then the owner or operator may continue with implementation of the design plan, recognizing they would be proceeding at their own risk.

(7) If the owner or operator chooses to demonstrate compliance with the emission control requirements of this subpart using a treatment system as defined in this subpart, then the owner or operator must prepare a site-specific treatment system monitoring plan as specified in §60.768(b)(5).

(d) Revised design plan. The owner or operator who has already been required to submit a design plan under paragraph (c) of this section must submit a revised design plan to the Administrator for approval as follows:

(1) At least 90 days before expanding operations to an area not covered by the previously approved design plan.

**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE  
LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER  
JULY 17, 2014.**

(2) Prior to installing or expanding the gas collection system in a way that is not consistent with the design plan that was submitted to the Administrator according to paragraph (c) of this section.

(e) Closure report. Each owner or operator of a controlled landfill must submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under §60.7(a)(4).

(f) Equipment removal report. Each owner or operator of a controlled landfill must submit an equipment removal report to the Administrator 30 days prior to removal or cessation of operation of the control equipment.

(1) The equipment removal report must contain all of the following items:

(i) A copy of the closure report submitted in accordance with paragraph (e) of this section;

(ii) A copy of the initial performance test report demonstrating that the 15-year minimum control period has expired, unless the report of the results of the performance test has been submitted to the EPA via the EPA's CDX, or information that demonstrates that the GCCS will be unable to operate for 15 years due to declining gas flows. In the equipment removal report, the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in lieu of the performance test report if the report has been previously submitted to the EPA's CDX; and

(iii) Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 34 megagrams or greater of NMOC per year, unless the NMOC emission rate reports have been submitted to the EPA via the EPA's CDX. If the NMOC emission rate reports have been previously submitted to the EPA's CDX, a statement that the NMOC emission rate reports have been submitted electronically and the dates that the reports were submitted to the EPA's CDX may be submitted in the equipment removal report in lieu of the NMOC emission rate reports.

(2) The Administrator may request such additional information as may be necessary to verify that all of the conditions for removal in §60.762(b)(2)(v) have been met.

(g) Annual report. The owner or operator of a landfill seeking to comply with §60.762(b)(2) using an active collection system designed in accordance with §60.762(b)(2)(ii) must submit to the Administrator, following the procedure specified in paragraph (i)(2) of this section, annual reports of the recorded information in paragraphs (g)(1) through (7) of this section. The initial annual report must be submitted within 180 days of installation and startup of the collection and control system, and must include the initial performance test report required under §60.8, as applicable, unless the report of the results of the performance test has been submitted to the EPA via the EPA's CDX. In the initial annual report, the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted may be submitted in lieu of the performance test report if the report has been previously submitted to the EPA's CDX. For enclosed combustion devices and flares, reportable exceedances are defined under §60.768(c).

(1) Value and length of time for exceedance of applicable parameters monitored under §60.766(a), (b), (c), (d), and (g).

(2) Description and duration of all periods when the gas stream was diverted from the control device or treatment system through a bypass line or the indication of bypass flow as specified under §60.766.

(3) Description and duration of all periods when the control device or treatment system was not operating and length of time the control device or treatment system was not operating.

(4) All periods when the collection system was not operating.

(5) The location of each exceedance of the 500 parts per million methane concentration as provided in §60.763(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month. For location, you must determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.

(6) The date of installation and the location of each well or collection system expansion added pursuant to §60.765(a)(3), (a)(5), (b), and (c)(4).

**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE  
LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER  
JULY 17, 2014.**

(7) For any corrective action analysis for which corrective actions are required in §60.765(a)(3) or (5) and that take more than 60 days to correct the exceedance, the root cause analysis conducted, including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

(h) Initial performance test report. Each owner or operator seeking to comply with §60.762(b)(2)(iii) must include the following information with the initial performance test report required under §60.8:

(1) A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion;

(2) The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based;

(3) The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material;

(4) The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; and

(5) The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; and

(6) The provisions for the control of off-site migration.

