


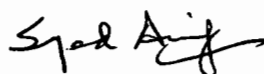
# Florida Department of Environmental Protection

## Memorandum

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TO: Joseph Kahn, Division of Air Resource Management

THROUGH: Trina Vielhauer, Bureau of Air Regulation 

FROM: Syed Arif, New Source Review Section 

DATE: August 31, 2009

SUBJECT: Air Permit No. 0470002-055-AC  
White Springs Agricultural Chemicals, Inc. (PCS)  
Suwannee River/Swift Creek Complex  
BART Project

The Final Permit for this project is attached for your approval and signature, which requires PCS to satisfy the requirements of Best Retrofit Available Technology (BART) determination pursuant to Rule 62-296.340, Florida Administrative Code (F.A.C.). The proposed work will be conducted at the Suwannee River/Swift Creek Complex, which is located in Hamilton County at 15843 SE 78<sup>th</sup> Street, White Springs, Florida.

The Department distributed a Written Notice of Intent to Issue Permit package on July 27, 2009. The applicant published the Public Notice of Intent to Issue in the Lake City Reporter on July 30, 2009. The Department received the proof of publication on July 30, 2009. No comments on the Draft Permit were received from the applicant, public, Environmental Protection Agency or the Northeast District Office.

I recommend your approval of the attached Final Permit for this project.

Attachments

**STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

**NOTICE OF FINAL PERMIT**

In the Matter of an  
Application for Permit by:

White Springs Agricultural Chemicals, Inc. (PCS)  
Post Office Box 300  
White Springs, FL 32096

Air Permit No. 0470002-055-AC  
Facility ID No. 0470002  
Suwannee River/Swift Creek Complex  
BART Project  
Hamilton County, Florida

*Authorized Representative:*

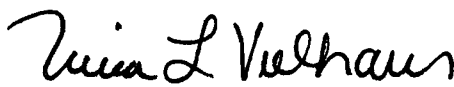
Mr. W. K. Thornton, General Manager

Enclosed is the final air construction (AC) permit for PCS to satisfy the requirements of Best Available Retrofit Technology (BART) determination pursuant to Rule 62-296.340, Florida Administrative Code (F.A.C.). The BART regulation requires a control technology review to establish a BART standard, which is an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by a BART-eligible source. As noted in the attached Final Determination, no changes were made to the draft permit.

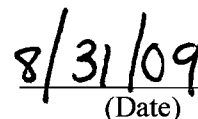
The proposed work will be conducted at the Suwannee River/Swift Creek Complex, which is located in Hamilton County at 15843 SE 78<sup>th</sup> Street, White Springs, Florida. This permit is issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida



Trina L. Vielhauer, Chief  
Bureau of Air Regulation

  
(Date)

**NOTICE OF FINAL PERMIT**

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**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Determination and the Final Permit), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested before the close of business on 8/31/09 to the persons listed below.

- W.K. Thornton, White Springs Agricultural Chemicals, Inc. ([wkthornton@pcsphosphate.com](mailto:wkthornton@pcsphosphate.com))
- B. Ellis, White Springs Agricultural Chemicals, Inc. ([wjellis@pcsphosphate.com](mailto:wjellis@pcsphosphate.com))
- M. Lee, PhD., P.E., Koogler & Associates, Inc. ([mlee@kooglerassociates.com](mailto:mlee@kooglerassociates.com))
- R. Ryan, Holland & Knight LLP ([rory.ryan@hklaw.com](mailto:rory.ryan@hklaw.com))
- R. Moore, DEP-OGC ([ronni.moore@dep.state.fl.us](mailto:ronni.moore@dep.state.fl.us))
- C. Kirts, DEP-NED ([christopher.kirts@dep.state.fl.us](mailto:christopher.kirts@dep.state.fl.us))
- Kathleen Forney, EPA Region 4 ([forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov))
- Catherine Collins, Fish and Wildlife Service ([catherine\\_collins@fws.gov](mailto:catherine_collins@fws.gov))
- Vickie Gibson, DEP-BAR ([victoria.gibson@dep.state.fl.us](mailto:victoria.gibson@dep.state.fl.us)) (for read file)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

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

8/31/09  
(Date)

# Final Determination

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## PERMITTEE

Mr. W. K. Thornton, General Manager  
White Springs Agricultural Chemicals, Inc. (PCS)  
P.O. Box 300  
White Springs, FL 32096

## PERMITTING AUTHORITY

Florida Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation, New Source Review Section  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida 32399-2400

## PROJECT

Air Permit No. 0470002-055-AC  
Suwannee River/Swift Creek Complex  
BART Project

This project is for an air construction (AC) permit for the Suwannee River/Swift Creek Complex to satisfy the requirements of Best Available Retrofit Technology (BART) determination pursuant to Rule 62-296.340, Florida Administrative Code (F.A.C.). The BART regulation requires a control technology review to establish a BART standard, which is an emission limitation based on the degree of reduction achievable through the application of the best system of continuous emission reduction for each pollutant which is emitted by a BART-eligible source. The emission limitation must be established, on a case-by case basis, taking into consideration the technology available, the costs of compliance, the energy and non-air quality environmental impacts of compliance, any pollution control equipment in use or in existence at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology.

