
APPENDIX A

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

Abbreviations and Acronyms:

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

AOR: Annual Operating Report

ARMS: Air Resource Management System
(Department's database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CO: carbon monoxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resources Management

DCA: Department of Community Affairs

DEP: Department of Environmental Protection

Department: Department of Environmental
Protection

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for
reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.D.: forced draft

F.S.: Florida Statutes

FGR: flue gas recirculation

Fl: fluoride

ft²: square feet

ft³: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

ISO: International Standards Organization (refers to
those conditions at 288 Kelvin, 60% relative
humidity and 101.3 kilopascals pressure.)

kPa: kilopascals

LAT: Latitude

lb: pound

lbs/hr: pounds per hour

LONG: Longitude

MACT: maximum achievable technology

mm: millimeter

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for
Hazardous Air Pollutants

NO_x: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O₂: oxygen

ORIS: Office of Regulatory Information Systems

OS: Organic Solvent

Pb: lead

PM: particulate matter

PM₁₀: particulate matter with a mean aerodynamic
diameter of 10 microns or less

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RMP: Risk Management Plan

RO: Responsible Official

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SNCR: selective non-catalytic reduction (control
system used for reducing emissions of nitrogen
oxides)

SOA: Specific Operating Agreement

SO₂: sulfur dioxide

TPH: tons per hour

TPY: tons per year

ULSD: Ultra Low Sulfur Diesel

UTM: Universal Transverse Mercator coordinate
system

VE: visible emissions

VOC: volatile organic compounds

x: By or times

APPENDIX A

ABBREVIATIONS, ACRONYMS, CITATIONS AND IDENTIFICATION NUMBERS

Citations:

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

Code of Federal Regulations:

Example: [40 CFR 60.334]

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

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

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

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

Identification Numbers:

Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

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

Permit Numbers:

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

Where:

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

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

Where:

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

APPENDIX I

LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

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

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

Brief Description of Emissions Units and/or Activities

1. Propane System
 - A. Propane Vaporizer
 - B. Propane tanks
 - C. Personnel propane fired heaters (approximately 10 locations)
2. Parts Washers
 - A. Plant Machine Shop
 - B. Mining Truck Shop
3. Diesel Fuel Storage (five 500 gallon tanks) and refueling operations
4. Gasoline Storage Tanks (one 500 gallon tank) and refueling operations
5. Portable Welders, Pumps, Air Compressors and Generators
6. Lawn maintenance equipment
7. Comfort Cooling Air Conditioner Systems (<50 lbs)
8. Mobile Sources, including vehicles, trucks and equipment
9. Sandblasting and abrasive grit blasting
10. Internal combustion engines – mobile sources
11. Lab equipment used for chemical or physical analyses
12. Brazing, soldering and welding equipment
13. Mercaptan Tank (used for odorizing natural gas-250 gallon)
14. House cleaning and clean-up related activities.

APPENDIX RR

FACILITY-WIDE REPORTING REQUIREMENTS

(Version Dated 1/16/2014)

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

Report	Reporting Deadline(s)	Related Condition(s)
Plant Problems/Permit Deviations	Immediately upon occurrence (See RR2.d.)	RR2, RR3
Malfunction Excess Emissions Report	Quarterly (if requested)	RR3
Semi-Annual Monitoring Report	Every 6 months	RR4
Annual Operating Report	April 1	RR5
EAOR Title V Annual Emissions Fee Invoice and Fee Payment	April 1	RR6
Annual Statement of Compliance	Within 60 days after the end of each calendar year (or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement); and Within 60 days after submittal of a written agreement for transfer of responsibility, or Within 60 days after permanent shutdown.	RR7
Notification of Administrative Permit Corrections	As needed	RR8
Notification of Startup after Shutdown for More than One Year	Minimum of 60 days prior to the intended startup date or, if emergency startup, as soon as possible after the startup date is ascertained	RR9
Permit Renewal Application	225 days prior to the expiration date of permit	TV17
Test Reports	Maximum 45 days following compliance tests	TR8

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

RR2. Reports of Problems.

- a. Plant Operation-Problems. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.
- b. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (1) A description of and cause of noncompliance; and
 - (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

APPENDIX RR
FACILITY-WIDE REPORTING REQUIREMENTS
(Version Dated 1/16/2014)

- c. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.
- d. "Immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. - 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays; and, for purposes of Rule 62-4.160(15) and 40 CFR 70.6(a)(3)(iii)(B), "promptly" or "prompt" shall have the same meaning as "immediately". [Rule 62-4.130, Rule 62-4.160(8), Rule 62-4.160(15), and Rule 62-213.440(1)(b), F.A.C.; 40 CFR 70.6(a)(3)(iii)(B)]

RR3. Reports of Deviations from Permit Requirements. The permittee shall report in accordance with the requirements of Rule 62-210.700(6), F.A.C. (below), and Rule 62-4.130, F.A.C. (condition RR2.), deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. *Rule 62-210.700(6):* In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. (See condition RR2.). A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rules 62-213.440(1)(b)3.b., and 62-210.700(6)F.A.C.]

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

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

- a. [Rules 62-210.370(2) & (3), 62-210.900 and 62-213.440(3)(a)2., F.A.C.]

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

- a. If the Department has not received the fee by March 1 of the year following the calendar year for which the fee is calculated, the Department will send the primary responsible official of the Title V source a written warning of the consequences for failing to pay the fee by April 1. If the fee is not postmarked or electronically submitted by April 1 of the year due, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee unpaid plus interest on such amount computed in accordance with Section 220.807, F.S. If the Department determines that a submitted fee was inaccurately calculated, the Department shall either refund to the permittee any amount overpaid or notify the permittee of any amount underpaid. The Department shall not impose a penalty or interest on any amount underpaid, provided that the permittee has timely remitted payment of at least 90 percent of the amount determined to be due and remits full payment within 60 days after receipt of notice of the amount underpaid. The Department shall waive the collection of underpayment and shall not refund overpayment of the fee, if the amount is less than one percent of the fee due, up to \$50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.

APPENDIX RR
FACILITY-WIDE REPORTING REQUIREMENTS

(Version Dated 1/16/2014)

- b. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five years and shall be made available to the Department upon request.
 - c. A copy of the EAOR Title V Annual Emissions Fee Invoice generated by the electronic annual operating report (EAOR) application, must be submitted along with the annual emissions fee payment.
- [Rules 62-210.370(3), 62-210.900 and 62-213.205, F.A.C.]

RR7. Annual Statement of Compliance.

- a. The permittee shall submit a Statement of Compliance with all terms and conditions of the permit that includes all the provisions of 40 CFR 70.6(c)(5)(iii), incorporated by reference at Rule 62-204.800, F.A.C., using DEP Form No. 62-213.900(7). Such statement shall be accompanied by a certification in accordance with Rule 62-213.420(4), F.A.C., for Title V requirements and with Rule 62-214.350, F.A.C., for Acid Rain requirements. Such statements shall be submitted (postmarked) to the Department and EPA:
 - (1) Annually, within 60 days after the end of each calendar year during which the Title V permit was effective, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement; and
 - (2) Within 60 days after submittal of a written agreement for transfer of responsibility as required pursuant to 40 CFR 70.7(d)(1)(iv), adopted and incorporated by reference at Rule 62-204.800, F.A.C., or within 60 days after permanent shutdown of a facility permitted under Chapter 62-213, F.A.C.; provided that, in either such case, the reporting period shall be the portion of the calendar year the permit was effective up to the date of transfer of responsibility or permanent facility shutdown, as applicable.
 - b. In lieu of individually identifying all applicable requirements and specifying times of compliance with, non-compliance with, and deviation from each, the responsible official may use DEP Form No. 62-213.900(7) as such statement of compliance so long as the responsible official identifies all reportable deviations from and all instances of non-compliance with any applicable requirements and includes all information required by the federal regulation relating to each reportable deviation and instance of non-compliance.
 - c. The responsible official may treat compliance with all other applicable requirements as a surrogate for compliance with Rule 62-296.320(2), Objectionable Odor Prohibited.
- [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

RR8. Notification of Administrative Permit Corrections.

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

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

APPENDIX RR
FACILITY-WIDE REPORTING REQUIREMENTS
(Version Dated 1/16/2014)

g. Any other similar minor administrative change at the source.
[Rule 62-210.360, F.A.C.]

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

a. The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.

b. If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.
[Rule 62-210.300(5), F.A.C.]

RR10. Report Submission. The permittee shall submit all compliance related notifications and reports required of this permit to the Compliance Authority. {See front of permit for address and phone number.}

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

RR12. Acid Rain Report Submission. Acid Rain Program Information shall be submitted, as necessary, to: Department of Environmental Protection, 2600 Blair Stone Road, Mail Station #5510, Tallahassee, Florida 32399-2400. Phone: 850/488-6140. Fax: 850/922-6979.

