St. Marks Powder, Inc.
Facility ID No.: 1290003
Wakulla County

Title V Air Operation Permit Revision

FINAL Permit No.: 1290003-017-AV
Revision to Title V Air Operation Permit No.: 1290003-015-AV

Permitting and Compliance Authority:
Florida Department of Environmental Protection
Northwest District Air Program
160 W. Government Street, Suite 308
Pensacola FL 32502-5740

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Northwest District
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FINAL Permit No.: 1290003-017-AV
Facility ID No.: 1290003
SIC No(s).: 2892
Project**:** Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating changes made by air construction permit 1290003-016-AC issued January 13, 2011, to reactivate propellant surface coating at the North Sweetie Barrel. This facility is located at 7121 Coastal Highway, Crawfordville, Wakulla County, at the intersection of U.S. 98 and S.R. 36; UTM Coordinates: Zone 16, 767.6 km East and 3342.1 km North; Latitude: 30° 10' 45" North and Longitude: 84° 13' 25" West.

This Title V Air Operation Permit Revision is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
Appendix TV, Title-V General Conditions version dated 02/16/2012
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Table 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96
Appendix CAM General Conditions
Appendix O&M and CAM Plan
Appendix PEI – PSD Emissions Tracking

Initial Effective Date: May 19, 2009
Revision Effective Date: October 8, 2012
Renewal Application Due Date: October 6, 2013
Expiration Date: May 19, 2014
/s/

Rick Bradburn
Air Program Administrator

RB/ha/c

Section I. Facility Information.

This permit revision incorporates changes made by air construction permit 1290003-016-AC issued January 13, 2011, to reactivate propellant surface coating at the North Sweetie Barrel.

Process changes made under air construction permit 1290003-016-AC are listed below:

1. At the existing North Sweetie Barrel, a 15-gallon tank with agitator and piping was installed.
2. At the Wet Line, the following process and equipment changes were made:
   a. An evaporator designated E-evaporator was re-piped.
   b. A small over-flow receiver and liquor pump was installed.
   c. A 5000-gallon evaporator was installed.
   d. An existing 13,000-gallon impregnation vessel was replaced with a 20,000-gallon vessel.
   e. A 10% reduction in cycle time is expected as a result of improvements in process control and replacement of the impregnation vessel.
3. At the pilot plant batch drying facility, one of the two bays was converted to cart drying.

Process changes listed below were not implemented under air construction permit 1290003-016-AC and are not being considered for future implementation.

1. At the pilot plant, a 125lb capacity sweetie barrel was not replaced with a 250lb capacity barrel.
2. At the production batch drying facility, six cart dryers were not added to the existing four cart dryers.

Pre-Project Potential Emissions
Potential emissions prior to reactivation of surface coating at North Sweetie Barrel are summarized below.

Title-V air operation permit 1290003-015-AV issued May 19, 2009, incorporated various changes requested by the applicant. These changes, documented in the Summary of Anticipated Manufacturing and Emissions Changes dated August 18, 2009, are on file with the permitting authority. The changes did not require a construction permit and were either a change in the process or in the method of estimating emissions. Estimated pre-project potential emissions are summarized in the table below.

Pre-Project Potential Emissions: Regulated, Unregulated and Insignificant

Pollutant	2003 Estimate Tons/yr	2008 Estimate Tons/yr	Increase (Decrease) 2003 to 2008	Regulated EUs Increase (Decrease)
CO	24	23	(1)	0
NO_x	57	55	(2)	0
PM	69	74	5	0
PM_{10}	14	18	4	0
SO_2	245	245	0	0
VOC	664	567	(97)	(21)
NH3	NA	0	NA	NA
Pb	NA	12 lbs/yr	NA	NA
Max HAP	NA	679 lbs/yr	NA	NA
Total HAP	NA	900 lbs/yr	NA	NA

Post-Project Potential Emissions and PSD Applicability
Potential emissions after reactivation of propellant surface coating at North Sweetie Barrel are summarized below.