The BART-eligible units at this facility include: EU001 - #2 Phosphate Rock Grinder, EU003 - 'A' Defluorinated Phosphate (DFP) Plant, EU004 - 'X' Train (Dical Process), EU008 - 'Y' Train - #1 Monoammonium Phosphate (MAP)/Diammonium Phosphate (DAP) Plant, EU010 - #1 MAP/DAP Storage Building, EU015 - MAP/DAP Shipping and Screening Facility, EU021 - 'C' Sulfuric Acid Plant (SAP), EU022 - 'D' SAP, EU032 - 'Z' Train (#2 MAP/DAP), EU038 - 'B' DFP Plant, EU042 - DFP Feed Prep, EU044 - 'A' and 'B' DFP Coolers, EU054 - Molten Sulfur System, EU062 - DFP Silos, EU064 - Swift Creek Mine Rock Dryer, EU065 - Swift Creek Mine Silos. The Department of Environmental Protection (Department) reviewed the application and made a preliminary determination regarding the BART controls and emissions standards in the revised draft air construction permit. The Department has determined that the existing controls and techniques constitute BART for the eligible BART units at this facility. The revised air construction permit establishes the new BART emissions standards based on installed controls and tested emissions rates.

## PROCESSING SCHEDULE AND RELATED DOCUMENTS

Initial Draft Permit package for BART issued (clerked) on November 13, 2007.  
Applicant filed an extension of time to file a petition for an administrative hearing on November 16, 2007.  
DEP Order granting request for extension of time up to December 30, 2007, clerked on November 30, 2007.  
Comments from PCS received on December 11, 2007.  
Applicant filed for a second extension of time to file a petition for an administrative hearing on January 2, 2008.  
Department denied the second extension of time and provided applicant 15 days to file a petition for an

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White Springs Agricultural Chemicals, Inc  
Suwannee River/Swift Creek Complex

Air Permit No. 0470002-055-AC  
BART Project

## Final Determination

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administrative hearing on January 9, 2008.

Applicant filed a petition for an administrative hearing on January 23, 2008, and requested the petition to be put on hold for further negotiations with the Department.

Environmental Protection Agency (EPA) Region 4 submitted comments on the proposed BART for PCS on February 4, 2008.

Department received final proposal letter from Holland and Knight on January 20, 2009. All issues related to BART draft permit were resolved.

Department withdrew the original draft permit and issued a Revised Draft Permit package for BART (clerked) on July 23, 2009.

Department reissued the Revised Draft Permit package with some minor corrections (clerked) on July 27, 2009.

DEP Order closing file issued on July 27, 2009.

Public Notice published on July 30, 2009.

Proof of Publication of Public Notice received via e-mail on July 30, 2009.

### **NOTICE AND PUBLICATION**

The Department distributed a Written Notice of Intent to Issue Permit package on July 27, 2009. The applicant published the Public Notice of Intent to Issue in The Lake City Reporter on July 30, 2009. The permitting authority received the proof of publication via e-mail on July 30, 2009.

### **COMMENTS**

No comments on the Revised Draft Permit were received from the applicant, Northeast District Office, EPA or the general public.

### **CONCLUSION**

The final action of the Department is to issue the permit as proposed.



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## PERMITTEE

White Springs Agricultural Chemicals, Inc.  
P.O. Box 300  
White Springs, Florida 32096

*Authorized Representative:*

W. K. Thornton, General Manager

Permit No. 0470002-055-AC Suwannee River/Swift Creek Complex BART Project Expiration Date: June 30, 2014
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## PLANT AND LOCATION

White Springs Agricultural Chemicals, Inc. operates the Suwannee River/Swift Creek complex, which processes phosphate rock into several products. The phosphate complex is classified by Standard Industrial Classification (SIC) Code No. 2874. The existing facility is located in Hamilton County at 15843 SE 78th Street in White Springs, Florida. This site is located about 25 kilometers from the Okefenokee National Wilderness Area, which is a PSD Class I Area. The UTM coordinates are Zone 17; 328.3 km E; 3368.8 km N.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). Specifically, this project is subject to Rule 62-296.340, F.A.C., which requires a determination of the Best Available Retrofit Technology (BART) for each BART-eligible source as defined in 40 Code of Federal Regulations (CFR) 51.301. The state rule implements the federal provisions of Appendix Y in 40 CFR Part 51, "Guidelines for BART Determinations Under the Regional Haze Rule". In accordance with Appendix Y in 40 CFR 51, the affected visibility-impairing pollutants include the following: nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), and sulfur dioxide (SO<sub>2</sub>). Pursuant to Rule 62-296.340, F.A.C., the permittee shall install or modify the air pollution control equipment and/or implement the air pollution control measures that are specified by this permit as the Best Available Retrofit Technology (BART).

## EFFECTIVE DATE

Unless otherwise specified by this permit, the BART-eligible sources shall demonstrate compliance with the conditions of this permit no later than December 31, 2013. [Rule 62-296.340(3)(b)2, F.A.C.]

Executed in Tallahassee, Florida

Joseph Kahn, Director  
Division of Air Resource Management

8/31/09  
(Date)

## SECTION 1. GENERAL INFORMATION

### FACILITY DESCRIPTION

White Springs Agricultural Chemicals, Inc. operates an existing phosphate complex, which processes phosphate rock to produce several products at the Suwannee River/Swift Creek Complex (two plants). The facility consists of one rock grinder, two phosphoric acid plants, two defluorinated phosphate (DFP) plants, one dical process, two diammonium phosphate (DAP) plants, one monoammonium (MAP)/DAP storage building, one MAP/DAP screen/shipping building, four sulfuric acid plants (SAP), two phosphoric acid filters, four superphosphoric acid plants, one green superphosphoric acid plant, the Swift Creek Mine rock dryer, and one acid clarification plant. The facility also has storage silos associated with the Swift Creek Mine and the DFP plant. Sulfuric acid is produced on-site by burning elemental sulfur, converting the resulting sulfur dioxide to sulfur trioxide, and absorbing it into a recirculating sulfuric acid solution. Phosphoric acid is made by acidulation of phosphate rock with sulfuric acid. Waste gypsum is produced and stacked. The phosphoric acid is reacted with ammonia to make MAP and DAP. The phosphoric acid is reacted with limestone and other raw materials to make animal feed ingredients.

