



Charlie Crist  
Governor

Ana M. Viamonte Ros, M.D., M.P.H.  
State Surgeon General

**MAY 28, 2008**

**ELECTRONIC CORRESPONDENCE**

paul\_kraus@barnard-inc.com

**NOTICE OF AIR OPERATION PERMIT**

Barnard Construction Company, Inc  
13775 South U.S. 27  
South Bay, FL 33493

**Air Permit No.:** 0990671-003-AO  
**Project:** Initial Air Operation permit  
**PALM BEACH COUNTY, FLORIDA**

*Authorized Representative:*

Paul Kraus, Project Manager

**Dear Mr. Kraus:**

Enclosed is the above referenced air pollution construction permit to perform the proposed work on a source of air pollution located in Palm Beach County. This permit is issued pursuant to Chapter 403.087 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code. Any party to this order (permit) has the right to seek judicial review of it pursuant to Section 120.68, F.S., by filing a notice of appeal pursuant to Rule 9.110 of the Florida Rules of Appellate Procedure with: the legal office of the Palm Beach County Health Department at P.O. Box 29 (826 Evernia Street), West Palm Beach, Florida 33402-0029; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days after this order (permit) is filed with the clerk of the Health Department.

*Executed in West Palm Beach, Florida*  
PALM BEACH COUNTY HEALTH DEPARTMENT

James E. Stormer, QEP, Environmental Administrator  
Air Pollution Control Section  
Division of Environmental Health and Engineering



Post Office Box 29 / 901 Evernia Street, West Palm Beach, FL. 33402  
Jean M. Malecki, M.D., MPH, FACPM, Director  
[www.pbchd.com](http://www.pbchd.com)

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that the Notice of Permit, the Final Determination, and the Air Pollution Construction Permit were sent by electronic mail to the Authorized Representative and copies were sent by electronic mail to the persons listed before close of business on the date of filing indicated below.

**Copies:**

Lee Hoefert, PE,  
Southeast District Office – DEP

[Lee.Hoefert@dep.state.fl.us](mailto:Lee.Hoefert@dep.state.fl.us)

Robert E. Wallace, III, P.E.,  
Environmental Engineering Consultants, Inc.

[RWallace@EEC-Tampabay.com](mailto:RWallace@EEC-Tampabay.com)

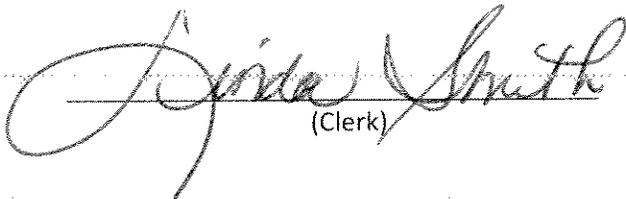
Marvin Scott  
Environmental Engineering Consultants, Inc.

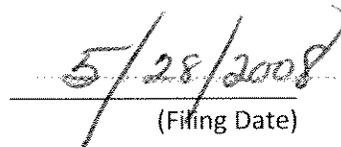
[mscott@EEC-Tampabay.com](mailto:mscott@EEC-Tampabay.com)

Tom Tittle, PBCHD

[Thomas\\_Tittle@doh.state.fl.us](mailto:Thomas_Tittle@doh.state.fl.us)

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52, Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

  
\_\_\_\_\_  
(Clerk)

  
\_\_\_\_\_  
(Filing Date)



Charlie Crist  
Governor

Ana M. Viamonte Ros, M.D., M.P.H.  
State Surgeon General

**AIR POLLUTION OPERATION PERMIT**

**ISSUED TO:**

**Permittee:**

Barnard Construction Company, Inc  
17415 South U.S. 27  
South Bay, FL 33493

<b>ARMS No.:</b>	0990671
<b>Permit No:</b>	0990671-003-AO
<b>Issued:</b>	05/28/2008
<b>Expires:</b>	05/27/2013

**Authorized Representative:**

Paul Kraus

*Note: A renewal application must  
be submitted by 03/26/2013*

**LOCATED AT:**

**PROJECT DESCRIPTION:** Initial Air Operating Permit

**LOCATED AT:** 17415 South U.S. 27, South Bay, FL 33493

**UTM:** Zone 17; 535.12 km E; 2926.17 km N; Lat. /Long: 26° 27' 25" N/ 80° 38' 39" W

**DESCRIPTION:** An aggregate processing plant for the construction of Everglades Agricultural Area (EAA) reservoir

**SIC No.:** 1422 (Crushed and Broken Limestone)

**STATEMENT OF BASIS:**

The Palm Beach County Health Department (Health Department) issues this permit under the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62.4 through 62.297 the Florida Administrative Code (F.A.C.). The Florida Department of Environmental Protection (DEP) has permitting jurisdiction under Chapter 403.087, F.S. However, in accordance with Section 403.182, F.S., the DEP recognizes the Health Department as the approved local air pollution control program in Palm Beach County. As such, the DEP and the Health Department have entered into a Specific Operating Agreement that authorizes the Health Department to issue or deny permits for this type of air pollution source located in Palm Beach County. The above named permittee is authorized to operate the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Health Department.

**ISSUED BY:**

*Executed in West Palm Beach, Florida*

PALM BEACH COUNTY HEALTH DEPARTMENT

James E. Stormer, Q.E.P., Environmental Administrator  
Air Pollution Control Section  
Division of Environmental Health and Engineering



The Palm Beach County Health Department  
Post Office Box 29 / 901 Evernia Street, West Palm Beach, FL 33402  
Jean M. Malecki, M.D., MPH, FACPM, Director  
www.pbchd.com

## SECTION I. SUMMARY INFORMATION

### PERMIT HISTORY

- 04/08/2008: Application for air operation permit received.
- 04/08/2008: Correct Application fee received.

