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

ft^2: square feet

ft^3: 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

O_2: oxygen

ORIS: Office of Regulatory Information Systems

OS: Organic Solvent

Pb: lead

PM: particulate matter

PM_{10}: 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

SO_2: 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

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

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. Emissions associated with tray drying, pellet screening, and graphite bag loading
2. Process machinery hoods:
   a. A, B, C Lines deliquoring screens
   b. North, northeast and south Sweetie Barrels
3. Facility painting activities
4. Process building ventilation
5. Pneumatic propellant conveyors
6. Open burn unit: By RCRA permit, a maximum of 1,160 pounds per day of material can be treated. Emissions result from the following:
   a. Four propane torches on each of two flat pans. Torches are rated at 125,000 Btu/hr each.
   b. Energetic wastes (propellant powder, water, and inert materials) up to 1,160 pounds per day.
   c. Propellant-contaminated paper, wood, and plastic; 43 pounds every one to two months.
7. Milling of salt slurries for surface coating
   a. 2-propanol storage
   b. Ball mills (two)
   c. Storage of prepared coatings
8. Recirculated water solvent losses
9. Test range emissions
10. Laboratory solvent and reagent losses (Chemical Laboratories)
11. Strong acid offloading, storing, and mixing (Acidic Mists)
12. Petroleum storage tanks:
    a. Tank 495-002, vertical fixed roof, 2,538 gal (unleaded gasoline)
    b. Maintenance tank, vertical fixed roof, 564 gal (diesel fuel)
    c. Tank 483-13, vertical fixed roof, 564 gal (diesel fuel)
    d. Tank 405-11, horizontal fixed roof, 41,452 gal (no. 6 fuel oil)
    e. Tank 450-032, horizontal roof, 211 gal (diesel fuel)
    f. Tank 455-021, horizontal roof, 211 gal (diesel fuel)
    g. Tank 483-028, horizontal roof, 211 gal (diesel fuel)
    h. Tank 484-087, horizontal roof, 211gal (diesel fuel)
    i. Tank 484-150, horizontal roof, 211 gal (diesel fuel)
13. Welding activities in support of plant maintenance
14. Filter Cleaning Tanks (2) (Lacquer Filter Brush Tanks)

15. Heavy Organic Material Storage Tanks (one at North Coater, one at South Coater; 50 gal each)
16. Chemical Decontamination of filter elements and equipment (solvent soak followed by caustic soak)
17. Venting of non-condensable gases from process vapor condensers.
18. Propellant grinding (EU023)
19. Pilot Surface Coating (EU024)

Insignificant Activities

The below listed activities are considered exempt pursuant to Rule 62-210.300(3), F.A.C.:

- Application of fungicides, herbicides and pesticides
- Asbestos renovation and demolition
- Automobile/vehicle body shops associated with plant maintenance
- Brazing, soldering, welding associated with plant maintenance
- Degreasing of equipment associated with plant maintenance
- Equipment for steam cleaning or brushing dust off equipment
- Equipment used for office cleaning and maintenance, such as vacuum cleaner and floor waxing machines
- Fire fighting, security and safety operations including training
- Heating and ventilation
- Internal combustion engines used for transportation of materials or personnel
- Lab fume hoods, vents and activities
- Laboratories
- Laboratory vacuum pumps
- Laundry dryers, extractors or tumblers for fabrics cleaned with only water solutions of bleach or detergents.
- Lubrication of machinery with petroleum products
- Plant laundry facilities
- Portable space heaters
- Steam cleaning equipment
- Vehicle refueling and associated fuel storage
- Woodworking activities associated with plant maintenance

Trivial Insignificant Activities

- Air compressors and pneumatically operated tools and equipment
- Air conditioning units for human comfort
- Bathroom/toilet/port-a-john vent emissions
- Batteries and battery charging stations
- Bench scale laboratory equipment used for physical or chemical analysis.
- Boiler water treatment operations
- Brazing, soldering and welding, and cutting torches
- Combustion emissions from propulsion of mobile sources
- Covered used oil containers used for recycling
- De-aeration of water
- Demineralized water tanks and demineralizer vents
- Environmental chambers
- Equipment used for quality control/assurance and inspection including sampling equipment used to withdraw material for analysis
- Fire suppression systems
- Grounds keeping and landscaping
- Hand held powered equipment and tools

LIST OF INSIGNIFICANT EMISSIONS UNITS AND/OR ACTIVITIES

- Hydraulic and hydrostatic testing equipment
- Hydraulic presses used for forging and metalwork
- Lunch rooms and break rooms
- Monitoring wells
- Natural gas pressure regulating vents
- Office equipment and products
- Picnic and barbeque area
- Plant maintenance, repair, upkeep, and janitorial activities

APPENDIX RICE

REQUIREMENTS FOR RECIPROCATING INTERNAL COMBUSTION ENGINES

This Title V facility contains stationary reciprocating internal combustion engines that have been exempted from the requirement to obtain an air construction permit because they qualify for one of the categorical exemptions listed in Rule 62-210.300(3)(a), Florida Administrative Code (F.A.C.). However, they are included in this permit as regulated emissions units because they are subject to one or more of the following federal rules:

- *40 CFR 60, Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.*
- 40 CFR 60, Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.
- 40 CFR 63, Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

The below listed engines are subject to the specified federal rules.

E.U. ID No.	Brief Description of Engine	Year Built	Displacement or Horsepower	Rule Applicability
025	WWTP Emergency Generator (Diesel)	1986	408	ZZZZ
025	WWTP Emergency Blower (Diesel)	1969	122	ZZZZ
025	Wet Line Emergency Generator (Diesel)	1969	578	ZZZZ
025	Magazine Road Fire Fighting Pump (Propane)	1969	16.8	ZZZZ
025	Central Pump House Fire Fighting Pump (Diesel)	1994	235	ZZZZ
025	Central Pump House Fire Fighting Pump (Diesel)	1996	235	ZZZZ
026	Central Pump House Fire Fighting Pump (Diesel)	2010	244	IIII
026	Medical/Security Emergency Generator (Diesel)	“new”	54	IIII
027	Open Burn Unit Moat Pump (Gasoline)	2010	7	JJJJ
027	Burning Ground – Decon Oven Pad (Gasoline)	2011	6.5	JJJJ

Note: WWTP means Waste Water Treatment Plant.