(i) Electronic reporting. The owner or operator must submit reports electronically according to paragraphs (i)(1) and (2) of this section.

(1) Within 60 days after the date of completing each performance test (as defined in §60.8), the owner or operator must submit the results of each performance test according to the following procedures:

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site ([https://www3.epa.gov/ttn/chief/ert/ert\\_info.html](https://www3.epa.gov/ttn/chief/ert/ert_info.html)) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternative file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site, once the XML schema is available. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S.

EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §60.4.

(2) Each owner or operator required to submit reports following the procedure specified in this paragraph must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The owner or operator must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the XML schema listed on the CEDRI Web site (<https://www3.epa.gov/ttn/chief/cedri/index.html>). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the owner or operator must submit the report to the Administrator at the appropriate address listed in §60.4. Once the form has been available in CEDRI for 90 calendar days, the owner or operator must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted.

**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE  
LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER  
JULY 17, 2014.**

(j) Corrective action and the corresponding timeline. The owner or operator must submit according to paragraphs (j)(1) and (j)(2) of this section.

(1) For corrective action that is required according to §60.765(a)(3)(iii) or (a)(5)(iii) and is expected to take longer than 120 days after the initial exceedance to complete, you must submit the root cause analysis, corrective action analysis, and corresponding implementation timeline to the Administrator as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature monitoring value of 55 degrees Celsius (131 degrees Fahrenheit). The Administrator must approve the plan for corrective action and the corresponding timeline.

(2) For corrective action that is required according to §60.765(a)(3)(iii) or (a)(5)(iii) and is not completed within 60 days after the initial exceedance, you must submit a notification to the Administrator as soon as practicable but no later than 75 days after the first measurement of positive pressure or temperature exceedance.

(k) Liquids addition. The owner or operator of an affected landfill with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters that has employed leachate recirculation or added liquids based on a Research, Development, and Demonstration permit (issued through Resource Conservation and Recovery Act, subtitle D, part 258) within the last 10 years must submit to the Administrator, annually, following the procedure specified in paragraph (i)(2) of this section, the following information:

(1) Volume of leachate recirculated (gallons per year) and the reported basis of those estimates (records or engineering estimates).

(2) Total volume of all other liquids added (gallons per year) and the reported basis of those estimates (records or engineering estimates).

(3) Surface area (acres) over which the leachate is recirculated (or otherwise applied).

(4) Surface area (acres) over which any other liquids are applied.

(5) The total waste disposed (megagrams) in the areas with recirculated leachate and/or added liquids based on on-site records to the extent data are available, or engineering estimates and the reported basis of those estimates.

(6) The annual waste acceptance rates (megagrams per year) in the areas with recirculated leachate and/or added liquids, based on on-site records to the extent data are available, or engineering estimates.

(7) The initial report must contain items in paragraph (k)(1) through (6) of this section per year for the initial annual reporting period as well as for each of the previous 10 years, to the extent historical data are available in on-site records, and the report must be submitted no later than:

(i) September 27, 2017, for landfills that commenced construction, modification, or reconstruction after July 17, 2014 but before August 29, 2016 containing data for the first 12 months after August 29, 2016; or

(ii) Thirteen (13) months after the date of commenced construction, modification, or reconstruction for landfills that commence construction, modification, or reconstruction after August 29, 2016 containing data for the first 12 months after August 29, 2016.

(8) Subsequent annual reports must contain items in paragraph (k)(1) through (6) of this section for the 365-day period following the 365-day period included in the previous annual report, and the report must be submitted no later than 365 days after the date the previous report was submitted.

(9) Landfills may cease annual reporting of items in paragraphs (k)(1) through (7) of this section once they have submitted the closure report in paragraph (e) of this section.

(l) Tier 4 notification. (1) The owner or operator of an affected landfill with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters must provide a notification of the date(s) upon which it intends to demonstrate site-specific surface methane emissions are below 500 parts per million methane, based on the Tier 4 provisions of §60.764(a)(6). The landfill must also include a description of the wind barrier to be used during the SEM in the notification. Notification must be postmarked not less than 30 days prior to such date.