### PERMIT CONTENT

- Section I: Summary Information
- Section II: Facility-Wide Specific Conditions
- Section III: Emissions Unit Specific Conditions
- Section IV: Appendix A: General Conditions  
                   Appendix B: General Test Requirements  
                   Appendix C: General Provisions of 40 CFR Part 60 – Subpart A  
                   Appendix D: Definitions of 40 CFR Part 60 Subpart OOO [40 CFR 60.671]  
                   Appendix E: Definitions of 40 CFR Part 60 Subpart IIII [40 CFR 60.4219]

### REGULATORY CLASSIFICATION

This facility is classified as a synthetic minor source (for Nitrogen Oxides -- NO<sub>x</sub> and Sulfur Oxides -- SO<sub>2</sub>) of air pollution. *The non-metallic operations such as crushers, conveyors, and screens are subject to 40 CFR Part 60, Subpart OOO "Standards of Performance for Non-Metallic Mineral Processing Plants." The diesel engines/generators are subject to 40 CFR 60 Subpart IIII "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines."*

### EMISSIONS UNITS SUMMARY

This permit addresses the following emissions units:

EMISSIONS UNIT No.	EMISSIONS UNIT DESCRIPTION
001	<b>Non-Metallic Crushers</b> Primary Crusher (Lippmann Horizontal Impact Crusher rated at 800 TPH, Model 1FB-48-72-45) Secondary Crusher (Lippmann Horizontal Impact Crusher rated at 800 TPH, Model 5260) Tertiary Crusher (Actech Vertical Shaft Impact Crusher rated at 800 TPH, Model 4500)
002	<b>Screening Systems</b> One (1) Double Deck Scalping Screen (JCI 5' x 16' Scalping Screen) Four (4) Triple Wash Screening systems (JCI 8' x 20' Wash Screen)
003	Forty (40) 36" <b>Conveyors</b>
004	<b>Seven (7) Caterpillar Diesel Generators</b> These engines are rated at 725 KW, 1105hp, Four-Cycle 27 Liter per cylinder, with a fuel rate of 41.6 gal/hr @75% load. Model C27 ACERT. Output specifications 480 Volts, 60hz, at 1800 rpm.

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**SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS****1.0 ADMINISTRATIVE REQUIREMENTS**

- 1.1 Regulating Agencies: All applications, reports, tests, and notifications shall be submitted to the Air Pollution Control Section of the Palm Beach County Health Department (Health Department) at P.O. Box 29 (901 Evernia Street), West Palm Beach, Florida, 33402-0029, and phone number (561) 355-3136.
- 1.2 General Permit Conditions: The owner and operators shall be aware of, and operate under, the attached General Permit Conditions listed in *Appendix A* of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. **[Rule 62-4.160, F.A.C.]**
- 1.3 Application for Operation Permit: The permittee shall apply for a renewal permit at least 60 days prior to the expiration of this operation permit. The application shall include: the Application Form *[DEP Form No. 62-210.900(4)]*; the correct application processing fee; all required test reports; and a summary of any changes or substitutions to the original equipment, processes, fuels, controls, etc. When the renewal application is timely and sufficient, the existing permit shall remain in effect until final action is taken by the Health Department. **[Rules 62-4.090 and 62-210.900, F.A.C.]**
- 1.4 Applicable Regulations: This facility is subject to the following regulations: Chapters 62-4, 62-210, 62-212, 62-296, and 62-297, F.A.C. Specifically, the emissions units are subject to: *40 CFR 60 Subpart 000 (Crushers et al.) and 40 CFR 60 Subpart IIII (Diesel Engines)*. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. Appendices C, D and E are part of this permit. **[Rule 62-210.300(1), F.A.C. and the SOA]**

**2.0 EMISSION LIMITING AND PERFORMANCE STANDARDS**

- 2.1 General VOC Standards: The owner or operator shall not store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents without applying known and existing vapor emission control devices or systems. This includes: **[Rule 62-296.320(1), F.A.C.]**
- Regular inspection and maintenance of piping, valves, flanges, tanks, and containers used for storage and transfer of organic liquids in order to minimize fugitive VOC emissions.
  - When not in use, directing solvent-containing materials to containers that prevent evaporation.
- 2.2 Objectionable Odors: No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. **[Rule 62-296.320(2), F.A.C.]**
- Note: An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-210.200(200), F.A.C.]*
- 2.3 General Visible Emissions Standard: Unless otherwise specified by permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere any air pollutants from new, or existing emissions units, the opacity of which is equal to or greater than 20 percent. **[Rule 62-296.320(4)(b), F.A.C.]**
- 2.4 Unconfined Emissions of Particulate Matter: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions include the following: **[Rule 62-296.320(4)(c), F.A.C.]**
- Paving and maintenance of roads, parking areas and yards.
  - Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
  - Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
  - Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
  - Landscaping or planting of vegetation.
  - Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

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**SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS**

- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

*Note: Facilities that cause frequent, valid complaints will be required by the Health Department to take these or other reasonable precautions. In determining what constitutes reasonable precautions for a particular facility, the Health Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.*