RR13. Report Certification. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]

RR14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information. [Rule 62-213.420(4), F.A.C.]

RR15. Confidential Information. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. Any permittee may claim confidentiality of any data or other information by complying with this procedure. [Rules 62-213.420(2), and 62-213.440(1)(d)6., F.A.C.]

RR16. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The forms are listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resource Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, by contacting the appropriate permitting authority or by accessing the Department's web site at: <http://www.dep.state.fl.us/air/rules/forms.htm>.

a. Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) (Effective 12/31/2013)

b. Statement of Compliance Form (Effective 06/02/2002).

c. Responsible Official Notification Form (Effective 06/02/2002).
[Rule 62-213.900, F.A.C.: Forms (1), (7) and (8)]

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(Version Dated 9/12/2008)

Unless otherwise specified in the permit, the following testing requirements apply to each emissions unit for which testing is required. The terms “stack” and “duct” are used interchangeably in this appendix.

TR1. Required Number of Test Runs. 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, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are 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 or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

TR2. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]

TR3. Calculation of Emission Rate. For each emissions performance test, 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. [Rule 62-297.310(3), F.A.C.]

TR4. Applicable Test Procedures.

a. *Required Sampling Time.*

- (1) 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.
- (2) **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:
 - (a) 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.
 - (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - (c) 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

APPENDIX TR

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

- applicable opacity standard shall be twelve minutes.
- b. *Minimum Sample Volume.* Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. *Required Flow Rate Range.* For EPA 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.
 - d. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

TABLE 297.310-1 CALIBRATION SCHEDULE			
ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass	5° F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5° F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/- 0.001" mean of at least three readings; Max. deviation between readings, 0.004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, when 5% change observed, annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually		
	3. Check after each test series	Comparison check	5%

- e. *Allowed Modification to 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.
[Rule 62-297.310(4), F.A.C.]

APPENDIX TR

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

TR5. Determination of Process Variables.

- a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

TR6. Sampling Facilities. Permittees that are required to sample mass emissions from point sources shall install stack sampling ports and provide sampling facilities that meet the requirements of this condition. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

- a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
- c. *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) 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, constriction or other flow disturbance.
 - (4) For emissions units 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 emissions units 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. 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.
- d. *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

APPENDIX TR

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

- 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.
- e. *Access to Work Platform.*
- (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.
- f. *Electrical Power.*
- (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 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.
- g. *Sampling Equipment Support.*
- (1) A three-quarter inch eyebolt and an 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.
- (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
- (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
- (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. 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.
- (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
- (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.

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

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

- a. *General Compliance Testing.*
- (1) The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
- (2) For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
- (3) The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(Version Dated 9/12/2008)

an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- (a) Did not operate; or
 - (b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
- (4) During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
- (a) Visible emissions, if there is an applicable standard;
 - (b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - (c) Each NESHAP pollutant, if there is an applicable emission standard.
- (5) An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
- (6) For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.
- (7) For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
- (8) Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
- (9) The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. Notification of compliance testing may be submitted by electronic mail to nwdair@dep.state.fl.us.
- (10) An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- b. *Special Compliance Tests.* When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. Test reports may be submitted by electronic mail to nwdair@dep.state.fl.us.
- c. *Waiver of Compliance Test Requirements.* If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance the emissions unit with an applicable weight emission

APPENDIX TR
FACILITY-WIDE TESTING REQUIREMENTS
(Version Dated 9/12/2008)

limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of paragraph 62-297.310(7)(b), F.A.C., shall apply.

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

TR8. Test Reports.

- a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- b. 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. Test reports may be submitted by electronic mail to nwdair@dep.state.fl.us.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.
 - (1) The type, location, and designation of the emissions unit tested.
 - (2) The facility at which the emissions unit is located.
 - (3) The owner or operator of the emissions unit.
 - (4) 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.
 - (5) 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.
 - (6) 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.
 - (7) 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.
 - (8) The date, starting time and duration of each sampling run.
 - (9) 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.
 - (10) The number of points sampled and configuration and location of the sampling plane.
 - (11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - (12) The type, manufacturer and configuration of the sampling equipment used.
 - (13) Data related to the required calibration of the test equipment.
 - (14) Data on the identification, processing and weights of all filters used.
 - (15) Data on the types and amounts of any chemical solutions used.
 - (16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 - (17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 - (18) All measured and calculated data required to be determined by each applicable test procedure for each run.
 - (19) The detailed calculations for one run that relate the collected data to the calculated emission rate.
 - (20) The applicable emission standard and the resulting maximum allowable emission rate for the

APPENDIX TR

FACILITY-WIDE TESTING REQUIREMENTS

(Version Dated 9/12/2008)

emissions unit plus the test result in the same form and unit of measure.

- (21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are 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.

[Rule 62-297.310(8), F.A.C.]

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

Operation

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

Compliance

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

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 02/16/2012)

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

Permit Procedures

- TV17.** Permit Revision Procedures. The permittee shall revise its permit as required by Rules 62-213.400, 62-213.412, 62-213.420, 62-213.430 & 62-4.080, F.A.C.; and, in addition, the Department shall revise permits as provided in Rule 62-4.080, F.A.C. & 40 CFR 70.7(f).
- TV18.** Permit Renewal. The permittee shall renew its permit as required by Rules 62-4.090, 62.213.420(1) and 62-213.430(3), F.A.C. Permits being renewed are subject to the same requirements that apply to permit

APPENDIX TV
TITLE V GENERAL CONDITIONS

(Version Dated 02/16/2012)

issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) [Application for Air Permit - Long Form], 62-213.420(3) [Required Information], 62-213.420(6) [CAIR Part Form], F.A.C. Unless a Title V source submits a timely and complete application for permit renewal in accordance with the requirements this rule, the existing permit shall expire and the source's right to operate shall terminate. For purposes of a permit renewal, a timely application is one that is submitted 225 days before the expiration of a permit that expires on or after June 1, 2009. No Title V permit will be issued for a new term except through the renewal process. You can obtain a permit application form or apply for permit renewal electronically at the following web address: <http://www.dep.state.fl.us/air/emission/permitting.htm>. [Rules 62-213.420 & 62-213.430, F.A.C.]

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

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

TV21. Suspension and Revocation.

- a. Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- b. Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- c. A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or his agent:
 - (1) Submitted false or inaccurate information in his application or operational reports.
 - (2) Has violated law, Department orders, rules or permit conditions.
 - (3) Has failed to submit operational reports or other information required by Department rules.
 - (4) Has refused lawful inspection under Section 403.091, F.S.
- d. No revocation shall become effective except after notice is served by personal services, certified mail, or newspaper notice pursuant to Section 120.60(5), F.S., upon the person or persons named therein and a hearing held if requested within the time specified in the notice. The notice shall specify the provision of the law, or rule alleged to be violated, or the permit condition or Department order alleged to be violated, and the facts alleged to constitute a violation thereof.

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

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

TV23. Emissions Unit Reclassification.

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

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

TV24. Transfer of Permits. Per Rule 62-4.160(11), F.A.C., this permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 02/16/2012)

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

Rights, Title, Liability, and Agreements

- TV25. Rights.** As provided in Subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit. [Rule 62-4.160(3), F.A.C.]
- TV26. Title.** This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [Rule 62-4.160(4), (F.A.C.)]
- TV27. Liability.** This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department. [Rule 62-4.160(5), F.A.C.]
- TV28. Agreements.**
- a. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (1) Have access to and copy any records that must be kept under conditions of the permit;
 - (2) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
 - (3) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
 - b. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
 - c. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- [Rules 62-4.160(7), (9), and (10), F.A.C.]

Recordkeeping and Emissions Computation

- TV29. Permit.** The permittee shall keep this permit or a copy thereof at the work site of the permitted activity. [Rule 62-4.160(12), F.A.C.]
- TV30. Recordkeeping.**
- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports

APPENDIX TV
TITLE V GENERAL CONDITIONS

(Version Dated 02/16/2012)

required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

- c. Records of monitoring information shall include:
- (1) The date, exact place, and time of sampling or measurements, and the operating conditions at the time of sampling or measurement;
 - (2) The person responsible for performing the sampling or measurements;
 - (3) The dates analyses were performed;
 - (4) The person and company that performed the analyses;
 - (5) The analytical techniques or methods used;
 - (6) The results of such analyses.