### FACILITY REGULATORY CLASSIFICATIONS

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source pursuant to Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The facility operates BART-eligible units subject to Rule 62-296.340 (BART), F.A.C.

### BART-ELIGIBLE EMISSIONS UNITS

This permitting action affects the following BART-eligible emissions units (EU) at the plant.

EU No.	Emission Unit Description
001	# 2 Phosphate Rock Grinder
003	'A' DFP Plant
004	X-Train (Dical Process)
008	'Y' Train - #1 DAP Plant
010	#1 MAP/DAP - Storage Building
015	MAP/DAP Shipping and Screening Facility
021	'C' SAP
022	'D' SAP
032	'Z' Train - #2 DAP Plant
038	'B' DFP Plant
042	DFP Feed Prep
044	'A' and 'B' DFP Coolers
054	Molten Sulfur System
062	DFP Silos
064	Swift Creek Mine Rock Dryer
065	Swift Creek Mine Silos

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Florida Department of Environmental Protection. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400 (phone number 850/488-0114).
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Northeast District Office, 7825 Baymeadows Way, Suite B200, Jacksonville, Florida 32256-7577.
3. Appendices: The following Appendices are attached as an enforceable part of this permit:
  - Appendix A. Citation Formats;
  - Appendix B. General Conditions;
  - Appendix C. Standard Testing Requirements; and
  - Appendix D. Best Operational Startup Practices for Sulfuric Acid Plants.
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to the applicable provisions of: Chapter 403, F.S.; Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.; and the applicable parts and subparts of Title 40, Code of Federal Regulations (CFR). Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a revised Title V permit **on or before December 31, 2013**. To apply for a Title V permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]
6. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
7. 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 1<sup>st</sup> of each year. [Rule 62-210.370(3), F.A.C.]



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Particulate-Only Emissions Units Controlled by Baghouses

This subsection addresses the following affected emissions units (EU) and emissions points (EP).

EU No.	EP No.	Emissions Unit Description
001		Phosphate rock grinder controlled by a baghouse
004		X-Train Dical Process
	02	Dedust bin controlled by a baghouse
	03	Shipping area controlled by a baghouse
	04	Limestone silo controlled by a baghouse
	05	Reclaim bin controlled by a baghouse
	06	Material handling controlled by a baghouse
042		DFP Feed Prep
	EP-01	Rock bin controlled by a baghouse
	EP-02	Miscellaneous activity controlled by a baghouse
	EP-03	Lime silo controlled by a baghouse
	EP-04	Lime bin controlled by a baghouse
	EP-06	Soda ash Silo controlled by a baghouse
	EP-07	Soda ash Bin controlled by a baghouse
062		DFP Product Silos
	EP-14	Product Sizing and Crushing Silos
	EP-16	Silo A, silo B, silo C and shipping operations controlled by a baghouse

Pursuant to Rule 62-296.340 (BART), F.A.C., the following standards represent the Best Available Retrofit Technology. These standards apply to each BART-eligible unit and are in addition, and supplement, all other applicable standards.

#### CONTROL EQUIPMENT AND METHODS

1. **Baghouses:** The baghouse control systems shall be operated and maintained to effectively control particulate matter from each of the emissions points identified above for the regulated emissions units. [Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]
2. **Circumvention:** The permittee shall not 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.]

#### EMISSIONS LIMITING AND PERFORMANCE STANDARDS

3. **Opacity Standard:** Visible emissions from each baghouse exhaust shall not exceed 5% opacity as determined by EPA Method 9. [Rule 62-296.340 (BART), F.A.C.; and 40 CFR 60, Appendix A, Method 9]
4. **Baghouse Design Specification:** Bags/filters in each baghouse control system shall be selected based on a design outlet specification of 0.01 grains per actual cubic feet of exhaust. Compliance shall be demonstrated by maintaining the appropriate records. No stack testing is required. [Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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### A. Particulate-Only Emissions Units Controlled by Baghouses

#### EMISSIONS PERFORMANCE TESTING

5. Compliance Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct visible emissions tests on each baghouse exhaust in accordance with EPA Method 9 to demonstrate compliance with the opacity standard. This method is described in 40 CFR 60, Appendix A, which is adopted by reference in Rule 62-204.800, F.A.C. Initial compliance tests shall be conducted during federal fiscal year 2012/2013 and a test report demonstrating compliance shall be submitted before October 1, 2013. [Rules 62-204.800, 62-296.340(3)(b)2 and 62-297.310(7)(a)4, F.A.C.; and 40 CFR 60, Appendix A, Method 9]
6. Test Requirements: The permittee shall comply with the applicable “Common Testing Requirements” specified in Appendix C of this permit, which include test notifications, sampling facilities, test procedures, test frequencies, test records and test reports. [Rule 62-297.310(7)(a)9, F.A.C.]

#### RECORDS

7. Baghouse Records: The permittee shall maintain records on site of the vendor data sheets that demonstrate compliance with the baghouse design outlet specification for the bags/filters. To demonstrate initial compliance, the permittee shall provide copies of such records with the corresponding visible emissions test report that demonstrates initial compliance with the opacity standard. [Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### B. Particulate-Only Emissions Units Controlled by Wet Scrubbers

This subsection addresses the following affected emissions units.

