#### **MEMORANDUM**

TO:

Trina Vielhauer

THRU:

Jeff Koerner

FROM:

Bobby Bull &B

DATE:

August 22, 2006

SUBJECT:

Draft Permit Nos. 0470002-048-AV and 0470002-053-AC

White Springs Agricultural Chemicals, Inc. (PCS)

Suwannee River/Swift Creek Complex

Attached is the revised Draft permit for White Springs. This is a revision of the draft permit issued to White Springs March 4, 2005 which was never published. Since that time we have addressed several issues. CAM applicability was the biggest issue. We have resolved CAM applicability for the facility. Most recently, the Dical and two DAP plants are no longer subject to CAM due to testing and information submitted on the process. The facility still has 3 emission units subject to CAM and the CAM plan will be incorporated into this permit.

I also incorporated conditions from project 0470002-039-AC (PSD-FL-297) as part of 0470002-053-AC. Applicable requirements have been added to the permit and Compliance Plan CP-2 is included to supplement the inclusion of the project.

As part of project 0470002-053-AC, we permanently remove 6 emission units from the active Title V permit and any applicable requirements associated with the units.

Over the last 14 months since the last draft package was issued, we have provided the facility an opportunity to have input on the application. I believe all technical issues have been addressed, and believe there should be no reason the public notice is not published upon issuance.

Attachment

TV/JFK/rlb



## Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

August 22, 2006

W. K. Thornton, General Manager White Springs Agricultural Chemicals, Inc. Post Office Box 300 White Springs, Florida 32096-0300

Re:

Suwannee River/Swift Creek Complex

Project No. 0470002-053-AC (PSD-FL-297B): Revision of Permit No. 0470002-039-AC (PSD-FL-297)

Project No. 0470002-048-AV: Renewal of Title V Air Operation Permit

#### Dear Mr. Thornton:

On January 26, 2005, the Department received your application to permanently shutdown emission units at the Suwannee River/Swift Creek Complex, which is located at at 15843 SE 78<sup>th</sup> Street, White Springs, Hamilton County, Florida. On January 24, 2006, we received an application which required conditions in Permit No. 0470002-039-AC (PSD-FL-297) to be revised. Enclosed are the following related documents: "Technical Evaluation and Preliminary Determination" and "Draft Permit Revision". The "Technical Evaluation and Preliminary Determination" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue the permit. The "Draft Permit Revision" includes the specific changes to permit conditions that the Department intends to make.

On November 11, 2003, the Department received your application to renew the current Title V air operation permit to operate the Suwannee River/Swift Creek Complex. On January 24, 2006, we received additional information to incorporate PSD-FL-297 (0470002-039-AC) into the Title V permit. In addition, projects 0470002-038-AC, 0470002-050-AC, and 0470002-053-AC will be incorporated into the renewal permit. Enclosed are the following related documents: "Statement of Basis" and "DRAFT Title V Permit". The "Statement of Basis" summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue a DRAFT Permit. The proposed "DRAFT Permit" includes specific conditions that regulate the emissions units at this facility.

The Department hereby withdraws its intent to issue Permit Nos. 0470002-053-AC and 0470002-048-AV, which were previously issued on March 4, 2006, and now issues this revised permit package.

The Department is providing its preliminary determination to issue both of these permits at the same time. Enclosed are the following combined documents related to these projects: "Written Notice of Intent to Issue Revised Air Construction Permit/Revised Title V Air Operation Permit" and "Public Notice of Intent to Issue Revised Air Construction Permit/Revised Title V Air Operation Permit". These documents combine both projects so that the revised conditions of the air construction permit can be incorporated into the renewal Title V air operation permit. The "Written Notice" provides important information regarding: the Permitting Authority's intent to issue the permits; the requirements for publishing the Public Notice of the Permitting Authority's intent to issue the air permits; the procedures for submitting comments on the Draft Permits; the requirements for requesting a public meeting; the process for filing a petition for an administrative hearing; and the availability of mediation. The "Public Notice" is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Bobby Bull, at 850-921-9585.