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

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

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

- a. *Basic Approach.* The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
- (1) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - (2) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (3) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- b. *Continuous Emissions Monitoring System (CEMS).*
- (1) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
 - (a) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or,
 - (b) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

APPENDIX TV
TITLE V GENERAL CONDITIONS

(Version Dated 02/16/2012)

- (2) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
 - (a) A calibrated flowmeter that records data on a continuous basis, if available; or
 - (b) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (3) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- c. *Mass Balance Calculations.*
- (1) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - (a) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and,
 - (b) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - (2) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
 - (3) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- d. *Emission Factors.*
- (1) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
 - (a) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - (b) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
 - (c) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
 - (2) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no

APPENDIX TV

TITLE V GENERAL CONDITIONS

(Version Dated 02/16/2012)

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

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

Responsible Official

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

Prohibitions and Restrictions

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

TV34. Refrigerant Requirements. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Chapter 62-281, F.A.C.

TV35. Open Burning Prohibited. Open burning is prohibited unless performed in accordance with the provisions of Rule 62-296.320(3) or Chapter 62-256, F.A.C.

APPENDIX U

LIST OF UNREGULATED EMISSIONS UNITS AND/OR ACTIVITIES.

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘insignificant emissions units’.

<u>E.U. ID No.</u>	<u>Brief Description of Emissions Units and/or Activity</u>
041	Fugitive Emissions

ATTACHMENTS
(INCLUDED FOR CONVENIENCE)

The following attachment is included for convenient reference:

Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance
Table H, Permit History.

FIGURE 1

**SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING
SYSTEM PERFORMANCE**

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant (Circle One—SO₂/ NO_x/ TRS/ H₂S/ 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 period¹ _____

Emission data summary ¹		CMS performance summary ¹	
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]		3. [Total CMS Downtime] × (100) [Total source operating time]	
	% ²		% ²

¹For opacity, record all times in minutes. For gases, record all times in hours.

²For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

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

**TABLE H
PERMIT HISTORY**

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type ¹
All	Facility	0390005-002-AV	03/16/1999	03/16/2004	Initial TV Operation Permit
All	Facility	0390005-003-AO	06/23/1997	06/23/2002	Transfer of 12 permits
038	ACM Milling	0390005-004-AC	06/20/1997	06/20/2002	Modification to permit AC20-198734
038, 039, 040	Milling Expansion	0390005-005-AC	07/17/1997	07/17/2002	Construction Milling Expansion
038	ACM Milling/Ultra Fine Grind Equipment subject to NSPS	0390005-006-AC	06/29/2000	06/29/2005	Construction of additional product storage bin and truck loading spout controlled by baghouse
All	Facility	0390005-007-AV	07/14/04	07/14/09	Renewal and incorporation of construction permit 0390005-006-AC.
038, 029, 030, 002, 008, 019, 014, 015	ACM Milling/Ultra Fine Grind Equipment subject to NSPS; Clay Firing Equipment: Fluid Bed Dryer – North & South; High Temp. Drying Kiln No. 1 & 2; Gel Clay Firing Mill #4, 4A & 4B	0390005-008-AC	04/05/04	04/05/05	Modification of previous construction permit limits
039, 055	ACM Milling/Ultra Fine Grind Equipment subject to NSPS; Gel Rail Loadout	0390005-009-AC	11/09/04	11/09/05	Construction of an additional railcar load spout and air slide.
All	Facility	0390005-010-AV	Withdrawn	Withdrawn	Withdrawn Revision
038, 039	ACM Milling/Ultra Fine Grind Equipment subject to NSPS	0390005-011-AC	04/19/05	04/19/07	Construction of debottlenecking activities.
All	Facility	0390005-012-AV	08/30/06	06/14/09	Revision and incorporation of construction permits 0390005-009-AC and 0390005-011-AC.
All	Facility	0390005-013-AO	08/29/2006	06/14/2009	Transfer of ownership
All	Facility	0390005-014-AV	1/26/2010	1/26/2015	Renewal
022, 023, 024	Gel Clay Production Equipment not subject to NSPS	0390005-015-AC	08/01/2011	08/01/2016	Installation of pneumatic transporters and testing frequency modification

All	Facility	0390005-016-AV	10/10/2011	01/26/2015	Revision and incorporation of 0390005-015-AC
All	Facility	0390005-017-AV	10/24/2013	01/26/2015	Revision and incorporation of 0390005-018-AC, CAM updates and nomenclature changes.
013, 017, 018, 022, 023, 024, 033, 038 039	Facility	0390005-018-AC	09/13/2013	09/13/2014	Installation of portable bulk bag reclamation system, update fan ratings and corrections to baghouse information
All	Facility	0390005-019-AV	Pending		Renewal
002, 008, 013, 015, 019, 022, 023, 025, 028, 038, 039	Gel Clay Fired Equipment Not Subject to NSPS, Gel Clay Production Equipment Subject to NSPS, Granular Clay Fired Equipment Not Subject to NSPS, Gel Clay Production Equipment Not Subject to NSPS, ACM Milling/Ultra Fine Grind Equipment Subject to NSPS	0390005-020-AC	08/15/2014	08/15/2015	Minor modification to correct operating rates and/or hours of operation for certain emission units (emissions have not changed as a result of these changes)

¹ Note that permits 0390005-003-AO (issued 06/23/1997), 0390005-004-AC (issued 06/20/1997) and 0390005-005-AC (issued 07/17/1997) were issued prior to issuance of the initial Title V operation permit as a result of the time frames involved in processing the initial Title V operation permit. As a result, these projects are not included in this post initial Title V operation permit history

APPENDIX CAM

Compliance Assurance Monitoring Requirements

Compliance Assurance Monitoring Requirements

Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1. – 17. are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables, as submitted by the applicant and approved by the Department.

40 CFR 64.6 Approval of Monitoring.

1. The attached CAM plan(s), as submitted by the applicant, is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.

[40 CFR 64.6(a)]

2. The attached CAM plan(s) include the following information:

- (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
- (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
- (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.

[40 CFR 64.6(c)(1)]

3. The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see **CAM Conditions 5. - 9.**) and reporting exceedances or excursions (see **CAM Conditions 10. - 14.**).

[40 CFR 64.6(c)(2)]

4. The permittee is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see **CAM Conditions 5. - 17.**).

[40 CFR 64.6(c)(3)]

40 CFR 64.7 Operation of Approved Monitoring.

5. Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.

[40 CFR 64.7(a)]

6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR 64.7(b)]

7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the

operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR 64.7(c)]

8. Response to excursions or exceedances.

- a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(1) & (2)]

9. Documentation of need for improved monitoring. If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR 64.7(e)]

40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

10. Based on the results of a determination made under **CAM Condition 8.b.**, above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with **CAM Condition 4.**, an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

[40 CFR 64.8(a)]

11. Elements of a QIP:

- a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
- b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

- (i) Improved preventive maintenance practices.
- (ii) Process operation changes.
- (iii) Appropriate improvements to control methods.
- (iv) Other steps appropriate to correct control performance.
- (v) More frequent or improved monitoring (only in conjunction with one or more steps under **CAM Condition 11.b(i)** through **(iv)**, above).

[40 CFR 64.8(b)]

12. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

[40 CFR 64.8(c)]

13. Following implementation of a QIP, upon any subsequent determination pursuant to **CAM Condition 8.b.**, the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

- a. Failed to address the cause of the control device performance problems; or
- b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

14. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40 CFR 64.8(e)]

40 CFR 64.9 Reporting And Recordkeeping Requirements.

15. General reporting requirements.

- a. Commencing from the effective date of this permit, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
- b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:
 - (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - (iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10.** through **14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

16. General recordkeeping requirements.

- a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan

required pursuant to **CAM Conditions 10.** through **14.** and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

40 CFR 64.10 Savings Provisions.

17. It should be noted that nothing in this appendix shall:

- a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.
- b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.
- c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

**COMPLIANCE ASSURANCE MONITORING PLAN:
BASF CORPORATION-QUINCY OPERATIONS**

I. Background	
<u>A. Emission Unit</u>	
Description:	Fluid Bed Dryer South
Identification:	EU 030
Facility:	BASF Corporation-Quincy Operations
<u>B. Applicable Regulation, Emission Limit, and Monitoring Requirements</u>	
Regulation No.:	Permit No. 0390005-002-AV
Emission Limits:	Opacity: 5% Particulate Matter: 4.7 lb/hr/ 20.6 TPY
Monitoring Requirements:	Proposed CAM monitoring uses a tiered approach comprised of two indicators; pressure drop and visible emissions. An excursion of the first tier indicator (pressure drop) is defined as either less than 1.0 inches of water column (in. W.C.) or greater than 5.0 in. W.C. An excursion of the first tier indicator (i.e., a pressure drop of less than 1.0 or greater than 5.0 in. W.C.) will trigger evaluation of the second tier indicator. The second tier indicator consists of a Method 22-like evaluation of visible emissions (VE). An excursion of the second tier indicator is defined as any VE (i.e. $VE > 0$, excluding water vapor). An excursion of the second tier indicator will trigger an inspection and corrective action.
<u>C. Control Technology:</u>	Flex-Kleen Baghouse (WMW 960) with 1920 Nomex bags