**3.0 OPERATION AND MAINTENANCE REQUIREMENTS**

- 3.1 Circumvention: The owner or operator shall not circumvent air pollution control equipment/methods or allow the emission of air pollutants without the equipment/methods operating properly. **[Rule 62-210.650, F.A.C.]**
- 3.2 Excess Emissions Requirements **[Rule 62-210.700, F.A.C.]**
- (a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized, but in no case exceed two hours in any 24 hour period unless specifically authorized by the Health Department for longer duration. **[Rule 62-210.700(1), F.A.C.]**
  - (b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction are prohibited. **[Rule 62-210.700(4), F.A.C.]**
  - (c) In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Air Pollution Control Section of the Palm Beach County Health Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the problem; and the corrective actions being taken to prevent recurrence. **[Rule 62-210.700(6), F.A.C.]**

**4.0 COMPLIANCE MONITORING REQUIREMENTS**

- 4.1 Duration: Unless otherwise specified, all records and reports required by this permit shall be kept for at least 3 years from the date the information was recorded. **[Rule 62-4.160(14)(b), F.A.C.]**
- 4.2 Test Procedures shall meet all applicable requirements of the Chapter 62-297, F.A.C. See *Appendix B* of this permit for a summary of these requirements. **[Rule 62-297.100, F.A.C.]**
- 4.3 Operational Rate During Testing: Unless otherwise stated in the applicable emission limiting standard for a rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. **[Rule 62-297.310(2), F.A.C.]**
- 4.4 Stack Testing Facilities: The owner or operator shall maintain permanent stack testing facilities in accordance with **Rule 62-297.310(6), F.A.C.** These requirements are summarized in *Appendix B* of this permit.
- 4.5 Test Notification: The owner or operator shall notify the Health Department, in writing, at least 15 days prior to the date on which each formal compliance test is to begin, of the test date, the expected test time, the location of the test, the facility contact person responsible for coordinating the test, and the person or company conducting test. The 15 day notification requirement may be waived at the discretion of the Health Department. Likewise, if circumstances prevent testing during the test window specified for the emissions unit, the owner or operator may request an alternate test date before the expiration of this window. **[Rule 62-297.310(7)(a)9., F.A.C.]**
- 4.6 Special Compliance Tests: When the Health 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 DEP rule or permit 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 and to provide a report on the results of said tests to the Health Department. **[Rule 62-297.310(7)(b), F.A.C.]**

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**SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS****5.0 REPORTS REQUIRED**

- 5.1 Annual Operations Report: Before March 1st of each year, the owner or operator shall submit an Annual Operations Report [*DEP Form No. 62-210.900(5)*] to the Health Department which summarizes operations for the previous calendar year. **[Rule 62-210.370(3), F.A.C.]**
- 5.2 Excess Emissions Report: If excess emissions occur, the owner or operator shall notify the Air Compliance Section of the Health Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Health Department may request a written summary report of the incident. **[Rules 62-4.130 and 62-210.700(6), F.A.C.]**
- 5.3 Emission Compliance Stack Test Reports: For each required emissions compliance test, a report indicating the results of the test shall be filed with the Health Department as soon as practical, but no later than 45 days after the last sampling run is completed. The report shall provide sufficient detail on the tested emissions unit and the procedures used to allow the Health Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in **Rule 62-297.310(8)(c), F.A.C (Appendix B)**. Additional report information may be specified for a given group of emissions units in this permit. **[Rule 62-297.310(8), F.A.C.]**

**6.0 WASTE REQUIREMENTS**

- 6.1 Waste Disposal: The owner or operator shall treat, store, and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable Federal, State, and Local regulations. This air pollution permit does not preclude the permittee from securing any other types of required permits, licenses, or certifications.

**SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS**

**GROUP A. This portion of the permit addresses the following group of emissions units:**

EMISSIONS UNIT No.	EMISSIONS UNIT DESCRIPTION
001	<b>Non-Metallic Crushers</b> Primary Crusher (Lippmann Horizontal Impact Crusher rated at 800 TPH, Model 1FB-48-72-45) Secondary Crusher (Lippmann Horizontal Impact Crusher rated at 800 TPH, Model 5260) Tertiary Crusher (Actech Vertical Shaft Impact Crusher rated at 800 TPH, Model 4500)
002	<b>Screening Systems</b> One (1) Double Deck Scalping Screen (JCI 5' x 16' Scalping Screen) Four (4) Triple Wash Screening systems (JCI 8' x 20' Wash Screen)
003	Forty (40) 36" <b>Conveyors</b>

*These units are subject to 40 CFR Part 60 Subpart OOO "Standards of Performance for Non-Metallic Mineral Processing Plants."*

**EMISSION LIMITING STANDARDS AND OPERATION RESTRICTIONS**

**A.1** Following are the opacity standards for the referenced emission Units.

Emission Unit	Opacity Standard	Rule Reference
001	Not Greater than 15%	40 CFR 60.672(c)
002	No visible emissions (zero percent)	40 CFR 60.672(h)
003	Not greater than 10%	40 CFR 60.672(b)

**Note:** *These operations (screening, conveyors, and bucket elevators) process saturated material in the production line up to the next crusher, grinding mill or storage bin, or these operations in the production line downstream of wet mining operations and process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.[40 CFR 60.672(h)(l) &(2)]*

**A.2** The opacity standards above shall apply at all times except during periods of startup, shutdown and malfunction. At all times, including periods of startup, shutdown, and malfunction, the permittee 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 emission. The duration of excess emission shall be minimized and shall not exceed two hours in any 24-hour period. Excess emission which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

**[Rules 62-210.700 and 40 CFR 60.11(c) & (d), F.AC.]**

**COMPLIANCE MONITORING AND TESTING REQUIREMENTS**

**A.3** Visible Emission Test Required: In determining compliance with the fugitive particulate matter emission limiting standards above, the owner or operator shall use EPA Method 9 and the procedures in 40 CFR 60.11, with the following additions:

- (i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
- (ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (road dust). The required observer position relative to the sun (EPA Method 9, Section 2.1) must be followed.
- (iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emission and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emission is to be made at a point in the plume where the mist is no longer visible.