EU No.	Emissions Unit Description
010	No. 1 Storage/Shipping Building controlled by wet scrubber
015	MAP/DAP Shipping Facility controlled by cyclone and wet scrubber
044	'A' and 'B' DFP Coolers controlled by cyclonic wet scrubber
065	Swift Creek Mine Silos and Conveyor controlled by wet scrubber

Pursuant to Rule 62-296.340 (BART), F.A.C., the following standards represent the Best Available Retrofit Technology. These standards apply to each BART-eligible unit and are in addition, and supplement, all other applicable standards.

#### CONTROL EQUIPMENT AND METHODS

1. **Wet Scrubbers:** The wet scrubber controls shall be operated and maintained to effectively control particulate matter from each of the emissions points identified above for the regulated emissions units. [Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]
2. **Circumvention:** The permittee shall not 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.]

#### EMISSIONS LIMITING AND PERFORMANCE STANDARDS

3. **PM Standards:** Particulate matter emissions shall not exceed the following emissions standards as determined by EPA Method 5.

EU No.	Emissions Unit Description	BART Standard
010	No. 1 Storage/Shipping Building	4.7 lb/hour
015	MAP/DAP Shipping Facility	1.46 lb/hour
044	'A' and 'B' DFP Coolers	17.5 lb/hour
065	Swift Creek Mine Silos	6.27 lb/hour

[Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]

#### EMISSIONS COMPLIANCE TESTING

4. **Compliance Tests:** During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct tests on each wet scrubber exhaust in accordance with EPA Method 5 to demonstrate compliance with the PM standard. This method is described in 40 CFR 60, Appendix A, which is adopted by reference in Rule 62-204.800, F.A.C. Initial compliance tests shall be conducted during federal fiscal year 2012/2013 and a test report demonstrating compliance shall be submitted before October 1, 2013.

*{Permitting Note: For the PM BART standard, it may be necessary to develop new excursion levels for the scrubber parameters if subject to a Compliance Assurance Monitoring (CAM) plan. This may require additional compliance testing.}*

[Rules 62-204.800, 62-296.340(3)(b)2, and 62-297.310(7)(a)4, F.A.C.; and 40 CFR 60, Appendix A]

5. **Test Requirements:** The permittee shall comply with the applicable "Common Testing Requirements"

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### B. Particulate-Only Emissions Units Controlled by Wet Scrubbers

requirements specified in Appendix C of this permit, which include test notifications, test procedures, sampling facilities, test frequencies, test records and test reports. Parametric data recorded for the wet scrubber during each test shall be provided with the required test report. [Rule 62-297.310(7)(a)9, F.A.C.]

#### MONITORING

6. Wet Scrubber Parameters: For each wet scrubber, the permittee shall install, operate and maintain devices to continuously monitor the scrubber water flow rate, the pressure drop across the scrubber and the fan amperage. Such devices shall be calibrated, fully functional and in operation before conducting the initial compliance tests.
  - a. For each emissions unit subject to a CAM plan, the scrubber parameters shall be continuously monitored and recorded. For each operating hour, the 1-hour block average shall be computed from at least four data points evenly spaced over each operating hour. This data shall be used to develop new excursion levels for the scrubber parameters in the CAM plan.
  - b. For each emissions unit that is not subject to a CAM plan, the scrubber parameters shall be continuously monitored and manually recorded at least once during each eight-hour block of operation. Alternatively, the parametric data may be continuously recorded. During each required compliance test, such data shall be recorded at 15-minute intervals.

[Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]

#### RECORDS

7. Wet Scrubber Records: The permittee shall maintain records on site of the scrubber water flow rate and the pressure drop across the scrubber. In addition, the following vendor design information shall be maintained on site for each wet scrubber: exhaust flow rate; scrubber water flow rate, scrubber pressure drop, dust inlet loading, dust outlet loading and control efficiency. [Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**C. Emissions Units with Combustion**

This subsection addresses the following affected emissions units (EU).

EU No.	Emission Unit Description
003	'A' DFP Plant
004	X-Train (Dical Process)
008	'Y' Train - #1 DAP Plant
021	'C' SAP
022	'D' SAP
032	'Z' Train - #2 DAP Plant
038	'B' DFP Plant
042	DFP Feed Prep
064	Swift Creek Mine Rock Dryer

Pursuant to Rule 62-296.340 (BART), F.A.C., the following standards represent the Best Available Retrofit Technology. These standards apply to each BART-eligible unit and are in addition, and supplement, all other applicable standards.

**CONTROL EQUIPMENT AND METHODS**

- Wet Scrubbers: The wet scrubber controls shall be operated and maintained to effectively control particulate matter from each of the emissions points identified above for the regulated emissions units. The wet scrubber controls on the 'A' and 'B' DFP Plants (EU-003 and EU-038) shall also be operated and maintained to effectively control sulfur dioxide. [Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]
- Circumvention: The permittee shall not 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.]
- Best Operational Startup Practices for Sulfuric Acid Plants (EU-021 and EU-022): Sulfuric acid plants are authorized for excess emissions from startup for a period of three consecutive hours provided best operational practices to minimize emissions are adhered to in accordance with the agreement titled "Best Operational Startup Practices for Sulfuric Acid Plants" attached to this permit as Appendix D. [Rule 62-210.700, F.A.C., 40 CFR 60.7]
- General Best Operational Practices: Best operational practices to minimize leaks of sulfur dioxide and sulfur trioxide, or other fugitive process emissions shall be adhered to and shall include regular inspections and prompt repair or correction of any leaks or other fugitive emissions. [Rule 62-296.320, F.A.C.]