II. Monitoring Approach

The key elements of the monitoring approach are presented on the attached table:

**BASF CORPORATION QUINCY OPERATIONS
COMPLIANCE ASSURANCE MONITORING PLAN
Fluid Bed Dryer South – Emission Unit 030
Particulate Emissions Controlled by a Baghouse**

	INDICATOR NO. 1	INDICATOR NO. 2
I. Indicator	Baghouse pressure drop	Baghouse stack visible emissions
Measurement Approach	Baghouse pressure drop is monitored with a Magnehelic™ diaphragm-based pressure gauge (or equivalent).	Baghouse stack visible emissions are monitored using EPA Reference Method 22-like procedures.
II. Indicator Range	An excursion is defined as a pressure drop reading of either less than 1.0 in. W.C. or greater than 5.0 in. W.C., excluding periods of startup, shutdown, or malfunction. An excursion triggers an evaluation of Indicator No. 2 (visible emissions).	An excursion is defined as any visible emissions, excluding water vapor and excluding periods of startup, shutdown, or malfunction. An excursion triggers an immediate inspection and implementation of corrective action as soon as reasonably possible.
III. Performance Criteria		
A. Data Representativeness	The pressure drop sensors (pressure line taps) are located at the baghouse inlet and outlet. Accuracy of the pressure gauge is 2.0% of full scale.	Visible emissions are made at the baghouse outlet stack using M 22-like procedures.
B. Verification of Operational Status	Not Applicable (pressure drop gauges are currently installed)	Not Applicable
C. Quality Assurance and Control Practices and Criteria	Pressure lines are inspected daily for plugging. Pressure gauge is calibrated or replaced annually.	The visible emissions observer is familiar with M22 and will follow RM 22-like procedures.
D.1. Monitoring Frequency	Pressure drop is monitored once every shift or once every eight hours, whichever is more frequent.	A 6-minute EPA RM 22-like observation will be conducted as required; i.e., upon an excursion of Indicator No. 1.
D.2. Data Collection Procedures	Pressure drop is manually recorded on an air emission control form or recorded electronically.	The EPA RM 22-like observation is documented by the observer.
D.3. Averaging Period	Not Applicable.	Not Applicable.

III. Justification

A. Background:

The pollutant specific emission unit is Fluid Bed Dryer South (EU 030). Emissions from the equipment in this area are controlled by twin Flex-Kleen WMW 960 baghouses with 1920 bags.

B. Rationale for Selection of Performance Indicator:

Differential pressure was selected as the performance indicator for this control equipment because it is indicative of operation of these baghouses in a manner necessary to comply with the particulate emission requirements for this unit. When these baghouses are operating properly, differential pressures will remain in the prescribed range, and there will not be any visible emissions in the exhaust. Even when the bags have blinded over, which is indicated by high differential pressure, it is not necessarily an indicator that there absolutely will be visible emissions. Thus, by reacting to the differential pressure as the indicator, the operator will avoid reaching a level of emissions that would be considered an excursion.

C. Rationale for Selection of Performance Indicator Level:

The selected indicator range is a differential pressure reading that is less than 1.0 in. W.C. or exceed 5 in. W.C. When outside of this range, it will trigger a Method 22-like evaluation of the baghouse stack. If no VE's are noted, it will simply trigger a work order to have maintenance performed on the unit. Excursions trigger an inspection, corrective action, and reporting requirement. Once corrective action has been performed, another Method 22-like inspection will take place to help ensure that the problem has been corrected. Records of the correction, the problem found, and the VE results will be recorded.

**COMPLIANCE ASSURANCE MONITORING PLAN:
BASF CORPORATION-QUINCY OPERATIONS**

I. Background	
<hr/>	
A. <u>Emission Unit</u>	
Description:	#1 Kiln Scrubber
Identification:	EU 014
Facility:	BASF Corporation-Quincy Operations
B. <u>Applicable Regulation, Emission Limit, and Monitoring Requirements</u>	
Regulation No.:	Permit No. 0390005-002-AV
Emission Limits:	Opacity: 5% Particulate Matter: 4.2 lb/hr /18.4 TPY
Monitoring Requirements:	CAM monitoring uses a multi-parameter approach comprised of two indicators; differential pressure and scrubbing liquid flow. An excursion of the first indicator (pressure drop) is defined as any reading less than 11.0 inches of water column (in. W.C.). The second indicator consists of the scrubbing liquid flow rate to the scrubber, which is measured by an in-line flow meter. An excursion of the second tier indicator is defined as any reading outside of the 200-400 gallons per minute (gpm) range of flow.
C. <u>Control Technology:</u>	Venturi Scrubber

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table:

**BASF CORPORATION QUINCY OPERATIONS
COMPLIANCE ASSURANCE MONITORING PLAN**

**Drying Kiln No. 1 – Emission Unit 014
Particulate Emissions Controlled by a Venturi Scrubber**

	INDICATOR NO. 1	INDICATOR NO. 2
I. Indicator	Scrubber pressure drop	Scrubber liquid water flow
Measurement Approach	Scrubber pressure drop is monitored with a Magnehelic™ diaphragm-based pressure gauge (or equivalent).	Scrubber liquid water flow is monitored with a flowmeter located on the circulation water to the scrubber, reading in gallons per minute (gpm).
II. Indicator Range	An excursion is defined as a pressure drop reading less than 11.0 in. W.C., excluding periods of startup, shutdown, or malfunction.	An excursion is defined as flow less than 200 gpm or greater than 400 gpm.
III. Performance Criteria		
A. Data Representativeness	The pressure drop sensors (pressure line taps) are located at the scrubber inlet and outlet. Accuracy of the pressure gauge is 2.0% of full scale.	The flowmeter is located in the scrubber water recirculation line. The accuracy of the flowmeter is 1.0% of full scale.
B. Verification of Operational Status	Not Applicable (pressure drop gauges are currently installed).	A flowmeter is currently installed.
C. Quality Assurance and Control Practices and Criteria	Pressure lines are inspected daily for plugging. Pressure gauge is calibrated annually.	The flowmeter is calibrated in accordance with manufacturers recommendations.
D.1. Monitoring Frequency	Pressure drop is monitored once every shift or once every eight hours, whichever is more frequent.	Flowmeter indication is recorded once every shift and prescribed range is alarmed at the operator control station.
D.2. Data Collection Procedures	Pressure drop is recorded on an air emission control form or recorded electronically.	Scrubber water flow is recorded on an air emission control form or recorded electronically.
D.3. Averaging Period	Not Applicable.	Not Applicable.

III. Justification

A. Background:

The pollutant specific emission unit is #1 Kiln Scrubber (High Temperature Drying Kiln #1) (EU 014). Emissions from the equipment in this area are controlled by a venturi scrubber.

B. Rationale for Selection of Performance Indicator:

Differential pressure and scrubber water flow were selected as the performance indicators for this control equipment because they are indicative of operation of this scrubber in a manner necessary to comply with the particulate emission requirements for this unit. When the scrubber is operating properly, differential pressures and scrubber water flows will remain in the prescribed ranges, and there will not be any visible emissions in the exhaust. Thus, by reacting to the differential pressure and/or scrubber water flow as the indicators, the operator will avoid reaching a level of emissions that would be considered an excursion.

C. Rationale for Selection of Performance Indicator Level:

The selected indicator range is a differential pressure reading that below 11" W.C. as an excursion. For the recycle water flow, normal operation outside of the 200-400 gpm operating range is an excursion. Excursions trigger an inspection, corrective action, and a reporting requirement. When a flow meter reading outside these ranges is recorded while the unit is operational, it will trigger an adjustment to the scrubber to bring the water flow/differential pressure back into range.