Sincerely,

Trina Vielhauer, Chief Bureau of Air Regulation

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

<ul> <li>SENDER: COMPLETE THIS SECTION</li> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> </ul>	A. Signature  X  Agent  Addressee  B. Received by (Printed Name)  C. Date of Delivery
Attach this card to the back of the mailpiece, or on the front if space permits.  1. Article Addressed to:	D. Is delivery address different from item 1? Yes If YES, enter delivery address below:
W.K. Thornton, General Manager White Springs Agricultural Chemicals, I Post Office Box 300 White Springs, Florida 32096-0300	3. Service Type  Certified Mail
	4. Restricted Delivery? (Extra Fee)
Article Number     (Transfer from service label)	1160 0004 3034 4981
PS Form 3811, February 2004 Domestic F	Return Receipt

4981	U.S. Postal Service™ CERTIFIED MAIL™ RECEIPT (Domestic Mail Only; No Insurance Coverage Provided)		
	For delivery informa	ation visit our website	at www.usps.com <sub>®</sub>
hE 0	W.K. Bornton,	Ceneral Manage	USE
m	Postage	\$	
4000	Certified Fee		<b>-</b>
6	∂ Return Receipt Fee (Endorsement Required)		Postmark Here
7,1,60	Restricted Delivery Fee (Endorsement Required)		
	Total Postage & Fees	\$	
7005	Street, Apt. No.; or PO Box No. Post	General Manage Office Box 300 Florida 32096-	)

## WRITTEN NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

In the Matter of an Application for Title V Air Operation Permit by:

W. K. Thornton General Manager White Springs Agricultural Chemicals, Inc. Post Office Box 300 White Springs, Florida 32096-0300

DRAFT Title V Permit No. 0470002-048-AV (Renewal of Title V Air Operation Permit) Hamilton County, Florida

**Facility Location**: The Suwannee River/Swift Creek Complex is located at 15843 SE 78<sup>th</sup> Street, White Springs, Hamilton County, Florida.

Title V Air Operation Permit Project: The subject of this permit is for the renewal of Title V Air Operation Permit and the incorporation of air construction permits, Nos. 0470002-038-AC, 0470002-039-AC (PSD-FL-297), 0470002-050-AC, and 0470002-053-AC. Permit No. 0470002-038-AC modifies Emissions Unit (EU) No. 004 by adding a baghouse to the materials handling area for additional particulate matter emissions and fugitive dust control. Permit No. 0470002-039-AC (PSD-FL-297) increases production rates for the B and D phosphoric acid plants, acid clarification plant, and C and D superphosphoric acid plants. Permit No. 0470002-050-AC modified the existing Y-Train Fertilizer Plant to MAP with a pipe reactor. Permit No. 0470002-053-AC clarifies the operation of phosphoric acid plant B after construction is complete as authorized in Permit No. 0470002-039-AC (PSD-FL-297). Permit 0470002-053-AC also requires the permanent shutdown of the following EU's: 1) EU No. 006- Suwannee River Mine (SRM) Silos, 2) EU No. 009- SRM East Rock Dryer, 3) EU No. 013- SRM Rock Grinder, 4) EU No. 016 #1 Phosphate Rock Grinder, 5) EU No. 017- SRM Rock Dryer, and 6) EU No. 041- Dical Acid Prep. Additional details of the project are provided in the application and the enclosed "Statement of Basis". The DRAFT Title V Air Operation permit renewal incorporates the revised air construction permit and is a renewal of the initial Title V Air Operation Permit for this facility. The Department hereby withdraws its intent to issue Permit No. 0470002-048-AV, which were previously issued on March 4, 2005, and now issues this revised permit package.

Permitting Authority: Applications for these permitting actions are subject to review in accordance with the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-212 and 62-213 of the Florida Administrative Code (F.A.C.). The proposed projects are not exempt from air permitting requirements and air permits are required for the revised air construction permit and to operate the facility. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making permit determinations regarding these projects. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, in Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114 and facsimile number is 850/922-6979.