**EMISSIONS LIMITING AND PERFORMANCE STANDARDS**

- PM and SO<sub>2</sub> Standards: Particulate matter and sulfur dioxide emissions shall not exceed the following emissions standards as determined by EPA Methods 5 and 6/6C, respectively.

EU No.	EP No.	Emissions Unit Description	BART Standards	
			PM	SO <sub>2</sub>
003		'A' DFP Plant with PM and SO <sub>2</sub> controlled by wet scrubbing	12.8 lb/hour	2.0 lb/hour, a
004		X-Train Dical Process		
	EP-01	X-Train Rotary Dryer with PM controlled by wet scrubbing	18 lb/hour (all modes)	b

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**C. Emissions Units with Combustion**

EU No.	EP No.	Emissions Unit Description	BART Standards	
			PM	SO <sub>2</sub>
008	Y-Train No. 1 DAP Plant with PM controlled by wet scrubbing		9.2 lb/hour (all modes)	b
	Y-Train No. 1 MAP Plant with PM controlled by wet scrubbing			
021	'C' Sulfuric Acid Plant with double absorption process		---	3.5 lb/ton AP, c 335.4 lb/hour
022	'D' Sulfuric Acid Plant with double absorption process		---	3.5 lb/ton AP, c 335.4 lb/hour
032	Z-Train No. 2 DAP/MAP Plant			
	EP-01	Main part of DAP process with PM controlled by wet scrubbing	9.2 lb/hour	d
038	'B' DFP Plant with PM and SO <sub>2</sub> controlled by wet scrubbing		12.8 lb/hour	2.0 lb/hour, a
042	DFP Feed Prep			
	EP-05	DFP Feed Prep Dryer with PM controlled by wet scrubber	4.5 lb/hour	b
064	Swift Creek Mine (SCM) Rock Dryer with PM controlled by wet scrubber		17.3 lb/hour	e

- a. In addition to the SO<sub>2</sub> emissions standard, sulfur dioxide emissions from these units shall be limited by firing natural gas as the only fuel.
- b. To control sulfur dioxide emissions, natural gas shall be fired as the primary fuel. If the vendor is unable to provide natural gas, fuel oil with a maximum sulfur content of 1.5% by weight may be fired as a backup fuel.
- c. Sulfur dioxide emissions from the "C" and "D" Sulfuric Acid Plants (EU-021 and EU-022) shall not exceed 3.5 lb/ton of 100% sulfuric acid produced (AP) based on a 24-hour rolling CEMS average. No stack testing is required.
- d. To control sulfur dioxide emissions, natural gas shall be fired as the primary fuel. If the vendor is unable to provide natural gas, fuel oil or on-specification used oil with a maximum sulfur content of 1.0% by weight may be fired as a backup fuel.
- e. To control sulfur dioxide emissions, natural gas shall be fired as the primary fuel. If the vendor is unable to provide natural gas, fuel oil with a maximum sulfur content of 1.3% by weight or on-specification used oil with maximum sulfur content of 1.0% by weight may be fired as backup fuel.

[Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]

6. Opacity Standards: Visible emissions from the 'C' and 'D' Sulfuric Acid Plants (EU-021 and EU-022) shall not exceed 10% opacity as determined by EPA Method 9. Visible Emissions from the Z-Train (EU-032) dryer and cooler shall not exceed 20% opacity. Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. [Rule 62-296.340 (BART), F.A.C.; and 40 CFR 60.83(a)2 and 40 CFR 60, Appendix A, Method 9]
7. NO<sub>x</sub> Emissions Standards: Nitrogen oxides emissions (expressed as NO<sub>2</sub>) from the 'C' and 'D' Sulfuric Acid Plants (EU-021 and EU-022) shall not exceed 0.14 lb/ton of 100% sulfuric acid produced as determined by EPA Method 7E upon request by the Department. Nitrogen oxides emissions from the remaining emissions units shall be controlled by the inherent combustion design of the existing units and the firing of natural gas as the primary fuel. [Rule 62-4.070(3), F.A.C.]

**EMISSIONS COMPLIANCE TESTING**

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### C. Emissions Units with Combustion

8. Compliance Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the permittee shall conduct the following compliance tests.
- The permittee shall conduct visible emissions tests on the 'C' and 'D' Sulfuric Acid Plants (EU-021 and EU-022) in accordance with EPA Method 9 to demonstrate compliance with the opacity standard.
  - The permittee shall conduct tests on each wet scrubber exhaust with a PM standard in accordance with EPA Method 5 to demonstrate compliance with the corresponding standard.
  - The permittee shall conduct tests on each wet scrubber exhaust with a SO<sub>2</sub> standard in accordance with EPA Method 6/6C to demonstrate compliance with the corresponding standard.
  - These methods are described in 40 CFR 60, Appendix A, which is adopted by reference in Rule 62-204.800, F.A.C.
  - Initial compliance tests shall be conducted during federal fiscal year 2012/2013 and a test report demonstrating compliance shall be submitted before October 1, 2013.