**COMPLIANCE ASSURANCE MONITORING PLAN:
BASF CORPORATION-QUINCY OPERATIONS**

I. Background	
<u>A. Emission Unit</u>	
Description:	#2 Kiln Scrubber
Identification:	EU 015
Facility:	BASF Corporation-Quincy Operations
<u>B. Applicable Regulation, Emission Limit, and Monitoring Requirements</u>	
Regulation No.:	Permit No. 039005-002-AV
Emission Limits:	Opacity: 5% Particulate Matter: 4.4 lb/hr /19.3 TPY
Monitoring Requirements:	CAM monitoring uses a multi-parameter approach comprised of two indicators; differential pressure and scrubbing liquid flow. An excursion of the first indicator (pressure drop) is defined as any reading less than 11.0 inches of water column (in. W.C.). The second indicator consists of the scrubbing liquid flow rate to the scrubber, which is measured by an in-line flow meter. An excursion of the second tier indicator is defined as any reading outside of the 300-500 gallons per minute (gpm) range of flow.
<u>C. Control Technology:</u>	Venturi Scrubber

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table:

**BASF CORPORATION QUINCY OPERATIONS
COMPLIANCE ASSURANCE MONITORING PLAN**

**Drying Kiln No. 2 – Emission Unit 015
Particulate Emissions Controlled by a Venturi Scrubber**

	INDICATOR NO. 1	INDICATOR NO. 2
I. Indicator	Scrubber pressure drop	Scrubber liquid water flow
Measurement Approach	Scrubber pressure drop is monitored with a Magnehelic™ diaphragm-based pressure gauge (or equivalent).	Scrubber liquid water flow is monitored with a flowmeter located on the circulation water to the scrubber, reading in gallons per minute (gpm).
II. Indicator Range	An excursion is defined as a pressure drop reading less than 11.0 in. W.C., excluding periods of startup, shutdown, or malfunction.	An excursion is defined as flow less than 300 gpm or greater than 500 gpm.
III. Performance Criteria		
A. Data Representativeness	The pressure drop sensors (pressure line taps) are located at the scrubber inlet and outlet. Accuracy of the pressure gauge is 2.0% of full scale.	The flowmeter is located in the scrubber water recirculation line. The accuracy of the flowmeter is 1.0% of full scale.
B. Verification of Operational Status	Not Applicable (pressure drop gauges are currently installed)	A flowmeters is currently installed.
C. Quality Assurance and Control Practices and Criteria	Pressure lines are inspected daily for plugging. Pressure gauge is calibrated annually.	The flowmeter is calibrated in accordance with manufacturers recommendations.
D.1. Monitoring Frequency	Pressure drop is monitored once every shift change or once every eight hours, whichever is more frequent.	Flowmeter indication is recorded once every shift and prescribed range is alarmed at the operator control station.
D.2. Data Collection Procedures	Pressure drop is recorded on an air emission control form or recorded electronically.	Scrubber water flow is recorded on an air emission control form or recorded electronically.
D.3. Averaging Period	Not Applicable.	Not Applicable.

III. Justification

A. Background:

The pollutant specific emission unit is #2 Kiln Scrubber (High Temperature Drying Kiln #2) (EU 015). Emissions from the equipment in this area are controlled by a venturi scrubber.

B. Rationale for Selection of Performance Indicator:

Differential pressure and scrubber water flow were selected as the performance indicators for this control equipment because they are indicative of operation of this scrubber in a manner necessary to comply with the particulate emission requirements for this unit. When the scrubber is operating properly, differential pressures and scrubber water flows will remain in the prescribed ranges, and there will not be any visible emissions in the exhaust. Thus, by reacting to the differential pressure and/or scrubber water flow as the indicators, the operator will avoid reaching a level of emissions that would be considered an excursion.

C. Rationale for Selection of Performance Indicator Level:

The selected indicator range is a differential pressure reading that below 11in. W.C. as an excursion. For the recycle water flow, normal operation outside of the 300-500 gpm operating range is an excursion. Excursions trigger an inspection, corrective action, and a reporting requirement. When a flow meter reading outside these ranges is recorded while the unit is operational, it will trigger an adjustment to the scrubber to bring the water flow/differential pressure back into range.

**COMPLIANCE ASSURANCE MONITORING PLAN
BASF CORPORATION-QUINCY OPERATIONS**

I. Background	
<u>A. Emission Unit</u>	
Description:	#4A Mill Scrubber
Identification:	EU 002
Facility:	BASF Corporation-Quincy Operations
<u>B. Applicable Regulation, Emission Limit, and Monitoring Requirements</u>	
Regulation No.:	Permit No. 0390005-002-AV
Emission Limits:	Opacity: 5% Particulate Matter: 7.0 lb/hr /30.7 TPY
Monitoring Requirements:	CAM monitoring uses a multi-parameter approach comprised of two indicators; differential pressure and scrubbing liquid flow. An excursion of the first indicator (pressure drop) is defined as any reading less than 11.0 inches of water column (in. W.C.). The second indicator consists of the scrubbing liquid flow rate to the scrubber, which is measured by an in-line flow meter. An excursion of the second tier indicator is defined as any reading outside of the 150-400 gallons per minute (gpm) range of flow.
<u>C. Control Technology:</u>	Stansteel Venturi-impactor high efficiency scrubber Model D

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table:

**BASF CORPORATION QUINCY OPERATIONS
COMPLIANCE ASSURANCE MONITORING PLAN**

**Williams Mill No. 4A – Emission Unit 002
Particulate Emissions Controlled by a Venturi Scrubber**

	INDICATOR NO. 1	INDICATOR NO. 2
I. Indicator	Scrubber pressure drop	Scrubber liquid water flow
Measurement Approach	Scrubber pressure drop is monitored with a Magnehelic™ diaphragm-based pressure gauge (or equivalent).	Scrubber liquid water flow is monitored with a flowmeter located on the circulation water to the scrubber, reading in gallons per minute (gpm).
II. Indicator Range	An excursion is defined as a pressure drop reading less than 11.0 in. W.C., excluding periods of startup, shutdown, or malfunction.	An excursion is defined as flow less than 150 gpm or greater than 400 gpm.
III. Performance Criteria		
A. Data Representativeness	The pressure drop sensors (pressure line taps) are located at the scrubber inlet and outlet. Accuracy of the pressure gauge is 2.0% of full scale.	The flowmeter is located in the scrubber water recirculation line. The accuracy of the flowmeter is 1.0% of full scale.
B. Verification of Operational Status	Not Applicable (pressure drop gauges are currently installed)	A flowmeter is currently installed.
C. Quality Assurance and Control Practices and Criteria	Pressure lines are inspected daily for plugging. Pressure gauge is calibrated annually.	The flowmeter is calibrated in accordance with manufacturers recommendations.
D.1. Monitoring Frequency	Pressure drop is monitored once every shift change or once every eight hours, whichever is more frequent.	Flowmeter indication is recorded once every shift and prescribed range is alarmed at the operator control station.
D.2. Data Collection Procedures	Pressure drop is recorded on an air emission control form or recorded electronically.	Scrubber water flow is recorded on an air emission control form or recorded electronically.
D.3. Averaging Period	Not Applicable.	Not Applicable.

III. Justification

A. Background:

The pollutant specific emission unit is #4A Mill (Mill #4A) (EU 002). Emissions from the equipment in this area are controlled by a venturi scrubber.

B. Rationale for Selection of Performance Indicator:

Differential pressure and scrubber water flow were selected as the performance indicators for this control equipment because they are indicative of operation of this scrubber in a manner necessary to comply with the particulate emission requirements for this unit. When the scrubber is operating properly, differential pressures and scrubber water flows will remain in the prescribed ranges, and there will not be any visible emissions in the exhaust. Thus, by reacting to the differential pressure and/or scrubber water flow as the indicators, the operator will avoid reaching a level of emissions that would be considered an excursion.

C. Rationale for Selection of Performance Indicator Level:

The selected indicator range is a differential pressure reading that below 11 in. W.C. as an excursion. For the recycle water flow, normal operation outside of the 150-400 gpm operating range is an excursion. Excursions trigger an inspection, corrective action and a reporting requirement. When a flow meter reading outside these ranges is recorded while the unit is operational, it will trigger an adjustment to the scrubber to bring the water flow/differential pressure back into range.

**COMPLIANCE ASSURANCE MONITORING PLAN
BASF CORPORATION-QUINCY OPERATIONS**

I. Background	
<hr/>	
A. <u>Emission Unit</u>	
Description:	#4 Mill Scrubber
Identification:	EU 008
Facility:	BASF Corporation-Quincy Operations
B. <u>Applicable Regulation, Emission Limit, and Monitoring Requirements</u>	
Regulation No.:	Permit No. 0390005-002-AV
Emission Limits:	Opacity: 5% Particulate Matter: 7.0 lb/hr /30.7 TPY
Monitoring Requirements:	CAM monitoring uses a multi-parameter approach comprised of two indicators; differential pressure and scrubbing liquid flow. An excursion of the first indicator (pressure drop) is defined as any reading less than 11.0 inches of water column (in. W.C.). The second indicator consists of the scrubbing liquid flow rate to the scrubber, which is measured by an in-line flow meter. An excursion of the second tier indicator is defined as any reading outside of the 150-400 gallons per minute (gpm) range of flow.
C. <u>Control Technology:</u>	Stansteel Venturi-impactor high efficiency scrubber Model D

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table:

**BASF CORPORATION QUINCY OPERATIONS
COMPLIANCE ASSURANCE MONITORING PLAN**

**Williams Mill No. 4– Emission Unit 008
Particulate Emissions Controlled by a Venturi Scrubber**

	INDICATOR NO. 1	INDICATOR NO. 2
I. Indicator	Scrubber pressure drop	Scrubber liquid water flow
Measurement Approach	Scrubber pressure drop is monitored with a Magnehelic™ diaphragm-based pressure gauge (or equivalent).	Scrubber liquid water flow is monitored with a flowmeter located on the circulation water to the scrubber, reading in gallons per minute (gpm).
II. Indicator Range	An excursion is defined as a pressure drop reading less than 11.0 in. W.C., excluding periods of startup, shutdown, or malfunction.	An excursion is defined as flow less than 150 gpm or greater than 400 gpm.
III. Performance Criteria		
A. Data Representativeness	The pressure drop sensors (pressure line taps) are located at the scrubber inlet and outlet. Accuracy of the pressure gauge is 2.0% of full scale.	The flowmeter is located in the scrubber water recirculation line. The accuracy of the flowmeter is 1.0% of full scale.
B. Verification of Operational Status	Not Applicable (pressure drop gauges are currently installed)	A flowmeter are currently installed.
C. Quality Assurance and Control Practices and Criteria	Pressure lines are inspected daily for plugging. Pressure gauge is calibrated annually.	The flowmeter is calibrated in accordance with manufacturers recommendations.
D.1. Monitoring Frequency	Pressure drop is monitored once every shift change or once every eight hours, whichever is more frequent.	Flowmeter indication is recorded once every shift and prescribed range is alarmed at the operator control station.
D.2. Data Collection Procedures	Pressure drop is recorded on an air emission control form or recorded electronically.	Scrubber water flow is recorded on an air emission control form or recorded electronically.
D.3. Averaging Period	Not Applicable.	Not Applicable.

III. Justification

A. Background:

The pollutant specific emission unit is #4 Mill (Mill #4) (EU 008). Emissions from the equipment in this area are controlled by a venturi scrubber.

B. Rationale for Selection of Performance Indicator:

Differential pressure and scrubber water flow were selected as the performance indicators for this control equipment because they are indicative of operation of this scrubber in a manner necessary to comply with the particulate emission requirements for this unit. When the scrubber is operating properly, differential pressures and scrubber water flows will remain in the prescribed ranges, and there will not be any visible emissions in the exhaust. Thus, by reacting to the differential pressure and/or scrubber water flow as the indicators, the operator will avoid reaching a level of emissions that would be considered an excursion.

C. Rationale for Selection of Performance Indicator Level:

The selected indicator range is a differential pressure reading that below 11 in. W.C. as an excursion. For the recycle water flow, normal operation outside of the 150-400 gpm operating range will be considered an excursion. Excursions trigger an inspection, corrective action, and a reporting requirement. When a flow meter reading outside these ranges is recorded while the unit is operational, it will trigger an adjustment to the scrubber to bring the water flow/differential pressure back into range.

**COMPLIANCE ASSURANCE MONITORING PLAN
BASF CORPORATION-QUINCY OPERATIONS**

I. Background	
<hr/>	
A. <u>Emission Unit</u>	
Description:	#4B Mill Scrubber
Identification:	EU 019
Facility:	BASF Corporation-Quincy Operations
B. <u>Applicable Regulation, Emission Limit, and Monitoring Requirements</u>	
Regulation No.:	Permit No. 0390005-002-AV
Emission Limits:	Opacity: 5% Particulate Matter: 7.0 lb/hr /30.7 TPY
Monitoring Requirements:	CAM monitoring uses a multi-parameter approach comprised of two indicators; differential pressure and scrubbing liquid flow. An excursion of the first indicator (pressure drop) is defined as any reading less than 11.0 inches of water column (in. W.C.). The second indicator consists of the scrubbing liquid flow rate to the scrubber, which is measured by an in-line flow meter. An excursion of the second tier indicator is defined as any reading outside of the 150-400 gallons per minute (gpm) range of flow.
C. <u>Control Technology:</u>	Stansteel Venturi-impactor high efficiency scrubber Model D

II. Monitoring Approach

The key elements of the monitoring approach are presented in the attached table:

**BASF CORPORATION QUINCY OPERATIONS
COMPLIANCE ASSURANCE MONITORING PLAN**

**Williams Mill No. 4B – Emission Unit 019
Particulate Emissions Controlled by a Venturi Scrubber**

	INDICATOR NO. 1	INDICATOR NO. 2
I. Indicator	Scrubber pressure drop	Scrubber liquid water flow
Measurement Approach	Scrubber pressure drop is monitored with a Magnehelic™ diaphragm-based pressure gauge (or equivalent).	Scrubber liquid water flow is monitored with a flowmeter located on the circulation water to the scrubber, reading in gallons per minute (gpm).
II. Indicator Range	An excursion is defined as a pressure drop reading less than 11.0 in. W.C., excluding periods of startup, shutdown, or malfunction.	An excursion is defined as flow less than 150 gpm or greater than 400 gpm.
III. Performance Criteria		
A. Data Representativeness	The pressure drop sensors (pressure line taps) are located at the scrubber inlet and outlet. Accuracy of the pressure gauge is 2.0% of full scale.	The flowmeter is located in the scrubber water recirculation line. The accuracy of the flowmeter is 1.0% of full scale.
B. Verification of Operational Status	Not Applicable (pressure drop gauges are currently installed)	A flowmeter is currently installed.
C. Quality Assurance and Control Practices and Criteria	Pressure lines are inspected daily for plugging. Pressure gauge is calibrated annually.	The flowmeter is calibrated in accordance with manufacturers recommendations.
D.1. Monitoring Frequency	Pressure drop is monitored once every shift change or once every eight hours, whichever is more frequent.	Flowmeter indication is recorded once every shift and prescribed range is alarmed at the operator control station.
D.2. Data Collection Procedures	Pressure drop is recorded on an air emission control form or recorded electronically.	Scrubber water flow is recorded on an air emission control form or recorded electronically.
D.3. Averaging Period	Not Applicable.	Not Applicable.

III. Justification

A. Background:

The pollutant specific emission unit is #4B Mill (Mill #4B) (EU 019). Emissions from the equipment in this area are controlled by a venturi scrubber.

B. Rationale for Selection of Performance Indicator:

Differential pressure and scrubber water flow were selected as the performance indicators for this control equipment because they are indicative of operation of this scrubber in a manner necessary to comply with the particulate emission requirements for this unit. When the scrubber is operating properly, differential pressures and scrubber water flows will remain in the prescribed ranges, and there will not be any visible emissions in the exhaust. Thus, by reacting to the differential pressure and/or scrubber water flow as the indicators, the operator will avoid reaching a level of emissions that would be considered an excursion.

C. Rationale for Selection of Performance Indicator Level:

The selected indicator range is a differential pressure reading that below 11 in. W.C. as an excursion. For the recycle water flow, normal operation outside of the 150-400 gpm operating range is an excursion. When a flow meter reading outside these ranges is recorded while the unit is operational, it will trigger an adjustment to the scrubber to bring the water flow/differential pressure back into range. Excursions trigger an inspection, corrective action, and a reporting requirement.

**ATTACHMENT 5
PROCEDURES FOR START UP / SHUT DOWN**



The Chemical Company

Startup and Shutdown Procedures for Equipment With Air Pollution Control Devices

I. General Information

A. Scope

This policy and procedure applies to all externally discharging air emission sources at the BASF-Quincy Operations facility. All employees at the BASF-Quincy Operations facility are required to comply with this policy and procedure. These procedures are required during periods of startup and shutdown of pollution control equipment.

In accordance with the initial Title V Air Permit for the BASF-Quincy Operations facility, failure to comply with the requirements of the permit must be promptly reported to the Florida Department of Environmental Protection. Actions by individuals that intentionally violate the requirements of this permit may be criminally enforceable to the individual or the company.

B. Statement Of Standard

This policy and procedure defines all current production related air emission sources for the BASF-Quincy Operations. This policy and procedure outlines what actions should be followed during periods of startup and shutdown of baghouses and scrubbers used as pollution control of particulate matter.

C. Definitions

Air Emissions – Any release from the facility to the outside air. Most air emissions at this site are particulate matter (PM), which are typically viewed in the form of dust.

Emission Controls – The baghouses and scrubbers located upstream of the emission stacks for controlling or reducing air emissions.



The Chemical Company

D. Responsibilities

1. EHS Specialist

- a) Create and revise this document.
- b) Educate the site Engineering Manager, Production Manager and Site Manager on the requirements of this policy and procedure.
- c) Provide training to plant supervision for compliance with air permits for the site.
- d) Complete, file, and address issues relating to the Annual Operating Report and Annual Emission Fee.

2. Anyone Modifying, Installing, or Removing Equipment

- a) Understand and comply with the requirements of the air permit.
- b) Notify in advance the EHS Specialist of any plans to alter, upgrade, move, or remove any process equipment that could potentially effect air emissions from the site.