**[40 CFR 60.675(c)(1)]**

**SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS**

- A.4** Initial Compliance Test Requirements: The initial visible emission compliance test shall be completed within 180 days of initial startup of the facility. **[40 CFR 60.8(a)]**
- A.5** Opacity Test Requirements:
- (a) For the purpose of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test. **[40 CFR 60.11 (b)]**
  - (b) When determining compliance for affected facilities under 60.672(b) (conveyers), the duration of Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply: **[40 CFR 60.675(c)3]**
    - i) There are no individual readings greater than 10 percent opacity; and
    - ii) There are no more than 3 readings of 10 percent for the 1-hour period.
  - (c) When determining compliance for affected facilities under 60.672(c) (crusher), the duration of Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply: **[40 CFR 60.675(c)4]**
    - i) There are no individual readings greater than 15 percent opacity; and
    - ii) There are no more than 3 readings of 15 percent for the 1-hour period.
- A.6** Alternative to the test method: For the method and procedure of sp. condition A.4, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emission from an individual affected facility cannot be read, either of the following procedures may be used:
- i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emission stream.
  - ii) Separate the emission so that the opacity of emission from each affected facility can be read **[40 CFR 60.675(e)]**
- A.7** Wet screening Operations: EPA Method 9 performance tests are not required for:
- i) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill or storage bin.
  - ii) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher, grinding or storage bin in the production line.

**REPORTING AND RECORDKEEPING REQUIREMENTS**

- A.8** Test Notifications: The permittee shall provide the Health Department at least 30 days prior notice of any performance test. **[CFR 60.675, and 40 CFR 60.8(d)]**
- If, after 30 days notice for an initially scheduled performance test, there is a delay in conducting any scheduled performance test, the permittee shall submit a notice to the Health Department at 7 days prior to any scheduled performance test. **[CFR 60.675(g)]**
- A.9** Test Reports: The permittee shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the emission limiting standards above, including reports of opacity observations made using Method 9. **[40 CFR 60.676(f)]**

Copies of all reports, tests, notifications or other submittals required by this permit shall be submitted to the Palm Beach County Health Department, Air Pollution Control Program. All records required by this permit shall be kept by the permittee for a minimum of two years from the date of such records. **[Rule 62-4.070(3) F.A.C.]**

**SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS**

A.10 AOR Supplemental Information: Annual-operating reports for the emission units covered under this section shall include following supplemental information that was recorded in the previous calendar year:

- A consecutive 12-month total of the amount of material processed, calculated from the monthly totals for the previous twelve calendar months. **[Rule 62-4.070(3), F.A.C.]**

A.11 Change of processing material (Saturated vs Unsaturated): The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to CFR 60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in 40 CFR 60.672(b) and the emission test requirements of 40 CFR 60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in 40 CFR 60.672(h). **[40 CFR 60.676(g)]**

**REPORTING FOR REPLACEMENT OF FACILITIES**

A.12 When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in 40 CFR 60.671, having the same function as the existing facility, the new facility is exempt from provisions of 40 CFR 60.672 (standards for particulate matter), 40 CFR 60.674 (Monitoring of operations), and 40 CFR 60.675 (Test methods and procedures). Reconstruction costs shall be calculated per 40 CFR 60.673.

**[40 CFR 60.670(d)(I)]**

A.13 Replacing existing facilities in a production line with new facilities does not qualify for the exemption described as above in A.12.

**[40 CFR 60.670.670(d)(3)]**

A.14 When seeking exemption as mentioned in condition A.10, the permittee shall submit the following information required by 40 CFR 60.676(a) to the Health Department.

*The required information shall be submitted for both existing facility replaced, and the replacement equipment.*

When Replacing ...	Required Information	Rule Reference
A crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station.	Rated capacity in tons per hour, Model and serial numbers.	40 CFR 60.676(a)(1)
A screening operation	The total surface area of the top screen, Model and serial numbers.	40 CFR 60.676(a)(2)
A conveyor belt	The width of the belt	40 CFR 60.676(a)(3)
A storage bin	The rated capacity in tons	40 CFR 60.676(a)(4)

**[40 CFR 60.676(a)]**

A.15 The permittee shall not replace facility covered under this permit with a piece of equipment of larger size or different function without applying for, and receiving, a modification of this permit to allow such replacement, unless this requirement is specifically waived in writing by the Health Department.

**[40 CFR 60.670]**

**SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS**

**GROUP B. This portion of the permit addresses the following group of emissions units:**

EMISSIONS UNIT No.	EMISSIONS UNIT DESCRIPTION
004	<p><b>Seven (7) Caterpillar Diesel Generators</b>                      These engines are rated at 725 KW, 1105hp, Four-Cycle 27 Liter per cylinder, with a fuel rate of 41.6 gal/hr @75% load. Model C27 ACERT.                      Output specifications 480 Volts, 60hz, at 1800 rpm.</p>

*These generators are subject to 40 CFR 60 Subpart IIII "Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines."*

**EMISSION LIMITING STANDARDS**

**B.1 Allowable Fuels:** Fuel burned shall be limited to number # 2 distillate fuel oil with maximum sulfur content as specified in specific condition B.6. **[Permit No. 0990671-002-AC]**

**B.2 Fuel Consumption Limits:** Diesel fuel consumption combined with all diesel units shall not exceed 1,116,170 gallons in any consecutive 365-day period. **[Applicant's Request to escape Title V Regulations and Permit No. 0990671-002-AC]**

*{Permitting Note: The potential emissions of NOx from this facility are estimated as 97.13 tons per year. This was estimated based on 3833 hours of operation for each generator, the fuel consumption, and manufacturer's emission factor for NOx}*

*Permitting Note: The following specific conditions (except B.8, B.12 and B.13) are from 40 CFR 60 Subpart IIII.*

**B.3 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine (CI) manufacturer? [40 CFR 60.4201]**

Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.