*{Permitting Note: For the PM and SO<sub>2</sub> BART standards, it may be necessary to develop new excursion levels for the scrubber parameters if subject to a Compliance Assurance Monitoring (CAM) plan. This may require additional compliance testing.}*

[Rules 62-204.800, 62-296.340(3)(b)2, and 62-297.310(7)(a)4, F.A.C.; and 40 CFR 60, Appendix A]

9. Test Requirements: The permittee shall comply with the applicable "Common Testing Requirements" requirements specified in Appendix C of this permit, which include test notifications, test procedures, sampling facilities, test frequencies, test records and test reports. Parametric data recorded for the wet scrubber during each test shall be provided with the required test report. As necessary, EPA Methods 1 – 4 shall be conducted to support the other test methods. [Rule 62-297.310(7)(a)9, F.A.C.]

### MONITORING

10. Wet Scrubber Parameters: For each wet scrubber, the permittee shall install, operate and maintain devices to continuously monitor the scrubber water flow rate, the pressure drop across the scrubber and the fan amperage. Such devices shall be calibrated, fully functional and in operation before conducting the initial compliance tests. In addition, the permittee shall install, operate and maintain devices to continuously monitor the pH level of the caustic solution in the wet scrubbers for the 'A' and 'B' DFP Plants (EU-003 and EU-038).
- For each emissions unit subject to a CAM plan, the scrubber parameters shall be continuously monitored and recorded. For each operating hour, the 1-hour block average shall be computed from at least four data points evenly spaced over each operating hour. This data shall be used to develop new excursion levels for the scrubber parameters in the CAM plan.
  - For each emissions unit that is not subject to a CAM plan, the scrubber parameters shall be continuously monitored and manually recorded at least once during each eight-hour block of operation. Alternatively, the parametric data may be continuously recorded. During each required compliance test, such data shall be recorded at 15-minute intervals.

[Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]

11. CEMS Compliance Demonstration: The permittee currently operates continuous emissions monitoring systems (CEMS) to determine SO<sub>2</sub> emissions from the "C" and "D" Sulfuric Acid Plants (EU-021 and EU-022). The permittee shall operate and maintain each CEMS to demonstrate compliance with the BART SO<sub>2</sub> standards specified in this permit, which requires the data to also be reduced to 24-hour rolling averages.

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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### C. Emissions Units with Combustion

Each CEMS shall be certified to meet Performance Specification 2 and Performance Specification 3 in Appendix B of 40 CFR 60 and the quality assurance procedures specified in Appendix F of 40 CFR 60. [Rules 62-296.340 (BART) and 62-4.070(3), F.A.C.]

### RECORDS

12. Wet Scrubber Records: The permittee shall maintain records on site of the scrubber water flow rate and the pressure drop across the scrubber. In addition, the following vendor design information shall be maintained on site for each wet scrubber: exhaust flow rate; scrubber water flow rate, scrubber pressure drop, dust inlet loading, dust outlet loading and control efficiency. [Rules 62-4.070(3) and 62-296.340 (BART), F.A.C.]



## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### D. Molten Sulfur System for 'C' and 'D' Sulfuric Acid Plants

This subsection addresses the following affected emissions units.

EU No.	Emissions Unit Description
054	Molten Sulfur System for 'C' and 'D' sulfuric acid plants

Pursuant to Rule 62-296.340 (BART), F.A.C., the following standards represent the Best Available Retrofit Technology. These standards apply to each BART-eligible unit and are in addition, and supplement, all other applicable standards.

#### EMISSIONS LIMITING AND PERFORMANCE STANDARDS

1. Molten Sulfur Facilities – Work Practice Standards: All molten sulfur facilities shall employ, as a minimum, the following practices to minimize the emission of sulfur particulate matter into the atmosphere.
  - a. All molten sulfur transfer shall be through enclosed piping systems where feasible and practical. In user facilities, molten sulfur may be transferred by covered trench or a movable spout which is positioned over a receiving pit. Contact surfaces between movable unloading arms and stationary pipes shall seat effectively around the entire circumference to minimize spillage.
  - b. All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks or railcars shall be paved and curbed within 20 feet of the point of disconnection or transfer to contain any spilled molten sulfur, or shall be provided with non-corrodible drip pans or other secondary containment, positioned to collect spills, that are adequate to contain amounts of sulfur that may escape during routine disconnection, reconnection or operation of the piping system.
  - c. All spilled molten sulfur shall be collected and properly disposed of whenever the containment area is filled to one-half its containment capacity, or monthly, whichever is more frequent. Spills of molten sulfur outside of a containment area, or where subject to vehicular traffic, shall be collected and disposed of as soon as possible, but no later than 24 hours after the spill occurs. Drip pans or other secondary containment shall be cleaned as needed to prevent exceedance of capacity, but at least weekly.
  - d. All vent surfaces shall be cleaned monthly to remove captured particles.
  - e. All owners and operators of molten sulfur storage and handling facilities shall maintain records of spills outside of containment areas and of collection and disposal of spilled sulfur. Such records shall be retained for a minimum of two years and shall be available for inspection by the Department upon request.
  - f. Owners and operators shall establish and implement procedures to minimize spills from any movable loading arm or pipe upon disconnection, reconnection or operation.

[Rules 62-296.340 (BART) and 62-296.411, F.A.C.]

2. Opacity Standard: As determined by EPA Method 9, visible emissions from any emission point in the molten sulfur facility shall not exceed 20% opacity (6-minute average). [Rules 62-296.340 (BART) and 62-296.411, F.A.C.]