3. Plant Manager

- a) Address any air emission complaints with the community.
- b) Notify the EHS Specialist well in advance of any plans to increase or alter air emissions from the site.

4. Production Personnel

- a) Immediately correct or shut down emission controls and related operating equipment that is not properly performing (generating visible particulate emissions (dust)).
- b) Report recurring problems with fugitive dusting or emission control equipment that is not properly functioning.
- c) Ensure that appropriate emission controls are operating for all process equipment being operated.
- d) Document required operating parameters in ink on sheets provided, and sign your full name (not initials). Record any problems with operation and complete work orders on emission control equipment that is not properly operating.



The Chemical Company

5. Maintenance Supervision:

- a) Determine ranges of proper operation for all baghouses, and perform required maintenance when operation extends beyond the prescribed parameters.
- b) Ensure appropriate level of process change designated.
- c) Ensure technical feasibility has been considered.
- d) Ensure persons to be trained are appropriately identified.



The Chemical Company

II. PROCEDURES

Condition	Action
1	<p data-bbox="435 898 711 930">Equipment Start-up</p> <p data-bbox="435 1024 1388 1087">Start emission controls prior to starting up production equipment that it is designed to control.</p> <ul data-bbox="472 1157 1382 1745" style="list-style-type: none"><li data-bbox="472 1157 1382 1360">• For baghouses, assure that blower is operational and differential pressure is registering within normal ranges. The stack should be visually checked for any visible emissions that might indicate a problem, and recorded. Any visible emissions noted in the stack requires a response to either correct the situation or shut down the equipment.<li data-bbox="472 1539 1382 1745">• For scrubbers, water should be on at proper rates, and differential pressure properly registering >11.0" H₂O. The stack should be visually checked for any visible emissions that might indicate a problem, and recorded. . Any visible emissions noted in the stack requires a response to either correct the situation or shut down the equipment. <p data-bbox="435 1776 1388 1871">If Not, Maintenance personnel should be notified and work order entered if the problem cannot be corrected. Operation of equipment for which controls operate cannot commence until the problem is corrected.</p>



The Chemical Company

2	<p data-bbox="427 459 737 491">Equipment Shutdown</p> <p data-bbox="427 520 1333 583">Shut down production equipment that it is designed to control prior to shutting down the pollution control equipment associated with it.</p> <ul data-bbox="464 655 1393 926" style="list-style-type: none"><li data-bbox="464 655 1393 758">• For baghouses, assure all related equipment including conveyors, load points, elevators, mills, etc. have ceased operation, and that no product can be transferred into this equipment.<li data-bbox="464 829 1393 926">• For scrubbers, water should remain on the scrubber until all feed is off, all fuel has ceased feeding, and all product has cleared the system.
---	---

Electronic Code of Federal Regulations

e-CFR Data is current as of June 2, 2014

[Browse Previous](#) | [Browse Next](#)

Title 40: Protection of Environment

[PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES](#)

Subpart 000—Standards of Performance for Nonmetallic Mineral Processing Plants

Contents

[§60.670 Applicability and designation of affected facility.](#)

[§60.671 Definitions.](#)

[§60.672 Standard for particulate matter \(PM\).](#)

[§60.673 Reconstruction.](#)

[§60.674 Monitoring of operations.](#)

[§60.675 Test methods and procedures.](#)

[§60.676 Reporting and recordkeeping.](#)

[Table 1 to Subpart 000 of Part 60—Exceptions to Applicability of Subpart A to Subpart 000](#)

[Table 2 to Subpart 000 of Part 60—Stack Emission Limits for Affected Facilities With Capture Systems](#)

[Table 3 to Subpart 000 of Part 60—Fugitive Emission Limits](#)

Source: 74 FR 19309, Apr. 28, 2009, unless otherwise noted.

[↑ Back to Top](#)

§60.670 Applicability and designation of affected facility.

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in §60.671).

(b) An affected facility that is subject to the provisions of subparts F or I of this part or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.

(c) Facilities at the following plants are not subject to the provisions of this subpart:

- (1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less;
 - (2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and
 - (3) Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less.
- (d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.
- (2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).
 - (3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.
- (e) An affected facility under paragraph (a) of this section that commences construction, modification, or reconstruction after August 31, 1983, is subject to the requirements of this part.
- (f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that do not apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions.

[↑ Back to Top](#)

§60.671 Definitions.

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 affected facilities 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 affected facilities 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.

Crush or Crushing means to reduce the size of nonmetallic mineral material by means of physical impaction of the crusher or grinding mill upon the material.

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, hammermill, 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:

- (1) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.
- (2) Sand and Gravel.
- (3) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.
- (4) Rock Salt.
- (5) Gypsum (natural or synthetic).
- (6) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.
- (7) Pumice.
- (8) Gilsonite.
- (9) Talc and Pyrophyllite.
- (10) Boron, including Borax, Kernite, and Colemanite.
- (11) Barite.
- (12) Fluorospar.

- (13) Feldspar.
- (14) Diatomite.
- (15) Perlite.
- (16) Vermiculite.
- (17) Mica.
- (18) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

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.

Saturated material means, for purposes of this subpart, mineral material with sufficient surface moisture such that particulate matter emissions are not generated from processing of the material through screening operations, bucket elevators and belt conveyors. Material that is wetted solely by wet suppression systems is not considered to be “saturated” for purposes of this definition.

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). Grizzly feeders associated with truck dumping and static (non-moving) grizzlies used anywhere in the nonmetallic mineral processing plant are not considered to be screening operations.

Seasonal shut down means shut down of an affected facility for a period of at least 45 consecutive days due to weather or seasonal market conditions.

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) of 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 material processing operation(s) means any of the following:

- (1) Wet screening operations (as defined in this section) and subsequent screening operations, bucket elevators and belt conveyors in the production line that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line; or
- (2) Screening operations, bucket elevators and belt conveyors in the production line downstream of wet mining operations (as defined in this section) that process saturated materials (as defined in this section) up to the first crusher, grinding mill or storage bin in the production line.

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.

[↑ Back to Top](#)

§60.672 Standard for particulate matter (PM).

(a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart 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 as required under §60.8. The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.

(b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart 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 as required under §60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.

(c) [Reserved]

(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a) and (b) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:

(1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and

(2) Vents (as defined in §60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart.

(f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

[↑ Back to Top](#)

§60.673 Reconstruction.

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital cost that would be required to construct a comparable new facility” under §60.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.

(b) Under §60.15, the “fixed capital cost of the new components” includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

[↑ Back to Top](#)

§60.674 Monitoring of operations.

(a) The owner or operator of any affected facility subject to the provisions of this subpart which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices:

(1) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals ± 1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(2) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(b) The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b).

(1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in

Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section:

(i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and §60.676(b), and

(ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §60.11 of this part and §60.675 of this subpart.

(2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §60.676(b) must specify the control mechanism being used instead of the water sprays.

(c) Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A-7). The Method 22 (40 CFR part 60, Appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part 60, Appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, Appendix A-7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.

(d) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions may use a bag leak detection system. The owner or operator must install, operate, and maintain the bag leak detection system according to paragraphs (d)(1) through (3) of this section.

(1) Each bag leak detection system must meet the specifications and requirements in paragraphs (d)(1)(i) through (viii) of this section.

(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.

(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (*e.g.*, using a strip chart recorder or a data logger).

(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (d)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(v) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (d)(1)(vi) of this section.

(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (d)(2) of this section.

(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.

(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(2) The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.

(i) Installation of the bag leak detection system;

(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;

(iii) Operation of the bag leak detection system, including quality assurance procedures;

(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;

(v) How the bag leak detection system output will be recorded and stored; and

(vi) Corrective action procedures as specified in paragraph (d)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(3) For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (d)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

- (i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;
 - (ii) Sealing off defective bags or filter media;
 - (iii) Replacing defective bags or filter media or otherwise repairing the control device;
 - (iv) Sealing off a defective fabric filter compartment;
 - (v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or
 - (vi) Shutting down the process producing the PM emissions.
- (e) As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) may follow the continuous compliance requirements in row 1 items (i) through (iii) of Table 6 to Subpart AAAAA of 40 CFR part 63.

[↑ Back to Top](#)

§60.675 Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendices A-1 through A-7 of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.
- (b) The owner or operator shall determine compliance with the PM standards in §60.672(a) as follows:
- (1) Except as specified in paragraphs (e)(3) and (4) of this section, Method 5 of Appendix A-3 of this part or Method 17 of Appendix A-6 of this part shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5 (40 CFR part 60, Appendix A-3), if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.
 - (2) Method 9 of Appendix A-4 of this part and the procedures in §60.11 shall be used to determine opacity.
- (c)(1) In determining compliance with the particulate matter standards in §60.672(b) or §60.672(e)(1), the owner or operator shall use Method 9 of Appendix A-4 of this part and the procedures in §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 (*e.g.*, road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of this part, 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 emissions

and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2)(i) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9 (40 CFR part 60, Appendix A-4), the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations shall be 1 hour (ten 6-minute averages).