The engines listed above are currently demonstrating compliance with the emissions limitations of the applicable federal rule through the retention of a manufacturer’s certification statement. So long as that certification is able to be retained, no additional compliance demonstration is required. At such time that the manufacturer’s certification is no longer valid (i.e. due to operation or maintenance practices that are inconsistent with the manufacturer’s recommendations), the permittee shall begin demonstrating compliance with the standards listed in the applicable federal rule (included in the appendices as an enforceable part of this permit) in a manner that is prescribed by that rule.

FACILITY-WIDE REPORTING REQUIREMENTS
(Version Dated 1/5/2011)

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
Annual Emissions Fee Form and Fee	March 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 may be submitted by electronic mail to nwdair@dep.state.fl.us and copied to the permitting authority at epost_nwdwasteair@dep.state.fl.us. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules.

b. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
   (1) A description of and cause of noncompliance; and
   (2) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

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

[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.
a. The permittee shall submit to the Compliance Authority, each calendar year, on or before April 1, a completed DEP Form No 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year. A copy of the form and instructions may be obtained electronically at http://www.dep.state.fl.us/air/rules/forms/aor.htm. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.
b. Emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C.

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

RR6. Annual Emissions Fee Form and Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 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 February 15 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 March 1. If the fee is not postmarked by March 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 1 percent of the fee due, up to $50.00. The Department shall make every effort to provide a timely assessment of the adequacy of the submitted fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C.
b. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.

c. A completed DEP Form 62-213.900(1), "Major Air Pollution Source Annual Emissions Fee Form", must be submitted by a responsible official with the annual emissions fee.

[Rules 62-213.205(1), (1)(g), (1)(i) & (1)(j), 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
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.} Notification of compliance testing and completed test reports may be submitted by electronic mail to nwdair@dep.state.fl.us.

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. Major Air Pollution Source Annual Emissions Fee Form (Effective 10/12/2008).
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)]

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

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.]

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

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

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

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

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.]

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.]

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

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-

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

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.

(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

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.

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' nor 'insignificant' emissions units.

EU No.	Brief Description of Emissions Units and/or Activity
013	Vacuum Pump Exhausts: 13-1: Two sets of: impregnation vessel, solvent receiver an vacuum pump in main line 13-2: Batch Still and vacuum pump in the Hybrid propellant production line 13.3: Seven sets of: Pilot Plant multipurpose batch vessel and vacuum pump 13.4: Evaporation vessel and vacuum pump in the Hybrid propellant line 13.5: Evaporation vessel and vacuum pump in the Hybrid propellant production line
014	Fugitive Emissions: 14-1: Fugitive PM emissions from the Wet Line Cooling Tower 14-2: Fugitive PM emissions from the Solvent Dryer Cooling Tower 14-3: Fugitive PM emissions from Pilot Plant Cooling Tower 14-4: Fugitive PM emissions from the Nitroglycerin (NG) Plant Cooling Tower 14-5: Fugitive VOC emissions from the Wastewater Treatment Plant Aeration Tank 14-6: Fugitive VOC emissions from the Wastewater Treatment Plant Equalization Tank 14-7: Fugitive PM emissions from the Spent Acid Storage Cooling Tower
015	Process Vessel Loading Losses: 15-1: Lacquer hold tank vent 15-2: Impregnation vessel A vacuum control 15-3: Impregnation vessel B vacuum control 15-4: Batch Still vacuum control 15-6: Batch Still emulsion tank vent
017	Propellant Dryer Exhausts: 17-1: North propellant dryer exhaust stack. 17-2: South propellant dryer exhaust stack
018	Lacquer Preparation Kettle Loading Losses: 18-1: A lacquer Preparation kettles 18-2: B lacquer Preparation kettles 18-3: C lacquer Preparation kettles 18-4: D lacquer Preparation Kettles
019	Solvent Storage Tanks: 19-1: Solvent Recovery Combined Tank Vent 19-2: Solvent Drying Combined Tank Vent 19-3: A/B/C Line Solvent Collection Tank Vent 19-4: Impregnation Solvent A Tank Vent (Vacuum Valve) 19-5: Impregnation Solvent B Tank Vent (Vacuum Valve) 19-6: NG Manufacture Solvent Storage Tank Vent 19-7: NG Storage Tank A Vent 19-8: NG Storage Tank B Vent. 19-9: Batch Still Solvent Receiver Vent. 19-10: DPA (Diphenylamine) Solution Tank Vent.

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 (CAM) Plan
Venturi Scrubber followed by a Packed Bed Scrubber for VOC Control
South Coater

I. Background

A. Emissions Unit

Emission Unit	012
Emission point	12.2
Description:	Propellant surface coating operation
Identification:	South Coater Scrubber 464-019
Facility:	St. Marks Powder, Inc. St. Marks, Florida

B. Applicable Regulations, Emissions Limit, and Monitoring Requirements

Regulation:	Florida Air Permit
Emission limit:	
VOC:	32 lb/hr hourly 20 ton/12 month rolling total
Monitoring requirements:	Differential pressure and scrubbing water flows

C. Control Technology

Venturi scrubber followed by packed bed scrubber with demister

II. Monitoring Approach

This CAM plan addresses operation of the South Coater in VOC mode.

VOC mode occurs whenever the coater is used to apply surface coatings that are suspended or dissolved in isopropyl alcohol (IPA). In VOC mode, Propellant and coating solution is introduced into the feed end of the coater co-currently. Heated air is introduced into the coater counter-currently, to volatize and remove the IPA. IPA and air exit the coater and are delivered to the scrubbers.

The air stream is first scrubbed with the venture to remove solids carried over from the coating operation that might plug the packed bed scrubber. The air stream is then scrubbed in the packed bed scrubber to remove the IPA.

Water at or above a minimum flow rate is sent to the venturi scrubber and water at or above a minimum flow rate is sent to the packed bed scrubber.

VOC reduction has been demonstrated and the operating parameters, water flow and differential pressure, have been verified through compliance testing.