**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

(2) If there is a delay to the scheduled Tier 4 SEM date due to weather conditions, including not meeting the wind requirements in §60.764(a)(6)(iii)(A), the owner or operator of a landfill shall notify the Administrator by email or telephone no later than 48 hours before any delay or cancellation in the original test date, and arrange an updated date with the Administrator by mutual agreement.

**§60.768 Recordkeeping requirements.**

(a) Except as provided in §60.767(c)(2), each owner or operator of an MSW landfill subject to the provisions of §60.762(b)(2)(ii) and (iii) must keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that triggered §60.762(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

(b) Except as provided in §60.767(c)(2), each owner or operator of a controlled landfill must keep up-to-date, readily accessible records for the life of the control system equipment of the data listed in paragraphs (b)(1) through (5) of this section as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring must be maintained for a minimum of 5 years. Records of the control device vendor specifications must be maintained until removal.

(1) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.762(b)(2)(ii):

(i) The maximum expected gas generation flow rate as calculated in §60.765(a)(1). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Administrator.

(ii) The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in §60.769(a)(1).

(2) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.762(b)(2)(iii) through use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts:

(i) The average temperature measured at least every 15 minutes and averaged over the same time period of the performance test.

(ii) The percent reduction of NMOC determined as specified in §60.762(b)(2)(iii)(B) achieved by the control device.

(3) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.762(b)(2)(iii)(B)(1) through use of a boiler or process heater of any size: A description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing.

(4) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.762(b)(2)(iii)(A) through use of a non-enclosed flare, the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in §60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent.

(5) Where an owner or operator subject to the provisions of this subpart seeks to demonstrate compliance with §60.762(b)(2)(iii) through use of a landfill gas treatment system:

(i) Bypass records. Records of the flow of landfill gas to, and bypass of, the treatment system.

(ii) Site-specific treatment monitoring plan, to include:

(A) Monitoring records of parameters that are identified in the treatment system monitoring plan and that ensure the treatment system is operating properly for each intended end use of the treated landfill gas. At a minimum, records should include records of filtration, de-watering, and compression parameters that ensure the treatment system is operating properly for each intended end use of the treated landfill gas.

(B) Monitoring methods, frequencies, and operating ranges for each monitored operating parameter based on manufacturer's recommendations or engineering analysis for each intended end use of the treated landfill gas.

**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

(C) Documentation of the monitoring methods and ranges, along with justification for their use.

(D) Identify who is responsible (by job title) for data collection.

(E) Processes and methods used to collect the necessary data.

(F) Description of the procedures and methods that are used for quality assurance, maintenance, and repair of all continuous monitoring systems.

(c) Except as provided in §60.767(c)(2), each owner or operator of a controlled landfill subject to the provisions of this subpart must keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in §60.766 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

(1) The following constitute exceedances that must be recorded and reported under §60.767(g):

(i) For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal units per hour) or greater, all 3-hour periods of operation during which the average temperature was more than 28 degrees Celsius (82 degrees Fahrenheit) below the average combustion temperature during the most recent performance test at which compliance with §60.762(b)(2)(iii) was determined.

(ii) For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under paragraph (b)(3) of this section.

(2) Each owner or operator subject to the provisions of this subpart must keep up-to-date, readily accessible continuous records of the indication of flow to the control system and the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under §60.766.

(3) Each owner or operator subject to the provisions of this subpart who uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with §60.762(b)(2)(iii) must keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other state, local, tribal, or federal regulatory requirements.)

(4) Each owner or operator seeking to comply with the provisions of this subpart by use of a non-enclosed flare must keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under §60.766(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

(5) Each owner or operator of a landfill seeking to comply with §60.762(b)(2) using an active collection system designed in accordance with §60.762(b)(2)(ii) must keep records of periods when the collection system or control device is not operating.

(d) Except as provided in §60.767(c)(2), each owner or operator subject to the provisions of this subpart must keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector.