Post-Project Potential Emissions and PSD Applicability

Pollutant	Existing Potential Emissions (TPY)	Post-Project Potential Emissions (TPY)	Project Potential Emission Increases (TPY)	Significant Emission Rate (TPY)	Subject to PSD?
CO	23	23		100	No
NO_x	55	55		40	No
PM	74	87	13	25	No
PM_{10}	36[a]	37	1	15	No
SO_2	245	245		40	No
VOC	567	577[b]	10	40	No
Pb	12 lbs/yr	12 lbs/yr			
Max HAP	679 lbs/yr	679 lbs/yr			
Total HAP	900 lbs/yr	909 lbs/yr			

a. The existing potential PM_{10} emissions of 36 TPY, listed in the post-project potential emissions table above, includes an additional 18 TPY that is not reflected in the pre-project potential emissions table. These updated PM_{10} emissions estimates, reported in the Title V Air Operation Permit Revision application, received April 26, 2012, have been added to the pre-project and post-project emissions estimates for the following emissions units: EU 011 (boilers) 1 TPY, EU 014 (plant fugitive emissions) 15 TPY, EU 024 (hooded process machinery) - 3 TPY, EU 022 (propellant pneumatic conveyers) 4 TPY and EU 022 (acid mists) 1 TPY.

b. Post-project VOC emissions increased by a total of 10 TPY as a result of the following changes.: EU 014 (plant fugitive emissions) decreased by 17 TPY, resulting primarily from new emissions estimates obtained using WATER9 software for the wastewater treatment plant, EU 012 (surface coating) increased by 1 TPY, EU 013 (vacuum distillation) increased by 8 TPY, EU 015 (process vessel venting) increased by 2 TPY, EU 017 (continuous dryers) increased by 11 TPY, EU 018 (lacquer preparation) increased by 4 TPY and EU 019 (solvent storage).increased by 1 TPY.

Subsection A. Facility Description.

This facility consists of a propellant manufacturing process, a nitroglycerin manufacturing process, and supporting utilities and operations. Volatile organic compounds (VOC) and sulfur dioxide (SO_2) are the major pollutants emitted. Both single base (mostly nitrocellulose) and double base (nitrocellulose and nitroglycerin) propellant are produced for a wide range of small caliber and medium caliber ammunition applications. Propellant manufacturing process involves dissolving the nitrocellulose to form a lacquer, graining the lacquer, and coating and drying the grains to the appropriate specifications. The grains are impregnated with nitroglycerin in the double base process. Emission controls include medium efficiency venturi scrubbers and medium efficiency packed column scrubbers with demister pads.

This facility includes two regulated emissions units:
Emissions Unit 011 includes two Cleaver-Brooks steam boilers (Nos. 1 & 2) each with a maximum heat input of 33.45 MMBtu/hr. These boilers burn fuel oil, (No. 2 or No. 6) with a maximum sulfur content of 2.5% by weight, or, alternatively, natural gas.

Emissions Unit 012 includes emissions points associated with propellant surface coating operations at the North Coater, South Coater and North Sweetie Barrel. The North East Sweetie

Barrel production line is not used for surface coating, but the product is conveyed through the barrel to the next process step.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and activities.

This facility is considered a major stationary source with respect to PSD because it emits or has the potential to emit 100 tons per year or more of any regulated air pollutant and the facility is a chemical process plant, one of the 27 PSD-major facility categories specified in Rule 62-212.400(3)(b)20., F.A.C.

Because air construction permit 1290003-016-AC, upon which this revision is based, avoided the requirements of Rule 62-212.400(4) through (12), Florida Administrative Code (F.A.C.), based in whole or in part on projected actual emissions calculations, the permittee shall calculate and maintain a record of the annual emissions of VOC and PM/PM_{10}, in tons/year on a calendar year basis, for a period of ten years, beginning January 1, 2013.

Based on the Title-V Air Operation Permit Revision Application, received April 26, 2012, this facility is not a major source of hazardous air pollutants (HAP).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

Regulated Emissions Units.