Compliance Assurance Monitoring (CAM) Plan
Venturi Scrubber followed by a Packed Bed Scrubber for VOC Control
South Coater

	Indicator No. 1	Indicator No. 2
Indicator	Venturi scrubber spray water flow	Packed bed scrubber spray water flow
Measurement approach	The venturi scrubber spray water flow is measured with an integral orifice flow transmitter.	The packed bed scrubber spray water flow is measured with an integral orifice flow transmitter.
Indicator range	An excursion is defined as any operating condition where the venturi scrubber spray water flow is less than 15.8 gpm. An excursion will trigger an investigation of the occurrence, corrective action, and reporting.	An excursion is defined as any operating condition where the packed bed scrubber spray water flow is less than 20.4 gpm. An excursion will trigger an investigation of the occurrence, corrective action, and reporting.
Performance Criteria		
Data Representativeness	The venturi scrubber spray water flow rate is measured using an integral orifice flow transmitter located in the spray water inlet line. The minimum acceptable accuracy of the meter is ±5% of full scale. The range is 0 to 24 gpm.	The packed bed scrubber spray water flow rate is measured using an integral orifice flow transmitter located in the spray water inlet line. The minimum acceptable accuracy of the meter is ±5% of full scale. The range is 0 to 24 gpm.
Quality Assurance and Control Practices	Annual calibration and cleaning of the integral orifice flow transmitter. Acceptance criteria: ±5% full scale	Annual calibration and cleaning of the integral orifice flow transmitter. Acceptance criteria: ±5% of full scale
Monitoring Frequency	The venturi scrubber spray water flow rate is indicated continuously and recorded hourly.	The packed bed scrubber spray water flow rate is indicated continuously and recorded hourly.
Data Collection Procedures	The venturi scrubber spray water flow rate is recorded hourly.	The packed bed scrubber spray water flow rate is recorded hourly.
Averaging Period	None	None

	Indicator No. 3
Indicator	Combined differential pressure
Measurement approach	The combined venturi and scrubber differential pressure (dP) is measured with a differential pressure transmitter.
Indicator range	(1) The normal operating range is 5.4 in WC ≤ dP ≤ 7.4 in WC. The normal operating range is derived from the average dP recorded during compliance testing plus allowance for ordinary gauge gauge accuracy and drift (5% scale). (2) If during routine operation the differential pressure is found to abnormally high (7.4 in WC < dP ≤ 8.4 in WC) or abnormally low (4.4 in WC ≤ dP < 5.4 in WC) the operator is required to determine the cause of the problem and take corrective action if possible. If immediate corrective action is not possible, repairs should be scheduled for the earliest opportunity. The extended operating range is derived from the average dP recorded during compliance testing plus allowance for gauge accuracy and drift (10% scale). (3) An excursion is defined as any operating condition where the combined differential pressure is outside the total operating range of 4.4 in WC < dP < 8.4 in WC. An excursion will trigger system shut down, an investigation of the occurrence, corrective action, and reporting.
Performance Criteria Data Representativeness	The combined differential pressure is measured using a differential pressure transmitter located across the venturi inlet and scrubber exhaust airlines. The minimum acceptable accuracy of the meter is ±5% of full scale. The range is 0 to 20 in WC.
Quality Assurance and Control Practices	Annual calibration and cleaning of the transmitter. Acceptance criteria: ±5% of full scale.
Monitoring Frequency	The combined differential pressure is indicated continuously and recorded hourly.
Data Collection Procedures	The combined differential pressure is recorded hourly.
Averaging Period	None

III. Monitoring Approach Justification

Background

The coating process consists of a continuous coater that receives propellant from a continuous dryer, several tanks with pumps to deliver VOC based coatings, a heated air supply that provides heat to volatize the VOC carrier, and feeders to apply dry agents such as graphite. The coater exhaust, plus any in-leaking fugitive air, is ducted to the combined scrubber unit and then to an exhaust blower and discharge stack. The emission point is the stack. The major VOC component is IPA.

The scrubbing section of the packed bed scrubber is 28 inches in diameter, and has 2 sections of packing and a demister. Single pass freshwater is introduced into the venturi scrubber and at the top of the packed bed scrubber.

Rationale for Selection of Performance Indicators and Ranges

During compliance testing the coating process was operated at capacity and the emission control system was operated at design. An average pressure drop across the combined venturi scrubber and packed bed scrubber was established at scrubber water flows recommended by the equipment suppliers. The water flows are considered minimum acceptable values. The differential pressure is expected to vary because of variation in processing air flow, variation in water flow, minor scale buildup, and gauge fluctuation. Variation of dP by +/- 5% of gauge range is normally expected. Variation of dP up through +/- 10% of gauge range is allowed as an overall operating range as described in the preceding table.

To comply with the emission limit for VOC, both the venturi scrubber and packed bed scrubber are operated whenever VOC based coatings are applied to the propellant. As demonstrated during compliance testing, 80% VOC removal (or more) can be expected at all allowed operating conditions.

St. Marks Powder, Inc.
Compliance Assurance Monitoring (CAM) Plan
Venturi Scrubber followed by a Packed Bed Scrubber for VOC Control
North Sweetie Barrel

I. Background

A. Emissions Unit

Emission Unit	012
Emission Unit Description	Propellant surface coating operation
Emission Point	12.3
Identification:	North Sweetie Barrel Scrubber 488-015
Facility:	St. Marks Powder, Inc. (SMP) St. Marks, Florida

B. Applicable Regulations, Emissions Limit, and Monitoring Requirements

Regulation:	Title V Air Permit
VOC Emission limit:	13.4 lb/hr maximum instantaneous 1.1 ton/12 month rolling total
Monitoring requirements:	Air flow differential pressure and scrubbing water flow rates

C. Control Technology

Venturi scrubber followed by packed bed scrubber with demister

II. Monitoring Approach

This CAM plan addresses operation of the North Sweetie Barrel in "VOC mode". The other operating mode, PM mode, is not regulated.

The key elements for the monitoring approach for VOC control, including the indicators and performance criteria are presented in the following table. In general:

- The operation is a remotely controlled batch operation although the loading at the start of the batch and unloading at the end of the batch are both performed locally and manually.
- The emission control parameters, total water flow and differential pressure, are remotely monitored.
- At the start of every batch cycle the emission control water flow distribution will be verified using the local manual gauges. These local gauges would be used for troubleshooting also.