**Project Files**: Complete project files are available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. For the Title V Air Operation Permit Project, the complete project file includes the DRAFT Permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT Permit and file electronic comments by visiting the following website: <a href="http://www.dep.state.fil.us/air/eproducts/ards/">http://www.dep.state.fil.us/air/eproducts/ards/</a>. Copies of the complete project files are also available at the Air Resource Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, FL 32256-7590 (Phone Number: 904/807-3300).

Notice of Intent to Issue Air Permits: The Permitting Authority gives notice of its intent to issue the DRAFT Title V Air Operation Permit to the applicant for the projects described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the projects will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. For the DRAFT Title V Air Operation Permit, the Permitting Authority will issue a PROPOSED Permit and subsequent FINAL Permit in accordance with the conditions of the DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Title V Air Operation Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section

## WRITTEN NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments on the DRAFT Title V Air Operation Permit Project: The Permitting Authority will accept written comments concerning the DRAFT Permit for a period of thirty (30) days from the date of publication of the Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address, email or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices at <a href="http://tlhora6.dep.state.fl.us/onw">http://tlhora6.dep.state.fl.us/onw</a> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permit, the Permitting Authority will issue a Revised DRAFT Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decisions may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this "Written Notice of Intent". Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached "Public Notice" or within fourteen (14) days of receipt of this "Written Notice", whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this "Written Notice". Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on these applications have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Objections to the DRAFT Title V Permit: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within sixty (60) days of the expiration of the Administrator's 45 (forty-

## WRITTEN NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT

five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the thirty (30) day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <a href="http://www.epa.gov/region4/air/permits/Florida.htm">http://www.epa.gov/region4/air/permits/Florida.htm</a>.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief Bureau of Air Regulation

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Issue Air Permit" package (including the Written Notice of Intent, the Public Notice, the Statement of Basis, and the DRAFT Title V Air Operation Permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on to the persons listed below.

W. K. Thornton, White Springs\*

The following parties were sent copies of these documents by INTERNET E-mail Memorandum:

Charles Pults, White Springs Pradeep Raval, Consultant, Koogler and Associates Christopher Kirts, DEP-NED Rita Felton-Smith, DEP-NED EPA Region 4

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.

## WRITTEN NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT

In the Matter of an Application for Air Construction Permit by:

W. K. Thornton General Manager White Springs Agricultural Chemicals, Inc. Post Office Box 300 White Springs, Florida 32096-0300 Draft Air Permit No. 0470002-053-AC (PSD-FL-297B) (Permit Modification)
Hamilton County, Florida

Facility Location: The Suwannee River/Swift Creek Complex is located at 15843 SE 78<sup>th</sup> Street, White Springs, Hamilton County, Florida.

Air Construction Permit Project: The air construction permit will recognize six emissions units (EU) at the facility that are not in operation and will be permanently shutdown. This permit will also revise Permit No. 0470002-039-AC (PSD-FL-297) to clarify the use of the filters, scrubbers and stacks from Phosphoric Acid Plant A and C in conjunction with Phosphoric Acid Plant B. Permit No. 0470002-039-AC (PSD-FL-297) was issued on November 22, 2000. This construction permit allows the permittee to increase production at Phosphoric Acid Plant B to 100 ton/hour and 600,000 tons per consecutive 12 months of P2O5 input. The permit also limited fluoride emissions to 1.2 lb/hour and 3.6 tons per consecutive 12 months, based on 0.012 lb/ton of P2O5 input. After construction and commercial operation of B and D plants, the permittee is to permanently shutdown Phosphoric Acid Plants A and C (Specific Condition 20). However, this condition does not state the intended use of Plant A's filter, scrubber and stack and plant C's scrubber and stack. The permittee intends to use portions of Plant A and Plant C to assist with the production of phosphoric acid at plant B. Details of the project are provided in the application and the enclosed "Technical Evaluation and Preliminary Determination". The Department hereby withdraws its intent to issue Permit No. 0470002-053-AC, which were previously issued on March 4, 2005, and now issues this revised permit package.