Facility ID No. 1290003	
ID No.	**Regulated Emission Unit Description**
011	Steam Boilers 1 and 2
012	Propellant Surface Coating Operations

Unregulated Emissions Units.

Facility ID No. 1290003	
ID No.	**Unregulated Emission Unit Description**
013	Vacuum Pump Exhausts
014	Fugitive Emissions
015	Process Vessel Loading Losses
017	Propellant Dryer Exhausts
018	Lacquer Preparation Kettle Loading Losses
019	Solvent Storage Tanks
024	Pilot Surface Coating

A list of Unregulated Emissions Units and/or Activities is contained in Appendix U-1.
A list of Insignificant Emissions Units and/or Activities is contained in Appendix I-1.

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

<u>These documents are provided to the permittee for information purposes only:</u>
Appendix A-1: Abbreviations, Acronyms, Citations, and Identification Numbers.
Statement of Basis.

<u>These documents are on file with the permitting authority:</u>
Initial Title V Permit Application received June 13, 1996; revised August 26, 1998.
Initial Title V Air Operation Permit issued February 9, 1999.
Appendix H-1, Permit History.
Title V Air Operation Permit Renewal application received October 31, 2008.
Summary of Anticipated Manufacturing and Emissions Changes, August 18, 2009.
Title V Air Construction Permit, 1290003-016-AC, issued January 13, 2011.
Title V Air Operation Permit Revision application received April 26, 2012.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. Appendix TV, Title-V General Conditions, is a part of this permit.

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. [Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
Documents on file with USEPA
The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.
b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: 850/413-9921; Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 10162
Fairfax, VA 22038
Telephone: 703/227-7650

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response

USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:
Cashier
Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit. [Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. To comply, procedures to minimize pollutant emissions shall include the following:

a. Tightly cover or close all VOC containers when they are not in use,
b. Tightly cover, where possible, all open troughs, basins, baths, tanks, etc. when they are not in use,
c. Maintain all piping, valves, fittings, etc. in good operating condition,
d. Prevent excessive air turbulence across exposed VOC, and,
e. Immediately confine and clean up VOC spills and make sure certain wastes are placed in closed containers for reuse, recycling or proper disposal.

[Rule 62-296.320(1), F.A.C., and permit 1290003-013-AC]

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements:

a. Paving and maintenance of roads, parking areas, and yards.
b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
c. Application of asphalt, water, oil or chemicals, or other dust suppressants to unpaved roads, yards, open stock piles, and similar activities.
d. Removal of excessive particulate matter from roads and other paved areas to prevent reentrainment, and excess particulate matter from buildings or work areas to prevent particulate from becoming airborne.
e. Landscaping or planting of vegetation.
f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

g. Confining abrasive blasting where possible.
[Rule 62-296.320(4)(c)2., F.A.C., and permit 1290003-013-AC]

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]

10. Statement of Compliance. Permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

> (3) Statement of Compliance.
> (a) For each applicable requirement, the permit shall contain:
> 1. A provision for assessing or monitoring compliance for each unit within the source;
> 2. A requirement that the source 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. Such statements shall be accompanied by certification in accordance with subsection 62-213.420(4), F.A.C., for Title V requirements, with Rule 62-214.350, F.A.C., for Acid Rain requirements, and with Rule 62-296.470, F.A.C., for CAIR Program requirements. Such statement shall be submitted (postmarked) to the Department and EPA:
> a. 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 subsection 62-213.440(2), F.A.C., or by any other applicable requirement; and
> b. 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 this chapter; 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;
> 3. In lieu of requiring a responsible official to individually identify all applicable requirements and specify times of compliance with, noncompliance with, and deviation from each, a provision that a responsible official may use DEP Form No. 62-213.900(2), adopted and incorporated by reference at Rule 62-213.900, F.A.C., as such statement of compliance so long as the responsible official specifically 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.

11. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each 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. [Rule 62-210.370(3), F.A.C.]

12. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee,

Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rule 62-213.205, F.A.C.]

12. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Northwest District office.