	Indicator No. 1
Indicator	Total Venturi scrubber and packed bed scrubber spray water flow
Measurement approach	The combined venturi scrubber and packed bed scrubber spray water flow is measured with a flow transmitter. The reading is transmitted to the control area.
Indicator range	An excursion is defined as combined scrubber spray water flow less than 35 gpm. An excursion will trigger an investigation, corrective action, and reporting.
Performance Criteria	
Data Representativeness	The flow transmitter is located in the combined scrubber spray water inlet line. The minimum acceptable accuracy of the meter is ± 0.5% of full scale, 0 to 40 gpm (± 0.2 gpm).
Quality Assurance and Control Practices	Semi-annual calibration and cleaning of the flow transmitter. Acceptance criteria: ± 0.5% full scale
Monitoring Frequency	The combined scrubber spray water flow rate is indicated continuously.
Data Collection Procedures	The combined scrubber spray water flow rate is recorded at the start of every batch.
Averaging Period	None

	Indicator No. 2
Indicator	Combined venturi and packed-bed scrubber differential pressure
Measurement approach	The combined venturi scrubber and packed bed scrubber differential pressure (dP) is measured with a differential pressure transmitter.
Indicator range	(1) Normal operating range. The normal operating range is 6.0 in WC ≤ dP ≤ 8.0in WC. The normal operating range is derived from the average dP recorded during the compliance testing plus allowance for ordinary gauge accuracy (1 inch WC) and drift (5% scale). (2) Extended operating range. If during routine operation the differential pressure is found to abnormally high (8.0 in WC < dP ≤ 9.0 in WC) or abnormally low (5.0 in WC ≤ dP < 6.0 in WC) the operator is required to determine the cause of the problem and take corrective action if possible. If immediate corrective action is not possible, repairs should be scheduled for the earliest opportunity. The extended operating range is derived from the average dP recorded during compliance testing plus allowance for gauge accuracy and drift (10% scale). (3) An excursion is defined as any operating condition where the combined differential pressure is outside the total operating range of 5.0 in WC < dP < 9.0 in WC. An excursion will trigger system shut down, an investigation of the occurrence, corrective action, and reporting.
Performance Criteria Data Representativeness	The combined differential pressure is measured using a differential pressure transmitter located across the venturi scrubber inlet and packed bed scrubber exhaust airlines. The minimum acceptable accuracy of the meter during calibration is ± 5 % of full scale. The range is 0 to 20 in WC.
Quality Assurance and Control Practices	Annual calibration and cleaning of the transmitter. Acceptance criteria: ± 1 in WC.
Monitoring Frequency	The combined differential pressure is indicated continuously and recorded hourly.
Data Collection Procedures	The combined differential pressure is recorded at the start of every batch.
Averaging Period	None

III. Monitoring Approach Justification

Background

The North Sweetie Barrel operates in two modes, VOC mode and PM mode.

- Normally the North Sweetie Barrel operates in PM mode. In PM mode the Barrel is used to apply a dry, particulate, antistatic coating to propellant, to polish propellant, or to blend propellant with itself. Although the emission control equipment is operated while in PM mode, the control equipment is functioning to capture fugitive dust.
- In VOC mode the barrel is used to apply surface coatings that are suspended in isopropyl alcohol (IPA). The IPA is volatized and captured with a hood (cross air flow) as it exits the barrel mouth. At the end of the application cycle, an antistatic coating is applied to the powder.

The coating process machinery consists of:

- The North Sweetie Barrel.
- A small batch tank to hold one charge of coating suspension.
- A pump to deliver the suspension into the barrel.
- A hot water tank and pump to heat the barrel and contents.

In a typical operating cycle:

- Propellant is brought to the area and loaded into the barrel manually.
- The coating suspension is charged into the batch tank.
- Emission control monitoring parameters are recorded
- The barrel is started and heating is applied.
- The coating suspension is pumped into the barrel.
- Heat transfer is limiting therefore IPA volatization is approximately constant.
- After a prescribed period of time, an antistatic agent is applied to the propellant, and the barrel is cooled.
- The barrel is stopped.
- The propellant is dumped manually and removed from the area.

Control

- The barrel exhaust is captured by a hood that induces air flow across the mouth of the barrel.
- This air, plus any in-leaking fugitive air, is ducted to the combined scrubber unit
- The air stream is first scrubbed with the venturi to remove IPA and remove solids carried over from the coating operation that might interfere with the packed bed

scrubber. The air stream is then scrubbed in the packed bed scrubber to complete removal of the IPA.

- The combined scrubber unit exhausts to an exhaust blower and discharge stack.
- The emission point is the stack.

The scrubbing section of the packed bed scrubber is 32 inches in diameter and has a 12 inch brush pack and a 4 inch thick demister pad.

Single pass freshwater is used for the water sprays.

Rationale for Selection of Performance Indicators and Ranges

During process testing the coating process was operated at capacity and the emission control system was operated at design. An average pressure drop across the combined venturi scrubber and packed bed scrubber was established at total scrubber water flows recommended by the equipment supplier. The water flows are considered minimum acceptable values. The differential pressure is expected to vary because of variation in processing air flow, variation in water flow, minor scale buildup, and gauge fluctuation. Variation of dP by +/- 5% of gauge range is normally expected. Variation of dP up through +/- 10% of gauge range is allowed as an overall operating range as described in the preceding table.

To comply with the emission limit for VOC, both the venturi scrubber and packed bed scrubber are operated whenever VOC based coatings are applied to the propellant. As demonstrated during compliance testing, 80% VOC removal (or more) can be expected at all allowed operating conditions.

St. Marks Powder
2013 Title V Air Operating Permit Application

Operations and Maintenance Plan
Cleaver-Brooks CB800--200# Boilers

Maintenance

As required, fuel-air ratios are adjusted to the optimum point throughout the range of the burner's operation. If necessary, a factory certified Cleaver-Brooks service technician is brought on site to tune combustion on both natural gas and #6 oil.

Annually, an inspection of all linkages, cams and followers, and heavy oil control valves is performed and repairs or rebuilds of these items is completed as required.

Once per year, or as necessary according to operating indicators, each boiler is opened for both a fire and waterside inspection.

1. Residue is removed from the end of each tube pass, and all tubes are individually cleaned from end to end using a high-pressure water jet. Residue is washed from the combustion chamber and refractory repairs are made as necessary.

2. The burner drawer is removed and inspected. The structural condition of the housing and vanes is visibly checked to insure there are no cracks or other damage. Moving parts are verified to be work smoothly through their full range of travel. The igniter and igniter tube are inspected, along with the flame detector and its tube.

3. Combustion fan wheel clearances are checked to insure they are within the manufacturer's recommended range. If necessary, the wheel is adjusted to optimize this clearance.

4. The flue stack is checked to insure that it is not damaged, it is clear of excessive buildup and the stack thermometer probe has not been coated with scale.