Permitting Authority: Applications for these permitting actions are subject to review in accordance with the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-212 and 62-213 of the Florida Administrative Code (F.A.C.). The proposed projects are not exempt from air permitting requirements and air permits are required for the revised air construction permit and to operate the facility. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making permit determinations regarding these projects. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, in Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114 and facsimile number is 850/922-6979.

Project Files: Complete project files are available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. For the Revised Air Construction Permit Project, the complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT Permit and file electronic comments by visiting the following website: <a href="http://www.dep.state.fl.us/air/eproducts/ards/">http://www.dep.state.fl.us/air/eproducts/ards/</a>. Copies of the complete project files are also available at the Air Resource Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, FL 32256-7590 (Phone Number: 904/807-3300).

Notice of Intent to Issue Air Permits: The Permitting Authority gives notice of its intent to issue the revised Draft Air Construction Permit to the applicant for the projects described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the projects will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. For the Draft Air Construction Permit, the Permitting Authority will issue a Final Permit in accordance with the conditions of the Draft Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue Revised Air Construction Permit" (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within

## WRITTEN NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT

seven (7) days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments on the Revised Air Construction Permit Project: The Permitting Authority will accept written comments concerning the Revised Draft Air Construction Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 14-day period by the Permitting Authority at the above address, email or facsimile. If written comments result in a significant change to the Draft Permit, the Permitting Authority will issue a revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decisions may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this "Written Notice of Intent". Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached "Public Notice" or within fourteen (14) days of receipt of this "Written Notice", whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this "Written Notice". Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on these applications have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief

Bureau of Air Regulation

## WRITTEN NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT

#### **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this "Written Notice of Intent to Revised Air Construction Permit" package (including the Written Notice of Intent, the Public Notice, the Technical Evaluation and Preliminary Determination, and the Revised Draft Air Construction Permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on to the persons listed below.

W. K. Thornton, White Springs\*

The following parties were sent copies of these documents by INTERNET E-mail Memorandum:

Charles Pults, White Springs Pradeep Raval, Consultant, Koogler and Associates Christopher Kirts, DEP-NED Rita Felton-Smith, DEP-NED EPA Region 4

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.

## PUBLIC NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT/TITLE V AIR OPERATION PERMIT

Florida Department of Environmental Protection
Draft Air Construction Permit No. 0470002-053-AC (PSD-FL-297B)
DRAFT Title V Air Operation Permit No. 0470002-048-AV
Suwannee River/Swift Creek Complex
Hamilton County, Florida

**Applicant**: The applicant for this project is the White Springs Agricultural Chemicals, Inc. The applicant's mailing address is P.O. Box 300, White Springs, FL 32096-0300. The applicant's responsible official is W.K. Thornton, General Manager.

Facility Location: The Suwannee River/Swift Creek Complex is located at 15843 SE 78<sup>th</sup> Street, White Springs, Hamilton County, Florida.

Air Construction Permit Project: The subject of this permit is for the renewal of Title V Air Operation Permit and the incorporation of air construction permits, Nos. 0470002-038-AC, 0470002-039-AC (PSD-FL-297), 0470002-050-AC, and 0470002-053-AC. Permit No. 0470002-038-AC modifies Emissions Unit (EU) No. 004 by adding a baghouse to the materials handling area for additional particulate matter emissions and fugitive dust control. Permit No. 0470002-039-AC (PSD-FL-297) increases production rates for the B and D phosphoric acid plants, acid clarification plant, and C and D superphosphoric acid plants. Permit No. 0470002-050-AC modified the existing Y-Train Fertilizer Plant to MAP with a pipe reactor. Permit No. 0470002-053-AC clarifies the operation of phosphoric acid plant B after construction is complete as authorized in Permit No. 0470002-039-AC (PSD-FL-297). Permit No. 0470002-039-AC (PSD-FL-297) was issued on November 22, 2000. This construction permit allows the permittee to increase production at Phosphoric Acid Plant B to 100 ton/hour and 600,000 tons per consecutive 12 months of P2O5 input. The permit also limited fluoride emissions to 1.2 lb/hour and 3.6 tons per consecutive 12 months, based on 0.012 lb/ton of P2O5 input. After construction and commercial operation of B and D plants, the permittee is to permanently shutdown Phosphoric Acid Plants A and C (Specific Condition 20). However, this condition does not state the intended use of Plant A's filter, scrubber and stack and plant C's scrubber and stack. The permittee intends to use portions of Plant A and Plant C to assist with the production of phosphoric acid at plant B. Permit 0470002-053-AC also requires the permanent shutdown of the following EU's: 1) EU No. 006- Suwannee River Mine (SRM) Silos, 2) EU No. 009- SRM East Rock Dryer, 3) EU No. 013- SRM Rock Grinder, 4) EU No. 016 #1 Phosphate Rock Grinder, 5) EU No. 017- SRM Rock Dryer, and 6) EU No. 041- Dical Acid Prep. Additional details of the project are provided in the application and the enclosed "Statement of Basis". The DRAFT Title V Air Operation permit renewal incorporates the revised air construction permit and is a renewal of the initial Title V Air Operation Permit for this facility." The Department hereby withdraws its intent to issue Permit No. 0470002-053-AC, which was previously issued on March 4, 2005, and now issues this revised permit package.