**B.4. What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine? [40 CFR 60.4204]**

(a) [Reserved.]

(b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in 40 CFR 60.4201 for their 2007 model year and later stationary CI ICE, as applicable. (Presented below).

*Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power. (40 CFR 60.4201 (d))*

**Tier 2 Standards:** *Exhaust emissions from marine compression-ignition engines shall not exceed the applicable Tier 2 exhaust emission standards contained as follows. (40 CFR 94.8)*

Engine Size liters/cylinder, rated power	Category	Model year	THC+NO <sub>x</sub> g/kW-hr	CO g/kW-hr	PM g/kW-hr
25.0 ≤ disp. <30.0 all power levels	Category 2	2007	11.0	5.0	0.50

**SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS**

(c) [Reserved.]

**B.5 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine? [40 CFR 60.4206]**

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieves the emission standards as required in 40 CFR 60.4204 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

**B.6 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart? [40 CFR 60.4207]**

(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

**(40 CFR 80.510 What are the standards and marker requirements for NRLM [nonroad locomotive or marine] diesel fuel?**

(a) Beginning June 1, 2007. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NRLM diesel fuel is subject to the following per-gallon standards:

- (1) Sulfur content. 500 parts per million (ppm) maximum.
- (2) Cetane index or aromatic content, as follows:
  - (i) A minimum cetane index of 40; or
  - (ii) A maximum aromatic content of 35 volume percent.)

(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.

**(§ 80.510 What are the standards and marker requirements for NRLM [nonroad locomotive or marine] diesel fuel?**

(b) Beginning June 1, 2010. Except as otherwise specifically provided in CFR 80 Subpart I, all NR and LM diesel fuel is subject to the following per-gallon standards:

- (1) Sulfur content.
  - (i) 15 ppm maximum for NR diesel fuel.
  - (ii) 500 ppm maximum for LM diesel fuel.
- (2) Cetane index or aromatic content, as follows:
  - (i) A minimum cetane index of 40; or
  - (ii) A maximum aromatic content of 35 volume percent.)

**COMPLIANCE MONITORING AND TESTING REQUIREMENTS**

**B.8 Allowable Fuels:** The owner or operator shall record and maintain records of the types of fuel burned. The owner or operator shall maintain records to demonstrate that each shipment of diesel fuel has 0.05 percent or less (by weight) of sulfur and that the content was determined by ASTM methods ASTM D4057-88 and ASTM D129-91, ASTM D2622-94 or ASTM D4294-90, adopted and incorporated by reference in Rule Certifications from the fuel supplier in accordance with the above requirement shall be satisfactory records. **[Rule 62-4.070(3),F.A.C.]**

**B.9 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine? [40 CFR 60.4209]**

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in Sec. **[40 CFR 60.4211]**.

(a) [Reserved.]

(b) [not applicable]

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**SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS**
**B.10 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine? [40 CFR 60.4211]**

- (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
- (b) [Reserved.]
- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in Sec. 60.4204(b), you must comply by purchasing an engine certified to the emission standards in Sec. 60.4204(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
- (d) – (e) [Reserved.]

**B.11 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder? [40 CFR 60.4212]**

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.

- (a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.
- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq.1})$$

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in Sec. 60.4213 of this subpart, as appropriate.

- (d) [Reserved.]

**REPORTING REQUIREMENTS**

- B.12** AOR Information: Annual-operating reports for the emission units covered under this section shall include following supplemental information that was recorded in the previous calendar year:

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**SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS**

- a. The fuel consumption rate on a monthly basis, used by all diesel units
- b. The highest 12-month total fuel consumption, calculated from the monthly totals for the previous twelve calendar months
- c. The highest percent sulfur content (by weight) of diesel fuel received **[Rule 62-4.070(3),F.A.C.]**

**B.13 Fuel Limits:** The owner or operator shall record and maintain records of the fuel consumption on a monthly basis. The permittee shall record and maintain the total consumption of diesel fuel by the diesel engines on a monthly basis. From the monthly records the permittee shall record and maintain a rolling 12-month total record of the amount of fuel consumed to demonstrate compliance with the fuel limitation in specific in specific condition no. **B.2. {Rule 62-4.070(3), F.A.C.}**

**B.14 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine? [40 CFR 60.4214]**

- (a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.
  - (1) Submit an initial notification as required in Sec. 60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.
    - (i) Name and address of the owner or operator;
    - (ii) The address of the affected source;
    - (iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
    - (iv) Emission control equipment; and
    - (v) Fuel used.
  - (2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.
    - (i) All notifications submitted to comply with this subpart and all documentation supporting any notification.
    - (ii) Maintenance conducted on the engine.
    - (iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
    - (iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.
- (b) [Reserved.]
- (c) [not applicable]

## LIST OF APPENDICES

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APPENDIX	DESCRIPTION
A	General Conditions
B	General Test Requirements
C	General Provisions of 40 CFR Part 60 – Subpart A
D	Definitions of 40 CFR Part 60 Subpart OOO [ 40 CFR 60.671
E	Definitions of 40 CFR Part 60 Subpart IIII [ 40 CFR 60.4219]

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**APPENDIX A**  
**GENERAL CONDITIONS [F.A.C. 62-4.160]**

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G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. 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.