5. Any repairs or adjustments that are deemed necessary are made prior to returning the boilers to service.

Routine Operating Activities--#6 Fuel Oil

1. The unloading of incoming fuel oil is supervised by the boiler operator. To insure that incoming oil meets plant specifications, operators do not allow an oil tanker to be unloaded until presented with the oil supplier's analysis sheet by the carrier. Filters are checked after each unloading to insure that an excessive amount of solids is not present. If excessive solids are present, contact is made with the supplier to correct the situation.

2. Both fuel oil pressure and temperature at the burner of an operating boiler are monitored and recorded every two hours. To insure proper oil viscosity at the burner, fuel oil temperature is maintained between 185 F and 215 F with a target of 200 F. To insure proper flow across the heavy oil control valve and subsequent

feed to the boiler, oil pressure is maintained above 60 psi. If temperature and pressure cannot be maintained within these ranges, the boiler is either shut down or switched to alternative fuel until the source of the problem can be found.

3. During winter months, when a boiler is in standby mode, a heat lamp is used to maintain the temperature of the burner wand and hose where hot oil cannot be circulated, thereby reducing the risk of flameout on startup.

4. External burner parts are inspected by the operator on a daily basis. If problems are found to exist with the oil system (leaks, etc.) or the moving parts associated with the burner, the operator takes one of the following actions:

   a. If the problem adversely affects combustion, the boiler is either shut down or switched to an alternate fuel source.

   b. If the problem is well understood and within the scope of the operator's training, then he repairs the problem himself or with the assistance of a maintenance technician.

   c. If the problem cannot be determined, is not well understood, or is outside the scope of the operator's training, the operator contacts supervision for assistance. Supervision will then assess the severity of the problem and make the determination if repairs are to be made in house or if outside services are needed. In the latter case, an authorized Cleaver-Brooks service provider is contracted to assist with the repairs.

Routine Operating Activities—Natural Gas

The natural gas system is less complex than the #6 fuel oil system and requires less extensive monitoring.

1. Once per day, gas pressure is read at the natural gas reducing station near the boiler house. Pressure on the downstream side of the regulator should run between 10 and 15 psi. If pressure is out of the range, the boiler operator is to contact supervision for further investigation.

2. External burner parts are inspected by the operator on a daily basis. For natural gas operation, this primarily consists of the combustion fan damper/natural gas control valve linkage. If problems are found to exist, the operator takes one of the following actions:

   a. If the problem adversely affects combustion, the boiler is either shut down or switched to an alternate fuel source.

   b. If the problem is well understood and within the scope of the operator's training, then he repairs the problem himself or with the assistance of a maintenance technician

c. If the problem cannot be determined, is not well understood, or is outside the scope of the operator's training, the operator contacts supervision for assistance. Supervision will then assess the severity of the problem and make the determination if repairs are to be made in house or if outside services are needed. In the latter case, an authorized Cleaver-Brooks service provider is contracted to make the repairs.

Routine Operating Activities—All fuels

1. Periodic visible checks are performed by the operator to insure that the burner flame is steady and of the typical shape and color. A flame produced by combustion of #6 fuel oil should be broad, opaque, and of a yellow-orange color. A flame that becomes red or appears unsteady or one-sided could indicate problems. A natural gas flame on the other hand should be of a more narrow conical shape, with a bluish semi-translucent center and yellowing tip. The actual size of either flame will depend on the firing rate.

2. The operator periodically inspects the boiler stacks for visible emissions. The operators' duties outside of the boiler house give the operator an opportunity to see the stacks from different vantage points throughout the shift. These duties include regular checks of equipment operation at the compressed air plant (2-3 hour intervals), process water plant (once per shift minimum), and cooling towers (two towers--once each per shift minimum). Each of these functional areas provides a different view of stack emissions either from the specific location or in route to and from. Also, each trip made by the operator to the warehouse, maintenance office/shop, or to escort incoming/outgoing fuel trucks puts the operator in direct line of sight of the boiler stacks as he or she returns to the boiler house. These trips are made several times during each shift. If the operator feels that there is abnormality on any of these visible checks, supervision is contacted for further evaluation.

3. Stack temperatures are read and recorded at 2 hour intervals. Although stack temperatures may fluctuate with certain operating conditions, when combined with other routine operating conditions, stack temperatures deemed abnormal may be an indication of combustion problems. Abnormal conditions are investigated by the operator, and supervision is contacted if necessary.

4. No other instrumentation is installed.

Operations and Maintenance (O&M) Plan
Venturi Scrubber followed by a Packed Bed Scrubber for VOC Control
North Coater

I. Background

A. Emissions Unit

Emission Unit	012
Emission point	12-1
Description:	Propellant surface coating operation
Identification:	North Coater Scrubber 468-039
Facility:	St. Marks Powder, Inc. St. Marks, Florida

B. Applicable Regulations, Emissions Limit, and Monitoring Requirements

Regulation:	Florida Air Permit
Emission limit:	
VOC:	32 lb/hr hourly 18 ton/12 month rolling total
Monitoring requirements:	Differential pressure and scrubbing water flows

C. Control Technology

Venturi scrubber followed by packed bed scrubber with demister.

II. Monitoring Approach

This O&M plan addresses operation of the North Coater in VOC mode.

VOC mode occurs whenever the coater is used to apply surface coatings that are suspended or dissolved in isopropyl alcohol (IPA). In VOC mode, Propellant and coating solution is introduced into the feed end of the coater co-currently. Heated air is introduced into the coater counter-currently, to volatize and remove the IPA. IPA and air exit the coater and are delivered to the scrubbers.

The air stream is first scrubbed with the venture to remove solids carried over from the coating operation that might plug the packed bed scrubber. The air stream is then scrubbed in the packed bed scrubber to remove the IPA.

Water at or above a minimum flow rate is sent to the venturi scrubber and water at or above a minimum flow rate is sent to the packed bed scrubber.

VOC reduction has been demonstrated and the operating parameters, water flow and differential pressure, have been verified through compliance testing.