(1) Each owner or operator subject to the provisions of this subpart must keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under §60.765(b).

(2) Each owner or operator subject to the provisions of this subpart must keep readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in §60.769(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in §60.769(a)(3)(ii).

(e) Except as provided in §60.767(c)(2), each owner or operator subject to the provisions of this subpart must keep for at least 5 years up-to-date, readily accessible records of the following:

(1) All collection and control system exceedances of the operational standards in §60.763, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

(2) Each owner or operator subject to the provisions of this subpart must also keep records of each wellhead temperature monitoring value of 55 degrees Celsius (131 degrees Fahrenheit) or above, each wellhead nitrogen level at or above 20 percent, and each wellhead oxygen level at or above 5 percent.



**APPENDIX NSPS, SUBPART XXX**

**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE  
LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER  
JULY 17, 2014.**

- (3) For any root cause analysis for which corrective actions are required in §60.765(a)(3)(i) or (a)(5)(i), keep a record of the root cause analysis conducted, including a description of the recommended corrective action(s) taken, and the date(s) the corrective action(s) were completed.
- (4) For any root cause analysis for which corrective actions are required in §60.765(a)(3)(ii) or (a)(5)(ii), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.
- (5) For any root cause analysis for which corrective actions are required in §60.765(a)(3)(iii) or (a)(5)(iii), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from the regulatory agency.
- (f) Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of “design capacity”, must keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.
- (g) Landfill owners or operators seeking to demonstrate that site-specific surface methane emissions are below 500 parts per million by conducting surface emission monitoring under the Tier 4 procedures specified in §60.764(a)(6) must keep for at least 5 years up-to-date, readily accessible records of all surface emissions monitoring and information related to monitoring instrument calibrations conducted according to sections 8 and 10 of Method 21 of appendix A of this part, including all of the following items:
- (1) Calibration records:
    - (i) Date of calibration and initials of operator performing the calibration.
    - (ii) Calibration gas cylinder identification, certification date, and certified concentration.
    - (iii) Instrument scale(s) used.
    - (iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value.
    - (v) If an owner or operator makes their own calibration gas, a description of the procedure used.
  - (2) Digital photographs of the instrument setup, including the wind barrier. The photographs must be time and date-stamped and taken at the first sampling location prior to sampling and at the last sampling location after sampling at the end of each sampling day, for the duration of the Tier 4 monitoring demonstration.
  - (3) Timestamp of each surface scan reading:
    - (i) Timestamp should be detailed to the nearest second, based on when the sample collection begins.
    - (ii) A log for the length of time each sample was taken using a stopwatch (e.g., the time the probe was held over the area).
  - (4) Location of each surface scan reading. The owner or operator must determine the coordinates using an instrument with an accuracy of at least 4 meters. Coordinates must be in decimal degrees with at least five decimal places.
  - (5) Monitored methane concentration (parts per million) of each reading.
  - (6) Background methane concentration (parts per million) after each instrument calibration test.
  - (7) Adjusted methane concentration using most recent calibration (parts per million).
  - (8) For readings taken at each surface penetration, the unique identification location label matching the label specified in paragraph (d) of this section.

**40 CFR 60, NSPS SUBPART XXX – —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

(9) Records of the operating hours of the gas collection system for each destruction device.

(h) Except as provided in §60.767(c)(2), each owner or operator subject to the provisions of this subpart must keep for at least 5 years up-to-date, readily accessible records of all collection and control system monitoring data for parameters measured in §60.766(a)(1), (2), and (3).

(i) Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.

(j) For each owner or operator reporting leachate or other liquids addition under §60.767(k), keep records of any engineering calculations or company records used to estimate the quantities of leachate or liquids added, the surface areas for which the leachate or liquids were applied, and the estimates of annual waste acceptance or total waste in place in the areas where leachate or liquids were applied.