(ii) The duration of the Method 9 (40 CFR part 60, Appendix A-4) observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.

(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1) of this subpart, the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages.

(d) To demonstrate compliance with the fugitive emission limits for buildings specified in §60.672(e)(1), the owner or operator must complete the testing specified in paragraph (d)(1) and (2) of this section. Performance tests must be conducted while all affected facilities inside the building are operating.

(1) If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11.

(2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 CFR part 60, Appendix A-7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in §60.672(e)(1). If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11 to show compliance with the opacity limit in §60.672(e)(1).

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions 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 emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(2) A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

(i) No more than three emission points may be read concurrently.

(ii) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

(3) Method 5I of Appendix A-3 of this part may be used to determine the PM concentration as an alternative to the methods specified in paragraph (b)(1) of this section. Method 5I (40 CFR part 60, Appendix A-3) may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.

(4) In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 of Appendix A-1 of this part [*i.e.*, velocity head <1.3 mm H₂O (0.05 in. H₂O)] and referred to in EPA Method 5 of Appendix A-3 of this part. For these conditions, the owner or operator may determine the average gas flow rate produced by the power fans (*e.g.*, from vendor-supplied fan curves) to the building vent. The owner or operator may calculate the average gas velocity at the building vent measurement site using Equation 1 of this section and use this average velocity in determining and maintaining isokinetic sampling rates.

$$v_e = \frac{Q_f}{A_e} \quad (\text{Eq. 1})$$

[View or download PDF](#)

Where:

V_e = average building vent velocity (feet per minute);

Q_f = average fan flow rate (cubic feet per minute); and

A_e = area of building vent and measurement location (square feet).

(f) To comply with §60.676(d), the owner or operator shall record the measurements as required in §60.676(c) using the monitoring devices in §60.674 (a)(1) and (2) during each particulate matter run and shall determine the averages.

(g) For performance tests involving only Method 9 (40 CFR part 60 Appendix A-4) testing, the owner or operator may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a 7-day advance notification.

(h) [Reserved]

(i) If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in §60.671 of this subpart) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.

[↑ Back to Top](#)

§60.676 Reporting and recordkeeping.

(a) Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

(i) The total surface area of the top screen of the existing screening operation being replaced and

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and

(ii) The rated capacity in megagrams or tons of replacement storage bins.

(b)(1) Owners or operators of affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.

(2) For each bag leak detection system installed and operated according to §60.674(d), the owner or operator must keep the records specified in paragraphs (b)(2)(i) through (iii) of this section.

(i) Records of the bag leak detection system output;

(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.

(3) The owner or operator of each affected facility demonstrating compliance according to §60.674(e) by following the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) must maintain records of visible emissions observations required by §63.7132(a)(3) and (b) of 40 CFR part 63, subpart AAAAA.

(c) During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

(d) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss and liquid flow rate decrease by more than 30 percent from the average determined during the most recent performance test.

(e) The reports required under paragraph (d) of this section shall be postmarked within 30 days following end of the second and fourth calendar quarters.

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR part 60, Appendix A-4) to demonstrate compliance with §60.672(b), (e) and (f).

(g) The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in §60.672(b) and the emission test requirements of §60.11.

(h) The subpart A requirement under §60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart.

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

(2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

(j) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.

(k) Notifications and reports required under this subpart and under subpart A of this part to demonstrate compliance with this subpart need only to be sent to the EPA Region or the State which has been delegated authority according to §60.4(b).

[↑ Back to Top](#)

Table 1 to Subpart OOO of Part 60—Exceptions to Applicability of Subpart A to Subpart OOO

Subpart A reference	Applies to subpart OOO	Explanation
60.4, Address	Yes	Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).
60.7, Notification and recordkeeping	Yes	Except in (a)(1) notification of the date construction or reconstruction commenced (§60.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675(c)), Method 9 (40 CFR part 60, Appendix A-4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

[↑ Back to Top](#)

Table 2 to Subpart OOO of Part 60—Stack Emission Limits for Affected Facilities With Capture Systems

For * * *	The owner or operator must meet a PM limit of * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf) ^a	7 percent for dry control devices ^b	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e).

Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf) ^a	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and
			Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

^aExceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

^bThe stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

[↑ Back to Top](#)

Table 3 to Subpart 000 of Part 60—Fugitive Emission Limits

For * * *	The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) * * *	The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	10 percent opacity	15 percent opacity	An initial performance test according to §60.11 of this part and §60.675 of this subpart.

<p>Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008</p>	<p>7 percent opacity</p>	<p>12 percent opacity</p>	<p>An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and</p>
			<p>A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.</p>

[↑ Back to Top](#)

Air Permit Time Sensitive Action Chart

[If any of the time deadlines in the Air Permit Action List are inconsistent with a time deadline in a permit condition, the time deadline in the permit condition shall be followed.]

SOURCE	ACTION	DUE DATE
Facility-Wide	EAOR Title V Annual Emissions Fee Invoice and Fee Payment [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]	April 1 - annually
Facility-Wide	Annual Statement of Compliance [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]	Before March 1 - annually
Facility-Wide	Plant Problems/Permit Deviations	Immediately upon occurrence
Facility-Wide	Malfunction Excess Emissions Report	Quarterly (if requested)
Facility-Wide	Semiannual Report [40 CFR 63.864(k)(1) or (2)]	as agreed with Administrator
Facility-Wide	Permit Renewal Application	On or before Application Due Date
EU 017, 021, 022, 023, 024, 025, 026	On-Site Recordkeeping [62-4.070(3)]	at time of inspection
	VE Test Notification [Annually, each FFY] [Rule 62-297.310(7)(a)9, F.A.C.]	15 days before testing
	VE Test Report [Annually, each FFY] [Rule 62-297.310(8)(b), F.A.C.]	45 days after testing
EU 013, 016, 018, 020 and 028	On-Site Recordkeeping [62-4.070(3)]	at time of inspection
	VE Test Notification [Annually, each FFY] [Rule 62-297.310(7)(a)9, F.A.C.]	15 days before testing
	VE Test Report [Annually, each FFY] [Rule 62-297.310(8)(b), F.A.C.]	45 days after testing
EU 011, 031, 032, 033, 035 and 036	On-Site Recordkeeping [62-210.200(PTE)]	at time of inspection
	VE Test Notification [Annually, each FFY] [Rule 62-297.310(7)(a)9, F.A.C.]	15 days before testing
	VE Test Report [Annually, each FFY] [Rule 62-297.310(8)(b), F.A.C.]	45 days after testing
EU 030	On-Site Recordkeeping [62-213.440(1) and 40 CFR 64]	at time of inspection
	VE Test Notification [Annually, each FFY] [Rule 62-297.310(7)(a)9, F.A.C.]	15 days before testing
	VE Test Report [Annually, each FFY] [Rule 62-297.310(8)(b), F.A.C.]	45 days after testing
	Semi-annual Report [40 CFR 64.9]	January 31 and July 31
EU 014 and EU 015	On-Site Recordkeeping [62-213.440(1)]	at time of inspection
	On-Site Recordkeeping [62-213.440(1) and 40 CFR 64]	at time of inspection
	Semi-annual Report [40 CFR 64.9]	January 31 and July 31
	VE Test Notification [Annually, each FFY] [Rule 62-297.310(7)(a)9, F.A.C.]	15 days before testing
	VE Test Report [Annually, each FFY] [Rule 62-297.310(8)(b), F.A.C.]	45 days after testing
EU 002, 008 and 019	On-Site Recordkeeping [62-213.440(1)]	at time of inspection
	On-Site Recordkeeping [62-213.440(1) and 40 CFR 64]	at time of inspection
	VE Test Notification [Annually, each FFY] [Rule 62-297.310(7)(a)9, F.A.C.]	15 days before testing
	VE Test Report [Annually, each FFY]	45 days after testing

BASF Corporation
Quincy Operations

Permit No.: 0390005-022-AV
Air Permit Action Chart

	[Rule 62-297.310(8)(b), F.A.C.]	
	Semi-annual Report [40 CFR 64.9]	January 31 and July 31
EU 038 and EU 039	On-Site Recordkeeping [62-4.070(3) and 62-210.200(PTE)]	at time of inspection
	VE Test Notification [Annually, each FFY] [Rule 62-297.310(7)(a)9, F.A.C.]	15 days before testing
	VE Test Report [Annually, each FFY] [Rule 62-297.310(8)(b), F.A.C.]	45 days after testing