	Indicator No. 1	Indicator No. 2
Indicator	Venturi scrubber spray water flow	Packed bed scrubber spray water flow
Measurement approach	The venturi scrubber spray water flow is measured with a rotameter.	The packed bed scrubber spray water flow is measured with a rotameter.
Indicator range	An excursion is defined as any operating condition where the venturi scrubber spray water flow is less than 7.1 gpm. An excursion will trigger an investigation of the occurrence, corrective action, and reporting.	An excursion is defined as any operating condition where the packed bed scrubber spray water flow is less than 11.2 gpm. An excursion will trigger an investigation of the occurrence, corrective action, and reporting.
Performance Criteria		
Data Representativeness	The venturi scrubber spray water flow rate is measured using a variable area flow meter (rotameter) located in the venturi scrubber spray water inlet line. The minimum acceptable accuracy of the meter is ± 5 % of full scale and the range is 0 to 11.5 gpm	The packed bed scrubber spray water flow rate is measured using a variable area flow meter (rotameter) located in the spray water inlet line. The minimum acceptable accuracy of the meter is ± 5 % of full scale and the range is 2 to 20 gpm
Quality Assurance and Control Practices	Annual calibration and cleaning of the rotameter. Acceptance criteria: ± 5% full scale	Annual calibration and cleaning of the rotameter. Acceptance criteria: ± 5% of full scale
Monitoring Frequency	The venturi scrubber spray water flow rate is indicated continuously and recorded hourly.	The packed bed scrubber spray water flow rate is indicated continuously and recorded hourly.
Data Collection Procedures	The venturi scrubber spray water flow rate is recorded hourly.	The packed bed scrubber spray water flow rate is recorded hourly.
Averaging Period	None	None

	Indicator No. 3

Indicator	Scrubber differential pressure
Measurement approach	The combined venturi scrubber and packed bed scrubber differential pressure (dP) is measured with a differential pressure transmitter.
Indicator range	(1) Normal operating range. The normal operating range is 15.3 in WC ≤ dP ≤ 17.3 in WC. The normal operating range is derived from the average dP recorded during compliance testing plus allowance for ordinary gauge calibration accuracy and drift (5% scale). (2) Extended operating range. If during routine operation the differential pressure is found to abnormally high (17.3 in WC < dP ≤ 18.3 in WC) or abnormally low (14.3in WC ≤ dP < 15.3 in WC) the operator is required to determine the cause of the problem and take corrective action if possible. If immediate corrective action is not possible, repairs should be scheduled for the earliest opportunity. The extended operating range is derived from the average dP recorded during compliance testing plus allowance for gauge accuracy and drift (10% scale). (3) An excursion is defined as any operating condition where the combined differential pressure is outside the total operating range of 14.3 in WC < dP < 18.3 in WC. An excursion will trigger system shut down, an investigation of the occurrence, corrective action, and reporting.
Performance Criteria Data Representativeness	The combined differential pressure is measured using a differential pressure transmitter located across the venturi scrubber inlet and packed bed scrubber exhaust airlines. The minimum acceptable accuracy of the meter during calibration is ± 5 % of full scale. The range is 0 to 20 in WC.
Quality Assurance and Control Practices	Annual calibration and cleaning of the transmitter. Acceptance criteria: ± 5 % of full scale.
Monitoring Frequency	The combined differential pressure is indicated continuously and recorded hourly.
Data Collection Procedures	The combined differential pressure is recorded hourly.
Averaging Period	None

III. Monitoring Approach Justification

Background

The coating process consists of a continuous coater that receives propellant from a continuous dryer, several tanks with pumps to deliver VOC based coatings, a heated air supply that provides heat to volatize the VOC carrier, and feeders to apply dry agents such as graphite. The coater exhaust, plus any in-leaking fugitive air, is ducted to the combined scrubber unit and then to an exhaust blower and discharge stack. The emission point is the stack. The major VOC component is IPA.

The scrubbing section of the packed bed scrubber is 2 ft in diameter and has 6 feet of packing material and a demister. Single pass freshwater is introduced into the venturi scrubber and at the top of the packed bed scrubber.

Rationale for Selection of Performance Indicators and Ranges

During compliance testing the coating process was operated at capacity and the emission control system was operated at design. An average pressure drop across the combined venturi scrubber and packed bed scrubber was established at scrubber water flows recommended by the equipment suppliers. The water flows are considered minimum acceptable values. The differential pressure is expected to vary because of variation in processing air flow, variation in water flow, minor scale buildup, and gauge fluctuation. Variation of dP by +/- 5% of gauge range is normally expected. Variation of dP up through +/- 10% of gauge range is allowed as an overall operating range as described in the preceding table.

To comply with the emission limit for VOC, both the venturi scrubber and packed bed scrubber are operated whenever VOC based coatings are applied to the propellant. As demonstrated during compliance testing, 80% VOC removal (or more) can be expected at all allowed operating conditions.

St. Marks Powder
2013 Title V Air Operating Permit Application

Alternate Methods of Boiler Operation

Alternate Fuels

Natural gas is available for consumption in the boilers. Natural gas is used as the alternate fuel:

When it is more economical to use than the primary fuel, #6 oil. When the supply of #6 oil is inadequate.
In the unlikely event that the SO_2 12 month rolling total emission limit is approached.

Startup and shutdown procedures using natural gas are basically identical to those using #6 oil, less the specific requirements pertaining to heating of the #6 oil.

St. Marks Powder
2013 Title V Air Operating Permit Application

Summarized Procedure for Boiler Startup and Shutdown

Following is a summary of the Standard Operating Procedures for each of the two 800HP Clever Brooks Boilers located at St. Marks Powder. The actual Standard Operating Procedures are maintained on site.

Start-up

In order to minimize Visible (and other) Emissions, the boilers are operated on hot (200 ^{o}F) #6 fuel oil or natural gas. Steam is the source of heat input to the #6 fuel oil. When starting the boilers from a cold iron condition, it is necessary to fire the boilers on natural gas until operating conditions are achieved and the #6 oil is heated.

The boiler is started and held at low fire until steam pressure has reached approximately 75 psi. Then the flame is manually ramped up to maintain a controlled rate of rise in boiler pressure. The boiler system is switched to automatic control as the boiler approaches its operating pressure of 150 psi.

After the #6 oil has been heated to the proper temperature, and the decision made to switch to #6 oil, the boiler will be shut down and restarted using #6 oil as fuel. After the boilers and #6 oil are hot, subsequent start-ups are performed in a similar manner, but #6 oil may be used from the beginning.

Operation

Losing steam supply to the St. Marks Powder steam distribution system could cause a costly interruption to production. Once started, one or both boilers are kept on line at all times. Therefore, the boilers typically do not require a cold start again until a major outage occurs.

During normal operations, a lead boiler is designated and kept on line at all times, with the other boiler serving both to supplement steam during high load conditions and as a backup in the event of unexpected shutdown of the lead boiler. When not required to operate to provide supplementary steam, the backup boiler is periodically started to maintain pressure and temperature. Each week (or sooner in the event of an upset), the boilers designations are rotated such that each boiler sees roughly the same amount of operating time over the course of a year.