Department of Environmental Protection
Northwest District Air Program
160 W Government Street, Suite 308
Pensacola, Florida 32502-5740
Telephone: 850/595-8300; Fax: 850/595-8096

Notification of compliance testing may be submitted by electronic mail to nwdair@dep.state.fl.us. A copy of all compliance related notifications shall be sent to the Northwest District Branch Office in Tallahassee at Carr Building Suite 115, 3800 Commonwealth Blvd., Tallahassee FL 32301.

13. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

14. 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.]

15. Permittee shall comply with all requirements of 40 CFR 61 subpart M, during any asbestos renovation and demolition activities at this facility.
[Rule 62-204.800(10)(b)8., F.A.C.]

16. PSD Emissions Monitoring and Reporting. Permit 1290003-016-AC was based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C., for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., Permittee is subject to the following monitoring, reporting and recordkeeping provisions. The first reporting year starts on January 1, 2012 and the first report is due in 2013 as noted below.

a. Permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is

emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of ten years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C. and consistent with the methods used to estimate projected emissions for this project.

b. Permittee shall report to the Department within 60 days after the end of each calendar year during the ten-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

1) The name, address and telephone number of the owner or operator of the major stationary source;

2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C.;

3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

4) Any other information that the owner or operator wishes to include in the report.

c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

1) For this project, the Department requires the annual reporting of actual VOC and PM/PM_{10} emissions for the following units:

Facility ID No. 1290003	
EU ID No.	**Regulated Emission Unit Description**
011	Steam Boilers 1 and 2
012	Propellant Surface Coating Operations
EU ID No.	**Unregulated Emission Unit Description**
013	Vacuum Distillation portions of the propellant process
014	Fugitive Emissions
015	Process Vessel Loading Losses
017	Propellant Dryer Exhausts
018	Lacquer Preparation Kettle Loading Losses
019	Solvent Storage Tanks
024	Pilot Surface Coating
EU ID No.	**Insignificant Emission Unit Description**
021	Pilot and Batch Dry Propellant Operations
022	Pneumatic Conveyors
023	Propellant Grinder

{*Permitting Note: Appendix PEI - PSD Emissions Tracking has been prepared and attached to this permit to facilitate tracking of post project emissions monitoring.*}

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
011	Steam Boilers 1 and 2

Emissions Unit 011 includes two Cleaver-Brooks steam boilers (Nos. 1 & 2) each with a maximum heat input of 33.45 MMBtu/hr. These boilers burn fuel oil, (No. 2 or No. 6) with a maximum sulfur content of 2.5% by weight, or, alternatively, natural gas. These boilers were initially permitted by construction permit AC65-42779 issued July 9, 1981, and predate requirements of 40 CFR 60 subpart Dc, and Rule 62-296.406, F.A.C. Permit AC65-42779 limited annual SO2 emissions to 245 tons per year.

Emissions are controlled by good operational practice and combustion control.

The requirement for a compliance assurance monitoring plan (CAM) does not apply to this emissions unit since a pollution control device is not installed.

NESHAP 40 CFR 63 subpart DDDDD was struck down after promulgation and is being revised by EPA. When the revised regulation is promulgated it may be applicable to this emissions unit and may require a Title V permit revision.

The following specific conditions apply to the emission unit listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum allowable heat input to each boiler shall not exceed 33.45 MMBtu/hr. This is the heat input at which compliance with standards shall be demonstrated. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and Permit AC65-42779]

A.2. Methods of Operation - (i.e., Fuels). These boilers may utilize fuel oil with a maximum sulfur content not exceeding 2.5% by weight, natural gas, and up to 3,000 gallons per calendar year of on-spec used oil. Fuel oil containing no more than 1% sulfur shall be maintained in readiness and used as necessary to assure compliance with the annual SO_2 limit. [Rules 62-4.160(2), 62-213.410 and 62-213.440(1), F.A.C., and Permit AC65-42779]

A.3. Hours of Operation. This emission unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

A.4. SO_2 emissions shall not exceed 245 tons in any consecutive 12-month period. [Permit AC65-42779]

A.5. Visible emissions (VE) shall not exceed 20% under normal operation except for up to two minutes in any one hour at not more than 40% opacity. [Permit AC65-42779]

Excess Emissions
{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of an NSPS or NESHAP provision.}

A.6. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer durations. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rules 62-210.700(1), (2), (4) and (6), F.A.C.]