**§60.769 Specifications for active collection systems.**

(a) Each owner or operator seeking to comply with §60.762(b)(2)(i) must site active collection wells, horizontal collectors, surface collectors, or other extraction devices at a sufficient density throughout all gas producing areas using the following procedures unless alternative procedures have been approved by the Administrator as provided in §60.767(c)(2) and (3):

(1) The collection devices within the interior must be certified to achieve comprehensive control of surface gas emissions by a professional engineer. The following issues must be addressed in the design: Depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closure end use, air intrusion control, corrosion resistance, fill settlement, resistance to the refuse decomposition heat, and ability to isolate individual components or sections for repair or troubleshooting without shutting down entire collection system.

(2) The sufficient density of gas collection devices determined in paragraph (a)(1) of this section must address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior.

(3) The placement of gas collection devices determined in paragraph (a)(1) of this section must control all gas producing areas, except as provided by paragraphs (a)(3)(i) and (ii) of this section.

(i) Any segregated area of asbestos or nondegradable material may be excluded from collection if documented as provided under §60.768(d). The documentation must provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and must be provided to the Administrator upon request.

(ii) Any nonproductive area of the landfill may be excluded from control, provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material must be documented and provided to the Administrator upon request. A separate NMOC emissions estimate must be made for each section proposed for exclusion, and the sum of all such sections must be compared to the NMOC emissions estimate for the entire landfill.

(A) The NMOC emissions from each section proposed for exclusion must be computed using Equation 7:

$$Q_i = 2 \ k \ L_o M_i (e^{-k t_i}) \ (C_{NMOC}) \ (3.6 \times 10^{-9}) \quad (Eq. 7)$$

Where:

$Q_i$  = NMOC emission rate from the  $i$ th section, megagrams per year.

$k$  = Methane generation rate constant, year<sup>-1</sup>.

$L_o$  = Methane generation potential, cubic meters per megagram solid waste.

$M_i$  = Mass of the degradable solid waste in the  $i$ th section, megagram.

$t_i$  = Age of the solid waste in the  $i$ th section, years.

$C_{NMOC}$  = Concentration of nonmethane organic compounds, parts per million by volume.

**40 CFR 60, NSPS SUBPART XXX —STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS THAT COMMENCED CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION AFTER JULY 17, 2014.**

$3.6 \times 10^{-9}$  = Conversion factor.

(B) If the owner/operator is proposing to exclude, or cease gas collection and control from, nonproductive physically separated (e.g., separately lined) closed areas that already have gas collection systems, NMOC emissions from each physically separated closed area must be computed using either Equation 3 in §60.764(b) or Equation 7 in paragraph (a)(3)(ii)(A) of this section.

(iii) The values for k and CNMOC determined in field testing must be used if field testing has been performed in determining the NMOC emission rate or the radii of influence (this distance from the well center to a point in the landfill where the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k, Lo and CNMOC provided in §60.764(a)(1) or the alternative values from §60.764(a)(5) must be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions provided the nature, location, age, and amount of the nondegradable material is documented as provided in paragraph (a)(3)(i) of this section.

(b) Each owner or operator seeking to comply with §60.762(b)(2)(ii)(A) construct the gas collection devices using the following equipment or procedures:

(1) The landfill gas extraction components must be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to: Convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system must extend as necessary to comply with emission and migration standards. Collection devices such as wells and horizontal collectors must be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations must be situated with regard to the need to prevent excessive air infiltration.

(2) Vertical wells must be placed so as not to endanger underlying liners and must address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors must be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices must be designed so as not to allow indirect short circuiting of air into the cover or refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations.

(3) Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly must include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices must be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness.

(c) Each owner or operator seeking to comply with §60.762(b)(2)(iii) must convey the landfill gas to a control system in compliance with §60.762(b)(2)(iii) through the collection header pipe(s). The gas mover equipment must be sized to handle the maximum gas generation flow rate expected over the intended use period of the gas moving equipment using the following procedures:

(1) For existing collection systems, the flow data must be used to project the maximum flow rate. If no flow data exists, the procedures in paragraph (c)(2) of this section must be used.

(2) For new collection systems, the maximum flow rate must be in accordance with §60.765(a)(1).