Operation is basically automatic after the startup sequence has been completed. The operator gathers operating data and logs the required information to be submitted each day. The operator also performs routine duties necessary for proper maintenance of the water and steam systems.

Shutdown

Shutdown of the boilers typically begins by switching the burner control to manual. The burner is then brought down to low fire and the flame is extinguished. When a long term shut down is in order, the combustion air blower is allowed to continue in operation to speed the cooling of the unit, and a steam vent is opened when pressure has fallen sufficiently.

St. Marks Powder Inc.
2013 Title V Renewal Permit Application
Procedures for Startup and Shutdown for the Propellant Surface Coating Operations (EU 012)

Following is a summary of the Standard Operating Procedures for Propellant Surface Coating Operations (EU 012) located at St. Marks Powder. The Propellant Surface Coating Operations are comprised of three emissions points: The North Coater, South Coater, and North Sweetie Barrel. The actual Standard Operating Procedures are maintained on site.

Start-up

In order to minimize particulate matter (PM) and volatile organic compound (VOC) emissions, each emission point is equipped with a venturi scrubber followed by packed bed scrubber with demister. To prevent excess emissions, the scrubbers are put in operation prior to starting (charging) the system (i.e. the process is not put into operation without the control equipment operating first).

The emission unit operates in two modes, VOC mode and PM mode. It should be noted that VOC mode is regulated; however PM mode is not regulated.

- Normally the North Coater, South Coater, and North Sweetie Barrel operate in PM mode. In PM mode the continuous coaters (or the barrel) are used to apply a dry, particulate, antistatic coating to propellant, to polish propellant, or to blend propellant with itself. In this mode the emission control equipment is functioning to capture fugitive dust in the form of PM and PM with aerodynamic diameter less than 10 microns (PM_{10}).
- In VOC mode, the continuous coaters (or the barrel) are used to apply surface coatings that are suspended in isopropyl alcohol (IPA). For all emission points, the IPA is volatized and captured with a hood (cross air flow) as it exits. At the end of the application cycle, an antistatic coating is applied to the powder.

North Coater/ South Coater Startup Procedure:

- Place all interlock/bypass switches to the interlock mode
- Start IPA Scrubber water flows (per SOP and air permit)
- Start the coated powder conveying system (pneumatically transfers coated product back to dryer packout area)
- Start the exhaust blower for the scrubber system (pulls IPA vapor from the coater drum thru the scrubber)
- Start the coater drum rotation(cylindrical drum tilted so that the powder flows over itself from the feed end to the discharge end while it rotates)
- Start the hot air blower (volatizes the IPA)
- Start the uncoated powder conveying system (feeds dry powder into one end of the drum)
- Start the antistatic feed system (prevents static discharge and aids flow characteristics of powder)

- Start the surface coating addition system

North Sweetie Barrel Startup Procedure:

- Propellant is brought to the area and loaded into the barrel manually.
- The coating suspension is charged into the batch tank. Note: the total alcohol volume charged is less than the proposed hourly IPA emissions.
- Emission control monitoring parameters are recorded
- The barrel is started and heating is applied.
- The coating suspension is pumped into the barrel.
- Heat transfer is limiting therefore IPA volatilization is approximately constant.

Control Device Operation

During operation of the continuous coaters (or the barrel), the exhaust, plus any in-leaking fugitive air, is ducted to the combined scrubber units and then to an exhaust blowers and discharge stacks. The emission points are the stacks.

The air stream is first scrubbed with the venturi to remove IPA and remove solids carried over from the coating operation that might interfere with the packed bed scrubber. The air stream is then scrubbed in the packed bed scrubber to complete removal of the IPA. The scrubbers are operated within approved operating parameter ranges for scrubber liquid flow rate and differential pressure across the scrubbers as described in the compliance assurance monitoring (CAM) plan to assure compliance.

Shutdown

The North Coater and South Coater Shutdown Procedure:

- Shutdown uncoated powder conveyor (stops powder feed)
- Surface coating addition system automatically stops when uncoated powder system shuts down
- Allow coated powder to exit the coater drum until flow stops
- Stop the coated powder conveyor system
- Shut off the exhaust blower for the scrubber system
- Stop the coater drum rotation
- Stop the hot air blower
- Stop the antistatic feed system
- Stop the IPA Scrubber water flows

The North Sweetie Barrel Shutdown Procedures:

- After a prescribed period of operation time, an antistatic agent is applied to the propellant, and the barrel is cooled.
- The barrel is stopped.
- The propellant is dumped manually and removed from the area.
- Once the propellant is removed, the venturi and packed bed scrubbers can also be turned off.

APPENDIX PEI
PROJECT EMISSIONS INCREASE REPORT - EXAMPLE FORMAT

Emissions Year*: _____ ***(This is year No. ___ of 10 required reports.)***

Facility Information	
ARMS ID No. 1290003	Facility/Site Name: St. Marks Powder

Air Construction Permit Information			
Permit No. 1290003-018-AV	Date Issued:	Date Construction Completed:	Date Regular Operation Resumed:

EU ID No.	**EU Description**	**EU ID No.**	**EU Description**
EU012	Propellant Surface Coating Operations	EU019	Solvent Storage Tanks
EU013	Vacuum Distillation portions of the propellant process	EU021	Pilot and Batch Dry Propellant Operations
EU014	Fugitive Emissions	EU022	Pneumatic Conveyors
EU015	Process Vessel Loading Losses	EU023	Propellant Grinder
EU017	Propellant Dryer Exhausts	EU024	Pilot Surface Coating
EU018	Lacquer Preparation Kettle Loading Losses		

Tracked PSD Pollutant			**Annual Emissions, Tons per Year**			**PSD? Yes/No [6]**
	RAE[1]	**DG[2]**	**BAE[3]**	**Increase[4]**	**SER[5]**	
VOC						
PM/PM10						

* *Report Deadline: This report must be submitted to the Compliance Authority within 60 days after the end of each calendar year during which records must be generated under subparagraph 62-212.300(1)(e)1., F.A.C.*

1. "RAE" means reported annual emissions for the given year (or PAE for year zero).
2. "DG" means the annual emissions resulting from production demand growth that could have been accommodated during the baseline years and that are unrelated to the project. Please provide supporting information and a discussion that describes: how the emissions were related to demand growth, how the emissions could have been accommodated previously and how the emissions are unrelated to the project. This will not change from year to year.
3. "BAE" means baseline actual emissions as determined in the original air construction permit. BAE will remain the same for each reporting year.