Test Methods and Procedures

A.7. Emissions Tests. Visible emissions tests shall be conducted annually in accordance with Common Testing Requirements specified in Subsection C of this permit. [Rule 62-297.310(7), F.A.C.]

A.8. Test Methods. The test method for visible emissions shall be EPA Method 9. The test period shall be for a minimum of 60 minutes. The fuel sulfur content and heat input for each boiler shall be recorded during the visible emissions tests and included in the test report. [Rule 62-297.401(9)(a), F.A.C]

Monitoring of Operations

A.9. The permittee shall demonstrate compliance with the SO_2 standard by keeping and maintaining records of the fuel oil purchases and their sulfur content. These records must be of sufficient detail to determine compliance with the allowable SO_2 emission limitation. The permittee shall make these records available for Department inspection. The records shall demonstrate compliance with the SO_2 standard by:

a. Establishing and maintaining a record of the sulfur content (percent, by weight) of the "as-fired" fuel oil. This record may be maintained either by:

1. Retaining the delivery receipts that are provided by the fuel oil vendor (which show that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or,
2. By "as-fired" sample results provided by the permittee.

b. Establishing and maintaining a record of the sulfur content of the "as-fired" natural gas. This record may be maintained either by:

1. Retaining delivery receipts provided by the natural gas vendor (which indicates that the proper ASTM test methods have been followed and which shall be provided, at a minimum, each time there is a measurable increase in the sulfur content of the natural gas), or

2. By on-site sample results provided by the permittee.

c. Establishing and maintaining a record showing the amount of each fuel fired monthly, the sulfur content (percent, by weight) of each fuel, and calculating cumulative SO_2 emissions based on stoichiometric calculations, i.e.:

Lbs SO_2 = (gal of fuel oil)(lbs oil/gal oil)(conc Sulfur by weight)(2 lbs SO_2/ lbs S)

Permittee shall provide a plan of corrective actions to meet the SO_2 limit in the event:

SO_2 emissions exceed the allowable cumulative monthly SO_2 allowance after September of each year, or

SO_2 emissions exceed the allowable cumulative monthly SO_2 allowance by more than 10% prior to September of each year.

[Rule 62-4.070, F.A.C., and Permit 1290003-002-AV]

Miscellaneous Conditions.

A.10. Used Oil. Burning of on-specification used oil is allowed in this emission unit in accordance with all other conditions of this permit and the following conditions:

a. On-specification Used Oil Emissions Limitations. This emission unit is permitted to burn on-specification used oil. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off specification" used oil shall not be burned. Used oil that fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

b. Quantity Limitation. This emission unit is permitted to burn up to 3,000 gallons of "on-specification" used oil during any calendar year.

c. Testing Requirements. The owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:
Arsenic, cadmium, chromium, lead, total halogens, and flash point.
Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

d. Record Keeping Requirements. The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:

(1) The gallons of on-specification used oil generated and burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)

(2) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period. (This record shall be completed no later than the fifteenth day of the succeeding month.)

(3) Results of the analyses required above.

e. Reporting Requirements. The owner or operator shall submit to the Northwest District office, within 30 days of the end of each calendar quarter, the analytical results and the total amount of on-specification used oil generated and burned during the quarter. The owner or operator shall submit, with the Annual Operation Report form, the analytical results and the total amount of on-specification used oil burned during the previous calendar year.
[Rules 62-4.070(3) and 62-213.440, F.A.C., 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

A.13. This emissions unit is also subject to the Common Testing Requirements of Subsection C of this permit.