#### EMISSIONS PERFORMANCE TESTING

3. Compliance Tests: The permittee shall conduct visible emissions tests every 5 years (prior to operation permit renewal) in accordance with EPA Method 9 to demonstrate compliance with the opacity standard. This method is described in 40 CFR 60, Appendix A, which is adopted by reference in Rule 62-204.800,

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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#### D. Molten Sulfur System for 'C' and 'D' Sulfuric Acid Plants

F.A.C. 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. [Rules 62-204.800, 62-296.340(3)(b)2 and 62-297.310(7)(a)4, F.A.C.; and 40 CFR 60, Appendix A, Method 9]

4. Test Requirements: The permittee shall comply with the applicable "Common Testing Requirements" specified in Appendix C of this permit, which include test notifications, sampling facilities, test procedures, test frequencies, test records and test reports. [Rule 62-297.310(7)(a)9, F.A.C.]

## **SECTION 4. APPENDICES**

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Appendix A. Citation Formats

Appendix B. General Conditions

Appendix C. Standard Testing Requirements

Appendix D. Best Operational Start-Up Practices for Sulfuric Acid Plants

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**SECTION 4. APPENDIX A**  
**CITATION FORMATS**

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The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.

**REFERENCES TO PREVIOUS PERMITTING ACTIONS**

**Old Permit Numbers**

*Example:* Permit No. AC50-123456 or Air Permit No. AO50-123456

*Where:* “AC” identifies the permit as an Air Construction Permit  
“AO” identifies the permit as an Air Operation Permit  
“123456” identifies the specific permit project number

**New Permit Numbers**

*Example:* Permit Nos. 099-2222-001-AC, 099-2222-001-AO, or 099-2222-001-AV

*Where:* “099” represents the specific county ID number in which the project is located  
“2222” represents the specific facility ID number  
“001” identifies the specific permit project  
“AC” identifies the permit as an air construction permit  
“AO” identifies the permit as a minor source air operation permit  
“AV” identifies the permit as a Title V Major Source Air Operation Permit

**PSD Permit Numbers**

*Example:* Permit No. PSD-FL-317

*Where:* “PSD” means issued pursuant to the Prevention of Significant Deterioration of Air Quality  
“FL” means that the permit was issued by the State of Florida  
“317” identifies the specific permit project

**RULE CITATION FORMATS**

**Florida Administrative Code (F.A.C.)**

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

*Means:* Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

**Code of Federal Regulations (CFR)**

*Example:* [40 CFR 60.7]

*Means:* Title 40, Part 60, Section 7

**SECTION 4. APPENDIX B**  
**GENERAL CONDITIONS**

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The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy and records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of non-compliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

**SECTION 4. APPENDIX B**  
**GENERAL CONDITIONS**

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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.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (Not Applicable);
  - b. Determination of Prevention of Significant Deterioration (Not Applicable); and
  - c. Compliance with New Source Performance Standards (Not Applicable).
14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
    - 1) The date, exact place, and time of sampling or measurements;
    - 2) The person responsible for performing the sampling or measurements;
    - 3) The dates analyses were performed;
    - 4) The person responsible for performing the analyses;
    - 5) The analytical techniques or methods used; and
    - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SECTION 4. APPENDIX C**  
**STANDARD TESTING REQUIREMENTS**

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Unless otherwise specified by permit, all emissions units that require testing are subject to the following conditions as applicable.

1. **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.]
2. **Operating Rate During Testing:** Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity as defined below. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the 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.
  - a. *Combustion Turbines.* (Reserved)
  - b. *All Other Sources.* Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.  
[Rule 62-297.310(2), F.A.C.]
3. **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.]
4. **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

**SECTION 4. APPENDIX C**  
**STANDARD TESTING REQUIREMENTS**

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, 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.
- 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.

TABLE 297.310-1 CALIBRATION SCHEDULE			
Item	Minimum 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; maximum 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%

[Rule 62-297.310(4), F.A.C.]



**SECTION 4. APPENDIX C**  
**STANDARD TESTING REQUIREMENTS**

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5. 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.]

6. Required Stack Sampling Facilities: Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any 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.

**SECTION 4. APPENDIX C**  
**STANDARD TESTING REQUIREMENTS**

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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), toeboard, 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 toeboards.

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 dualrail 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.

**SECTION 4. APPENDIX C**  
**STANDARD TESTING REQUIREMENTS**

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7. 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

**SECTION 4. APPENDIX C**  
**STANDARD TESTING REQUIREMENTS**

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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.
- 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., F.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 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.

8. 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.
- 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.

**SECTION 4. APPENDIX C**  
**STANDARD TESTING REQUIREMENTS**

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- 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.]

9. **Stack:** The terms stack and duct are used interchangeably in this rule.

[Rule 62-297.310(9), F.A.C.]