G.2 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 or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and 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 waiver or approval or any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

G.4 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.

G.5 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 Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or 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.

G.7 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 a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- (a) Have access to and copy and records that must be kept under the conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
- (c) 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.

G.8 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:

- (a) A description of and cause of non-compliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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.

**APPENDIX A**  
**GENERAL CONDITIONS [F.A.C. 62-4.160]**

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G.9 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 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

G.10 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.

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, 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.

G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.

G.13 This permit also constitutes:

G.13 This permit also constitutes:

Standard	Applicable	Not applicable
Determination of Best Available Control Technology (BACT)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Determination of Prevention of Significant Deterioration (PSD)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Compliance with New Source Performance Standards (NSPS)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

G.14 The permittee shall comply with the following:

(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 or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

(c) Records of monitoring information shall include:

- The date, exact place, and time of sampling or measurements;
- The person responsible for performing the sampling or measurements;
- The dates analyses were performed;
- The person responsible for performing the analyses;
- The analytical techniques or methods used; and
- The results of such analyses.

G.15 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 that 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.

**Appendix B**  
**General Test Requirements**

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**62-297.310 General Test Requirements.**

The focal point of a compliance test is the stack or duct which vents process and/or combustion gases and air pollutants from an emissions unit into the ambient air.

- (1) For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct; and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided that three complete and separate determinations shall not be required if the Department determines that the process variables are not subject to variation during a compliance test, or if a determination is not necessary in order to calculate the unit's emission rate. 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, the Secretary or his designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is 20% below the allowable emission limiting standards.
- (2) Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity as defined below. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
  - (a) Combustion Turbines. (Reserved)
  - (b) All Other Sources. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.
- (3) The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.

**62-297.330 Applicable Test Procedures.**

This section establishes required sampling times, minimum sample volumes and special test requirements, as applicable, for each category of emissions units for which an emission limiting standard is specified in or established pursuant to any of the air pollution rules of the Department.

- (1) Required Sampling Time.
  - (a) Unless otherwise specified in the applicable rule, 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.
  - (b) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

**Appendix B**  
**General Test Requirements**

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1. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
  2. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.340(3), F.A.C., Waiver of Compliance Test Requirement, shall be established on a case-by-case basis as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
  3. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (2) Minimum Sample Volume. Unless otherwise specified in the applicable rule the minimum sample volume per run shall be 25 dry standard cubic feet.
- (3) Required Flow Rate Range. For DEP Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (4) Calibration. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 62-297.330-1 (located at end of this Appendix).
- (5) EPA Method 5. When EPA Method 5 is required the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

**62-297.345 Stack Sampling Facilities Provided by the Owner of an Air Pollution Point Source.**

This section describes the minimum requirements for stack sampling facilities that are necessary to sample point sources. Sampling facilities include sampling ports, work platforms, access and electrical power. Sources must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR 1910, Subparts D and E. A copy of this reference document is available from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. and may be inspected at the Department's Tallahassee office.

- (1) Permanent Test Facilities. The owner or operator of a source that is required to conduct a compliance test, other than a visible emission test, on at least an annual basis, shall install and maintain permanent stack testing facilities.
- (2) Temporary Facilities. *(Omitted)*
- (3) Test Facilities.
  - (a) Sampling Ports.
    1. All sampling ports shall have a minimum inside diameter of 3 inches.
    2. The ports shall be capable of being sealed when not in use.
    3. Location of sampling ports.
      - a. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, construction or other flow disturbances.
      - b. For sources which do not comply with the criteria set forth in a. above, the source owner or operator shall demonstrate to the Department, within 12 months after the effective date of this rule, that sampling port locations for such source are not subject to flow disturbances which result in invalid test results. If the source cannot make such a demonstration to the Department's satisfaction, the Department, after full review of all data timely submitted by the source, shall specify appropriate sampling procedures or port locations in the source's operating permit.

**Appendix B**  
**General Test Requirements**

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4. For sources for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For sources for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. For sources not subject to Rule 62-296.800, F.A.C., (Standards of Performance for New Stationary Sources) or Rule 62-296.810, F.A.C., (Emissions Standards for Hazardous Air Pollutants) and which have submitted a complete application for a permit to construct prior to December 1, 1980, FDEP Method 1 may be substituted for EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(b) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(c) Access.

1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
2. Walkways over free fall areas shall be equipped with safety rails and toe boards.

(d) Electrical Power.

1. A minimum of two 120 volts AC, 20 amps outlets shall be provided at the sampling platform with 20 feet of each sampling port.
2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(e) Sampling Equipment Support.

1. An eyebolt and angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts. The eyebolt shall be capable of supporting a 500 pound working load. The dimensions and placement of these fixtures are shown on Figure 297.345-1. A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
2. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

**62-297.570 Test Reports.**

- (1) The owner or operator of an air pollution emissions unit, for which a compliance test is required, shall file a report with the Department on the results of each such test.