Subsection B. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
012	Propellant Surface Coating Operations

This emissions unit includes emissions points associated with propellant surface coating at the North Coater, South Coater and North Sweetie Barrel. The coaters function independently of each other. Each coater operates in mutually exclusive modes: (1) A regulated mode, called VOC mode, where a slurry of inorganic salts suspended in isopropyl alcohol (IPA) is applied. (2) A non-regulated mode, called PM mode, where a dry, particulate, antistatic material is applied to the powder. In PM mode either ground salts suspended in water are applied or no suspended salts are applied. Propellant processing rates may be higher in PM mode than in VOC mode.

The North Coater and South Coater are continuous operations. Dry propellant is introduced into one end of the coater, and a coating of slurry and graphite is applied as the propellant travels through the coater. Heated air is introduced counter-current to the propellant which removes the slurry solvent; and the heated air/solvent is exhausted to a dual section scrubber (venturi and packed tower with demister) which removes PM and 80% or better of the solvent. Ground salts suspended in IPA, or ground salts suspended in water, can be applied to the powder if needed. Heated air is blown into the coater to remove the alcohol or water. Graphite is added to the coater using a feeder. Because not all propellants require coatings, the line can be run either in VOC mode or in PM mode. Graphite is added in both modes.

The North Sweetie Barrel is a batch operation. A batch of propellant is charged to the barrel and graphite is added to control static. A slurry of inorganic salts suspended in IPA is added to the propellant as a surface coating. The barrel is heated with hot water to vaporize the alcohol. A fan pulls air, particulate matter and vaporized alcohol through a venturi scrubber and packed column to remove PM and 80% or better of the alcohol. After the alcohol is evaporated, additional graphite is added to the barrel using a feeder. Because not all propellants require coatings, the line can be run either in VOC mode or in PM mode. Regardless of the level of coating required, VOC is introduced in the coating stream only. This stream is analyzed and the application rate monitored to prevent overload of the control devices. All propellants are treated with a particulate antistatic material whether they have received a surface coating or not. In PM mode the exhaust collection system and the venturi scrubber are used to control fugitive particulate emissions.

Construction permit AC65-109412 issued February 13, 1986, included VOC emission limits of 12.9 lbs/hr and 18 tons/year for the North Coater.

Construction permit AC65-271708 issued July 12, 1995, included VOC emission limits of 32 lbs/hr and 20 tons/year for the South Coater.

Construction permit 1290003-013-AC issued June 16, 2003, authorized an increase in the production rate of propellant at the North Coater to 3,600 lbs/hour and an increase in the allowable emissions of VOC to 32 lbs/hour. The annual limit of 18 tons of VOC remained unchanged.

Construction permit 1290003-016-AC issued January 13, 2011, authorized a propellant production rate at the North Sweetie Barrel of 600 lbs/hour and allowable VOC emissions of 13.4 lbs/hour and 1.1 tons/year.

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

PERFORMANCE RESTRICTIONS

B.1. Permitted Capacity. The maximum allowable propellant production rate for each coating operation is as follows:

Emission Point	Operation in VOC mode	Process Type	Maximum Production Rate in VOC mode	Maximum VOC Input Rate
12.1	North Coater	Continuous	3600 lb/hr	160 lb/hr
12.2	South Coater	Continuous	3600 lb/hr	160 lb/hr
12.3	North Sweetie Barrel	Batch (≥3-hr cycle)	600 lb/hr (1800 lb/batch)	67 lb/hr
	TOTAL		7800 lb/hr	387 lb/hr

Emission Point	Operation in PM mode	Process Type	Maximum Production Rate in PM mode	Maximum VOC Input Rate
12.1	North Coater	Continuous	4000 lb/hr	0 lb/hr
12.2	South Coater	Continuous	4000 lb/hr	0 lb/hr
12.3	North Sweetie Barrel	Batch (≥30 min cycle)	3600 lb/hr (1800 lb/batch)	0 lb/hr
	TOTAL		**11,600 lb/hr**	**0 lb/hr**

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and permits 1290003-013-AC and 1290003-016-AC]

B.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

B.3. Emissions Standards. Combined VOC emissions shall not exceed 77.4 lbs/hr and 39.1.tons in any consecutive 12-month period. VOC emissions from each coater shall not exceed:

Emission Point	Operation	VOC Emission Limit (lb/hr)	Annual VOC Limit (Tons per consecutive 12-months)
12.1	North Coater	32	18
12.2	South Coater	32	20
12.3	North Sweetie Barrel	13.4	1.1
	TOTAL	**77.4**	**39.1**

[Permits AC65-109412, AC65-271708, 1290003-013-AC and 1290003-016-AC]

Test Methods and Procedures

B.4. Emissions Tests. To demonstrate compliance with Specific Condition B.3., Emissions Limitations and Standards, emissions tests shall be conducted annually for VE and VOC on each coater while operating in the VOC mode. The tests shall be conducted in accordance with Common Testing Requirements specified in Subsection C of this permit. The test results shall be used to validate treatment system VOC removal efficiencies. [Rule 62-297.310(7)(a)3, F.A.C.]

B.5. Test Methods. The test method for visible emissions shall be EPA Method 9 incorporated and adopted by reference in Rule 62-297, F.A.C. The test period (VE test) shall be for a minimum of 30 minutes. The test method for VOC shall be EPA Method 25A, incorporated and adopted by reference in Rule 62-297, F.A.C. [Rules 62-297.401(9)(a) and (25)(a), F.A.C.]

Compliance Assurance Monitoring (CAM) Requirements

B6. Monitoring of Operations. The control devices for this emissions unit are subject to the requirements of compliance assurance monitoring specified in Appendix CAM, which is a part of this permit. Monitoring of the production process and scrubber performance shall follow the most recently approved Operation & Maintenance (O&M) and CAM Plan contained in the appendices. The North Coater operates under an approved O&M Plan, while the South Coater and the North Sweetie Barrel operate under their respective CAM Plan. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it is an indication that special compliance testing (in accordance with Rule 62-297.310(7)(b), F.A.C.) may be required upon request by the Department. [Rules 62-4.070, 62-204.800 and 62-213.440(1)(b)1.a., F.A.C., and 40 CFR 64]

Record Keeping and Reporting Requirements

B.7. Test Reports. The permittee shall prepare and submit reports for all required tests in accordance with common testing requirements specified in Subsection C of this permit. For each test run, the report shall also indicate the VOC and VE test. [Rule 62-297.310(8), F.A.C.]

B.8. Operational Data. The permittee shall maintain daily records to document compliance with Specific Conditions B.1., Permitted Capacity, and B.3., Emissions Standards. In addition, recordkeeping for the North Coater production process and scrubber performance shall follow the most recently approved Operations & Maintenance (O&M) Plan. Record keeping requirements for the South Coater and North Sweetie Barrel production process and scrubber performance shall follow the most recently approved CAM Plan. The most recently approved

O&M Plan for the North Coater, the CAM Plan for the South Coater and the CAM Plan for the North Sweetie Barrel are grouped together in Appendix O&M and CAM Plan.

The records shall also include:

(a) Date
(b) Source identification
(c) Pounds propellant production (hourly based on daily totals for each mode)
(d) Pounds VOC usage (daily, monthly and 12-month rolling totals)
(e) Monthly and 12-month rolling total emissions of VOC by source.

Records of all calculations used to determine VOC emissions and supporting documentation (scrubber removal efficiency) shall be maintained.
[Rule 62-4.070, F.A.C.]

B.9. This emissions unit is also subject to the Common Testing Requirements of Subsection C of this permit.

Subsection C. Common Testing Requirements.

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

COMPLIANCE TESTING REQUIREMENTS

C.1. 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.

C.2. Applicable Test Procedures - 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 60 minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and 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.

C.3. 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.

C.4. 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. 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,

3. 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 visible emissions, if there is an applicable standard.

4. 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.

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 in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

RECORDS AND REPORTS

C.5. Test Reports. 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. 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. 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 shall provide the following information.

a. The type, location, and designation of the emissions unit tested.

b. The facility at which the emissions unit is located.

c. The owner or operator of the emissions unit.

d. 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.

e. 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.

f. The date, starting time and end time of the observation.

g. The test procedures used.

h. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.

i. 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.

j. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. 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.]