[Table of Contents](#)

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**ATTACHMENTS**  
**(INCLUDED FOR CONVENIENCE)**

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The following attachments are included for convenient reference:

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance  
(40 CFR 60, July, 1996).

Table H, Permit History.

Table 1, Summary of Air Pollutant Standards and Terms.

**FIGURE 1**

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING  
SYSTEM PERFORMANCE**

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant (*Circle One*):      SO<sub>2</sub>                      NO<sub>x</sub>      TRS      H<sub>2</sub>S                      CO                      Opacity

Reporting period dates: From \_\_\_\_\_ to \_\_\_\_\_

Company: \_\_\_\_\_

Emission Limitation: \_\_\_\_\_

Address: \_\_\_\_\_

Monitor Manufacturer: \_\_\_\_\_

Model No.: \_\_\_\_\_

Date of Latest CMS Certification or Audit: \_\_\_\_\_

Process Unit(s) Description: \_\_\_\_\_

Total source operating time in reporting period <sup>1</sup>: \_\_\_\_\_

<b>Emission data summary <sup>1</sup></b>	<b>CMS performance summary <sup>1</sup></b>
1. Duration of excess emissions in reporting period due to: a. Startup/shutdown ..... ____ b. Control equipment problems ..... ____ c. Process problems ..... ____ d. Other known causes ..... ____ e. Unknown causes ..... ____ 2. Total duration of excess emissions ..... ____ 3. Total duration of excess emissions x (100) / [Total source operating time] ..... % <sup>2</sup>	1. CMS downtime in reporting period due to: a. Monitor equipment malfunctions ..... ____ b. Non-Monitor equipment malfunctions ..... ____ c. Quality assurance calibration ..... ____ d. Other known causes ..... ____ e. Unknown causes ..... ____ 2. Total CMS Downtime ..... ____ 3. [Total CMS Downtime] x (100) / [Total source operating time] ..... % <sup>2</sup>

<sup>1</sup> For opacity, record all times in minutes. For gases, record all times in hours.

<sup>2</sup> For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

*Note: On a separate page, describe any changes since the last in CMS, process or controls.*

I certify that the information contained in this report is true, accurate, and complete.

Name: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Title: \_\_\_\_\_

[Table of Contents](#)

**TABLE H**  
**PERMIT HISTORY**

For convenience purposes only, this table summarizes the history of air construction and Title V air operation permits.

EU No.	Description	Permit No.	Effective Date	Expiration Date	Project Type
All	Facility	1250008-001-AV	06/07/2004	06/07/2009	Title V Initial
All	Facility	1250008-002-AV	01/03/2006	06/07/2009	Title V Reopening
All	Facility	1250008-003-AV	04/16/2009	04/16/2014	Title V Renewal
001	Facility	1250008-004-AC	07/06/2009	12/19/2010	Construction
001, 002	LFG flare on MSW Landfill	1250008-005-AV	05/20/2011	04/16/2014	Title V Revision
004, 005, 006, 007, 008	Facility	1250008-006-AC	10/14/2011	10/14/2013	Construction Cell 6
All	Facility	1250008-007-AV	01/29/2014	01/29/2019	Title V Renewal
All	Facility	1250008-008-AV	TBD	TBD	Title V Renewal

[Table of Contents](#)

**TABLE 1****SUMMARY OF AIR POLLUTANT STANDARDS AND TERMS**

For convenience purposes only, this table summarizes air pollutant standards and terms related to the facility. It does not supersede any of the terms or conditions of the permit.

Facility ID No. 1250008, New River Regional Landfill								
Emissions Unit Information						Equivalent Emissions		Regulatory Citations
EU ID	EU Description	Fuel	Hours/ Year	Pollutant	Emission Standards	lb/hour	TPY	
004	3000 SCFM Non-assisted Utility Flare	-	8760	VE 05	Visible Emissions $\leq$ 5% Opacity, except for periods not to exceed 5 minutes during any two consecutive hours			B.11.

[Table of Contents](#)