**Appendix B**  
**General Test Requirements**

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- (2) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (3) 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 an EPA or DEP Method 9 test, shall provide information on:
- The type, location, and designation of the emissions unit tested.
  - The facility at which the emissions unit is located.
  - The owner or operator of the emissions unit.
  - The normal type and amount of fuels used and materials processed and the types and amounts of fuels used and material processed during each test run.
  - The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
  - A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  - The date, starting time and duration of each sampling run.
  - The test procedures used including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  - The number of points sampled and configuration and location of the sampling plane.
  - For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
  - The type, manufacturer and configuration of the sampling equipment used.
  - Data related to the required calibration of the test equipment.
  - Data on the identification, processing and weights of all filters used.
  - Data on the types and amounts of any chemical solutions used.
  - Data on the amount of pollutant collected from each; the sampling probe, the filters, and the impingers, are reported separately for the compliance test.
  - The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  - All measured and calculated data required to be determined by each applicable test procedure for each run.
  - The detailed calculations for one run that relate the collected data to the calculated emission rate.
  - The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
  - A certification that to the knowledge of the owner or his authorized agent, all data submitted is true and correct.

When a compliance 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 his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

**62-297.620 Exceptions and Approval of Alternate Procedures and Requirements.**

- (1) The owner or operator may request in writing a determination by the Secretary of the Florida Department of Environmental Protection, or his designee, that any requirement of this chapter relating to emissions test procedures, methodology, equipment, or test facilities shall not apply to an emissions unit, and shall request prior approval of alternate procedures or requirements. For information on obtaining written approval for an Alternate Sampling Procedure (ASP), please contact the Emissions Monitoring Section in Tallahassee at (904) 488-1344.
- (2) The request shall set forth the following information, at a minimum:

Specific emissions unit and permit number, if any, for which exception is requested.

**Appendix B**  
**General Test Requirements**

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The specific provision(s) of this chapter from which an exception is sought.

The basis for the exception, including but not limited, to any hardship which would result from compliance with the provisions of this chapter.

The alternate procedure(s) or requirement(s) for which approval is sought and a demonstration that such alternate procedure(s) or requirement(s) shall be adequate to demonstrate compliance with applicable emission limiting standards contained in Rule 62-210, 62-212, 62-252, 62-272, 62-273, 62-275, 62-296, or 62-297, F.A.C. or any permit issued pursuant to those rules.

(3) The Secretary or his designee shall specify by order each alternate procedure or requirement approved for an individual emissions unit in accordance with this section or shall issue an order denying the request for such approval. The Department's order shall be final agency action, reviewable in accordance with Section 120.57, Florida Statutes.

(4) In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Secretary or the appropriate Director of District Management may waive any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specify an alternative standard of 5% opacity. The waiver of compliance test requirements for a particulate emissions unit equipped with a baghouse, and the substitution of the visible emissions standard, shall be specified in the permit issued to the emissions unit.

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**TABLE 62-297.330-1 CALIBRATION SCHEDULE**

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Thermometers, liquid in glass	Annually	ASTM Hg in glass reference thermometer or equivalent thermometric points.	(+/-) 2%
Thermometer, bimetallic	Quarterly	Calibrated liquid in glass thermometer.	5°F
Thermocouple	Annually	ASTM Hg in glass reference thermometer; NBS calibrated reference and potentiometer.	5°F
Barometer	Monthly	Hg barometer, or NOAA station.	(+/-) 1% scale
Pitot Tube	1. When required 2. When damaged	By construction or measurements or wind tunnel D greater than 16" and standard pitot tube.	See EPA Method 2, Figures 2-2 and 2-3.
Probes Nozzles	1. Before each test, or 2. When nicked, dented, or corroded.	Micrometer	(+/-) 0.001" mean of at least (3) readings. Maximum allowed deviation between readings is 0.004".
Dry gas and orifice meters	1. Full scale when received; Annually when 5% change observed. 2. One point semi-annually 3. Check after each test series.	Spirometer of calibrated wet test or dry gas test meter.  Comparison check.	2%  5%

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**§ 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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*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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*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 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, magneto hydrodynamics, 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).

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*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

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in—inch	(c) Chemical nomenclature:
k—1,000	CdS—cadmium sulfide
l—liter	CO—carbon monoxide
lpm—liter per minute	CO <sub>2</sub> —carbon dioxide
lb—pound	HCl—hydrochloric acid
meq—milliequivalent	Hg—mercury
min—minute	H <sub>2</sub> O—water
ml—milliliter	H <sub>2</sub> S—hydrogen sulfide
mol. wt.—molecular weight	H <sub>2</sub> SO <sub>4</sub> —sulfuric acid
ppb—parts per billion	N <sub>2</sub> —nitrogen
ppm—parts per million	NO—nitric oxide
psia—pounds per square inch absolute	NO <sub>2</sub> —nitrogen dioxide
psig—pounds per square inch gage	NO <sub>x</sub> —nitrogen oxides
°R—degree Rankine	O <sub>2</sub> —oxygen
scf—cubic feet at standard conditions	SO <sub>2</sub> —sulfur dioxide
scfh—cubic feet per hour at standard conditions	SO <sub>3</sub> —sulfur trioxide
scm—cubic meter at standard conditions	SO <sub>x</sub> —sulfur oxides
sec—second	(d) Miscellaneous:
sq ft—square feet	A.S.T.M.—American Society for Testing and Materials
std—at standard conditions	

**§ 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.

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(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.

(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.

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(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.

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**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 operating time]	% <sup>2</sup>	3. [Total CMS Downtime] × (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 §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

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(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]

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**§ 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.

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(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. 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.

[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]

#### **§ 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, 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

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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

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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 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

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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 daily in accordance with a written procedure. The zero and span must, as 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 automatically, intrinsic to the opacity monitor, 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 as 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 photo detector 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.