## SECTION 4. APPENDIX D

### BEST OPERATIONAL START-UP PRACTICES FOR SULFURIC ACID PLANTS

1. Only one sulfuric acid plant at a facility should be started up and burning sulfur at a time. There are times when it will be acceptable for more than one sulfuric acid plant to be in the start-up mode at the same time, provided the following condition is met. It is not acceptable to initiate sulfur burning at one sulfuric acid plant when another plant at the same facility is emitting SO<sub>2</sub> at a rate in excess of the emission limits imposed by the permit or rule, as determined by the CEMs emission rates for the immediately preceding 20 minutes.
2. A plant start-up must be at the lowest practicable operating rate, not to exceed 70 percent of the designated operating rate, until the SO<sub>2</sub> monitor indicates compliance. Because production rate is difficult to measure during start-up, if a more appropriate indicator (such as blower pressure, furnace temperature, gas strength, blower speed, number of sulfur guns operating, etc.) can be documented, tested and validated, the Department will accept this in lieu of directly documenting of the suitable list of surrogate parameters to demonstrate and document the reduced operating rate on a plant-by-plant basis. Documentation that the plant is conducting start-up at the reduced rate is the responsibility of the owner or operator.
3. Sulfuric acid plants are authorized to emit excess emissions from start-up for a period of three consecutive hours provided best operational practices, in accordance with this agreement, to minimize emissions are followed. No plant shall be operated (with sulfur as fuel) out of compliance for more than three consecutive hours. Thereafter, the plant shall be shut down (cease burning sulfur) if, as indicated by the continuous emission monitoring system, the plant is not in compliance within three hours of startup. Restart may occur as soon as practicable following any needed repairs or adjustments, provided the corrective action is taken and properly documented.
4. Cold Start-Up Procedures.
  - a. Converter.
    - (1) The inlet and outlet temperature at the first two masses of catalyst shall be sufficiently high to provide immediate ignition when SO<sub>2</sub> enters the masses. In no event shall the inlet temperature to the first mass be less than 800°F or the outlet temperature to the first two masses be less than 700°F. These temperatures are the desired temperatures at the time the use of auxiliary fuel is terminated.
    - (2) The gas stream entering the converter shall contain SO<sub>2</sub> at a level less than normal and sufficiently low to promote catalytic conversion to SO<sub>3</sub>.
  - b. Absorbing Towers.

The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent H<sub>2</sub>SO<sub>4</sub>.
5. Warm Restart.
  - a. Converter

The inlet and outlet temperatures of the first two catalyst masses should be sufficiently high to ensure conversion. One of the following three conditions must be met:

    - (1) The first two catalyst masses inlet and outlet temperatures must be at a minimum of 700°F; or
    - (2) Two of the four inlet and outlet temperatures must be greater than or equal to 800°F; or

## SECTION 4. APPENDIX D

### BEST OPERATIONAL START-UP PRACTICES FOR SULFURIC ACID PLANTS

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- (3) The inlet temperature of the first catalyst must be greater than or equal to 600°F and the outlet temperature greater than or equal to 800°F. Also, the inlet and outlet temperatures of the second catalyst must be greater than or equal to 700°F.

Failure to meet one of the above conditions requires use of cold start-up procedures.

To allow for technologies improvements or individual plant conditions, alternative conditions will be considered by the Department in appropriate cases.

b. Absorbing Towers.

The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent H<sub>2</sub>SO<sub>4</sub>.

## Livingston, Sylvia

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**From:** Livingston, Sylvia  
**Sent:** Monday, August 31, 2009 1:31 PM  
**To:** 'wkthornton@pcsphosphate.com'  
**Cc:** 'wjellis@pcsphosphate.com'; 'mlee@kooglerassociates.com'; 'rory.ryan@hklaw.com'; Moore, Ronni; Kirts, Christopher; 'forney.kathleen@epa.gov'; 'catherine\_collins@fws.gov'; Gibson, Victoria; Arif, Syed; Walker, Elizabeth (AIR)  
**Subject:** White Springs Agricultural Chemicals, Inc - WHITE SPRS AG CHEM-SR/SC CMLPX; 0470002-055-AC  
**Attachments:** 0470002-005-AC\_Signatures.pdf

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

*Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).*

**Click on the following link to access the permit project documents:**

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0470002.055.AC.F\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0470002.055.AC.F_pdf.zip)

**Owner/Company Name:** WHITE SPRINGS AGRICULTURAL CHEMICALS,INC

**Facility Name:** WHITE SPRS AG CHEM-SR/SC CMLPX

**Project Number:** 0470002-055-AC

**Permit Status:** FINAL

**Permit Activity:** CONSTRUCTION/ BART Project

**Facility County:** HAMILTON

**Processor:** Syed Arif

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Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
850/921-9506  
[sylvia.livingston@dep.state.fl.us](mailto:sylvia.livingston@dep.state.fl.us)



## Livingston, Sylvania

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**From:** wkthornton@pcsposphate.com  
**Sent:** Monday, August 31, 2009 2:21 PM  
**To:** Livingston, Sylvania  
**Cc:** sPosey@pcsposphate.com; WJEllis@pcsposphate.com  
**Subject:** Re: White Springs Agricultural Chemicals, Inc - WHITE SPRS AG CHEM-SR/SC CMLPX; 0470002-055-AC  
**Attachments:** 0470002-005-AC\_Signatures.pdf

I am in receipt of the e-mail  
Thanks,  
W.K. Thornton

"Livingston, Sylvania" <Sylvia.Livingston@dep.state.fl.us>

08/31/09 01:34 PM

To <wkthornton@pcsposphate.com>

cc <wjellis@pcsposphate.com>, <mlee@kooglerassociates.com>, <rory.ryan@hklaw.com>, "Moore, Ronni" <Ronni.Moore@dep.state.fl.us>, "Kirts, Christopher" <Christopher.Kirts@dep.state.fl.us>, <forney.kathleen@epa.gov>, <catherine\_collins@fws.gov>, "Gibson, Victoria" <Victoria.Gibson@dep.state.fl.us>, "Arif, Syed" <Syed.Arif@dep.state.fl.us>, "Walker, Elizabeth \A\IR)" <Elizabeth.Walker@dep.state.fl.us>

Subject White Springs Agricultural Chemicals, Inc - WHITE SPRS AG CHEM-SR/SC CMLPX; 0470002-055-AC

Dear Sir/ Madam:

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**Owner/Company Name:** WHITE SPRINGS AGRICULTURAL CHEMICALS,INC

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<http://www.dep.state.fl.us/air/eproducts/apds/default.asp> .

Permit project documents are addressed in this email may require immediate action within a specified time