   In this table, baseline emissions and demand growth are added together.
4. "Increase" is the annual emissions increase related to the project (Increase = RAE –DG – BAE).
5. "SER" means the "significant emissions rate" as defined for the PSD pollutant in Rule 62-210.200, F.A.C.
6. If RAE-DG-BAE is greater than the "SER," then the project is subject to PSD preconstruction review as though construction had not yet commenced.

ATTACHMENTS
(INCLUDED FOR CONVENIENCE)

The following attachments are included for convenient reference:

Table H, Permit History
Time Sensitive Action Chart

TABLE H

PERMIT HISTORY

E.U. ID No.	**Description**	Permit No.	Effective Date	Expiration Date	Project Type
001	North Sweetie Barrel	AC65-140731	01/25/1988	07/31/1989	Construction
001	North Sweetie Barrel	AO65-163478	06/02/1989	06/01/1994	Operation Permit
002	Northeast Sweetie Barrel	AC65-176101	04/05/1990	04/30/1991	Construction
001 & 002	North & Northeast Sweetie Barrel	AO65-191490	02/21/1991	02/01/1996	Operation Permit
003	Mixing Ventilation	AC65-23086	11/19/1979	11/01/1981	Construction
003	Mixing Ventilation	AO65-41130	04/17/1981	04/01/1986	Operation Permit
003	Mixing Ventilation	AO65-114702	03/03/1986	02/01/1991	Operation Permit
003	Mixing Ventilation	AO65-188422	12/06/1990	11/01/1995	Operation Permit
004, 006	Steam Boilers Nos. 1 & 2	AC65-42779	09/09/1981	01/01/1982	Construction
004, 006	Steam Boilers Nos. 1 & 2	AO65-52785	11/03/1982	04/01/1986	Operation Permit
004, 006	Steam Boilers Nos. 1 & 2	AO65-113338	02/28/1986	02/01/1991	Operation Permit
004, 006	Steam Boilers Nos. 1 & 2	AO65-188423	12/04/1990	11/01/1995	Operation Permit
007, 009	North Coater (Coated & Uncoated)	AC65-109412	02/13/1986	09/30/1987	Construction
007, 009	North Coater (Coated & Uncoated)	AO65-136175	08/17/1987	08/01/1992	Operation Permit
007, 009	North Coater (Coated & Uncoated)	AO65-213790	06/16/1992	06/01/1997	Operation Permit
010	South Coater	AC65-271708	07/12/1995	12/31/1995	Construction
010	South Coater	1290003-001-AO	11/13/1995	10/31/2000	Operating Permit
All	Facility	1290003-002-AV	02/15/1999	02/15/2004	Initial Title V Permit
All	Facility	1290003-003-AO	01/20/1999		Transfer Ownership
012	Propellant Surface Coating Operations	1290003-013-AC	05/16/2003	05/16/2008	Construction
All	Facility	1290003-014-AV	05/26/2004	05/26/2009	Renewal
All	Facility	1290003-015-AV	05/19/2009	05/19/2014	Renewal
012	Propellant Surface Coating Operations	1290003-016-AC	01/13/2011	01/13/2016	Construction
All	Facility	1290003-017-AV	10/08/2012	05/19/2014	Revision
All	Facility	1290003-018-AV	Pending		Renewal
012	Propellant Surface Coating Operations	1290003-019-AC	Pending		Construction

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	Annual Operating Report [Rule 62-210.370(3), F.A.C.]	April 1 - annually
Facility-Wide	Annual Emissions Fee Form and Fee [Rule 62-213.205, F.A.C.]	March 1 - annually
Facility-Wide	Annual Statement of Compliance [Rules 62-213.440(3) and 62-213.900, F.A.C.]	Before 60 days after end of CY
Facility-Wide	Risk Management Plan [40 CFR 68]	Revision, renewal - anytime
Facility-Wide	Actual Emissions Reporting [Rule 62-212.300(1)(e), F.A.C.]	Before 60 days after end of CY
EU 011	Excess Emissions Reporting [Rule 62-4.130, F.A.C.	Event Notification – Immediately
	Excess Emissions Reporting [Rule 62-210.700(6), F.A.C.	Full report with Quarterly Report if Requested by Department
	On-Site Recordkeeping [Rule 62-4.070(3), F.A.C. and permit AC65-42779]	Available at time of inspection
	Records & Reports [Rule 62-213.440, F.A.C. and 40 CFR 761]	Within 30 days at the end of each Quarter
	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
	* Notification of Compliance Status [40 CFR 63.11225(a), (b), (c), (d) & (g) *]	120 days after applicable compliance date
	Annual Compliance Certification Report [40 CFR 63.11225}	March 15 of following year
EU 012	VE and VOC Test Notification [Every 5 years, within 12 months of renewal] [Rule 62-297.310(7)(a)9, F.A.C.]	15 days before testing
	VE and VOC Test Report [Every 5 years, within 12 months of renewal] [Rule 62-297.310(8)(b), F.A.C.]	45 days after testing
	On-Site Recordkeeping [Rule 62-4.070(3)]	Available at time of

		inspection
	Semi-annual Reports [Rule 62-213.440(1)(b)3.a., F.A.C.]	January, 31 and July 31 each year
EU 025	On-Site Recordkeeping [40 CFR 63.6660 and 40 CFR 63.10(b)(1)]	Available at time of inspection
EU 026	Performance Test Notification [Upon loss of certification] [Rule 62-297.310(7)(a)9, F.A.C. and 40 CFR 60.4212(a) & (c)]	15 days before testing
	Performance Test Report [Upon loss of certification] [Rule 62-297.310(8)(b), F.A.C.]	45 days after testing
	On-Site Recordkeeping [Rule 62-213.440(1), F.A.C. and 40 CFR 60.4214]	Available at time of inspection
EU 027	Maintenance Plan & Records [Upon loss of certification] [40 CFR 60.4243(a)(2)(i)]	Available at time of inspection
	On-Site Recordkeeping [Rule 62-213.440(1), F.A.C.; 40 CFR 60.4243(a)(2)(i) and 40 CFR 60.4245(a)]	Available at time of inspection

*Federal Regulations have not been incorporated by reference by the Department.