(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.

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(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 no reduced 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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(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; 40 FR 59205, Dec. 22, 1975, as amended at 41 FR 35185, Aug. 20, 1976; 48 FR 13326, Mar. 30, 1983; 48 FR 23610, May 25, 1983; 48 FR 32986, July 20, 1983; 52 FR 9782, Mar. 26, 1987; 52 FR 17555, May 11, 1987; 52 FR 21007, June 4, 1987; 64 FR 7463, Feb. 12, 1999; 65 FR 48920, Aug. 10, 2000; 65 FR 61749, Oct. 17, 2000; 66 FR 44980, Aug. 27, 2001; 71 FR 31102, June 1, 2006; 72 FR 32714, June 13, 2007]

**Editorial Note:** At 65 FR 61749, Oct. 17, 2000, §60.13 was amended by revising the words “ng/J of pollutant” to read “ng of pollutant per J of heat input” in the sixth sentence of paragraph (h). However, the amendment could not be incorporated because the words “ng/J of pollutant” do not exist in the sixth sentence of paragraph (h).

**§ 60.14 Modification**

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(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.

(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

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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.

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(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;

(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**

<i>Priority Number</i> <sup>1</sup>	<i>Source Category</i>
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.

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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
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

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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]

**60.18 General control device requirements**

(a) *Introduction.* This section contains requirements for control devices used to comply with applicable subparts of parts 60 and 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section.

(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.

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(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.

(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:

$$(1) \quad H_T = K \sum_{i=1}^n C_i H_i$$

where:

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$H_T$ =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;

$$K = \frac{\text{Constant}}{1.740 \times 10^{-7}} \left( \frac{1}{\text{ppm}} \right) \left( \frac{\text{g mole}}{\text{scm}} \right) \left( \frac{\text{MJ}}{\text{kcal}} \right)$$

where the standard temperature for  $\left( \frac{\text{g mole}}{\text{scm}} \right)$  is 20°C;

(1)

$C_i$ =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.

(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).

[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000]

### § 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

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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.

(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]

**Appendix D**  
**Definitions of 40 CFR Part 60 Subpart OOO [ 40 CFR 60.671]**

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All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

*Bagging operation* means the mechanical process by which bags are filled with nonmetallic minerals.

*Belt conveyor* means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

*Bucket elevator* means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

*Building* means any frame structure with a roof.

*Capacity* means the cumulative rated capacity of all initial crushers that are part of the plant.

*Capture system* means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more process operations to a control device.

*Control device* means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more process operations at a nonmetallic mineral processing plant.

*Conveying system* means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators and pneumatic systems.

*Crusher* means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: jaw, gyratory, cone, roll, rod mill, hammer mill, and impactor.

*Enclosed truck or railcar loading station* means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

*Fixed plant* means any nonmetallic mineral processing plant at which the processing equipment specified in §60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

*Fugitive emission* means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

*Grinding mill* means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

*Initial crusher* means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

*Nonmetallic mineral* means any of the following minerals or any mixture of which the majority is any of the following minerals:

(a) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.

(b) Sand and Gravel.

(c) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.

(d) Rock Salt.

(e) Gypsum.

(f) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.

(g) Pumice.

(h) Gilsonite.

(i) Talc and Pyrophyllite.

(j) Boron, including Borax, Kernite, and Colemanite.

(k) Barite.

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(l) Fluorospar.	(p) Vermiculite.
(m) Feldspar.	(q) Mica.
(n) Diatomite.	(r) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.
(o) Perlite.	

*Nonmetallic mineral processing plant* means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in §60.670 (b) and (c).

*Portable plant* means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

*Production line* means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

*Screening operation* means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens).

*Size* means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

*Stack emission* means the particulate matter that is released to the atmosphere from a capture system.

*Storage bin* means a facility for storage (including surge bins) or nonmetallic minerals prior to further processing or loading.

*Transfer point* means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

*Truck dumping* means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: trucks, front end loaders, skip hoists, and railcars.

*Vent* means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

*Wet mining operation* means a mining or dredging operation designed and operated to extract any nonmetallic mineral regulated under this subpart from deposits existing at or below the water table, where the nonmetallic mineral is saturated with water.

*Wet screening operation* means a screening operation at a nonmetallic mineral processing plant which removes unwanted material or which separates marketable fines from the product by a washing process which is designed and operated at all times such that the product is saturated with water.

**Appendix E**  
**Definitions of 40 CFR Part 60 Subpart IIII [ 40 CFR 60.4219]**

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As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

*Combustion turbine* means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

*Compression ignition* means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

*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 number 2 distillate oil.

*Diesel particulate filter* means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

*Emergency stationary internal combustion engine* means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE 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 ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

*Engine manufacturer* means the manufacturer of the engine. See the definition of “manufacturer” in this section.

*Fire pump engine* means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

*Manufacturer* has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

*Maximum engine power* means maximum engine power as defined in 40 CFR 1039.801.

*Model year* means either:

- (1) The calendar year in which the engine was originally produced, or
- (2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

*Other internal combustion engine* means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

*Reciprocating internal combustion engine* means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

*Rotary internal combustion engine* means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

*Spark ignition* means relating to a gasoline, natural gas, or liquefied petroleum gas 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

**Appendix E**  
**Definitions of 40 CFR Part 60 Subpart IIII [ 40 CFR 60.4219]**

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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 internal combustion engine* means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE includes reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

*Subpart* means 40 CFR part 60, subpart IIII.

*Useful life* means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).