Title V Air Operation Permit Project: The subject of this permit is for the renewal of Title V Air Operation Permit and the incorporation of air construction permits, No. 0470002-038-AC, No. 0470002-039-AC (PSD-FL-297), 0470002-050-AC and No. 0470002-053-AC. Permit No. 0470002-038-AC modifies Emissions Unit (EU) No. 004 by adding a baghouse to the materials handling area for additional particulate matter emissions and fugitive dust control. Permit No. 0470002-039-AC (PSD-FL-297) increases production rates for the B and D phosphoric acid plants, acid clarification plant, and C and D superphosphoric acid plants. Permit No. 0470002-050-AC modified the existing Y-Train Fertilizer Plant to MAP with a pipe reactor. Permit No. 0470002-053-AC clarifies the operation of phosphoric acid plant B after construction is complete as authorized in Permit No. 0470002-039-AC (PSD-FL-297). Permit 0470002-053-AC also requires the permanent shutdown of the following EU's: 1) EU No. 006- Suwannee River Mine (SRM) Silos, 2) EU No. 009- SRM East Rock Dryer, 3) EU No. 013- SRM Rock Grinder, 4) EU No. 016 #1 Phosphate Rock Grinder, 5) EU No. 017- SRM Rock Dryer, and 6) EU No. 041- Dical Acid Prep. Additional details of the project are provided in the application and the enclosed "Statement of Basis". The DRAFT Title V Air Operation permit renewal incorporates the revised air construction permit and is a renewal of the initial Title V Air Operation Permit for this facility. The Department hereby withdraws its intent to issue Permit No. 0470002-048-AV, which was previously issued on March 4, 2005, and now issues this revised permit package.

Permitting Authority: Applications for these permitting actions are subject to review in accordance with the provisions of Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-212 and 62-213 of the Florida Administrative Code (F.A.C.). The proposed projects are not exempt from air permitting requirements and air permits are required for the revised air construction permit and to operate the facility. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making permit determinations regarding these projects. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, in Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114 and facsimile number is 850/922-6979.

**Project Files:** Complete project files are available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. For

(Public Notice to be Published in the Newspaper)

## PUBLIC NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT/TITLE V AIR OPERATION PERMIT

the Revised Air Construction Permit Project, the complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. For the Title V Air Operation Permit Project, the complete project file includes the DRAFT Permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the Draft Permit documents and file electronic comments by visiting the following website: <a href="http://www.dep.state.fl.us/air/eproducts/ards/">http://www.dep.state.fl.us/air/eproducts/ards/</a>. Copies of the complete project files are also available at the Air Resources Section of the Department's Northeast District Office at 7825 Baymeadows Way, Suite 200B, Jacksonville, FL 32256-7590 (Phone Number: 904/807-3300).

Notice of Intent to Issue Air Permits: The Permitting Authority gives notice of its intent to issue the Revised Draft Air Construction Permit and the DRAFT Title V Air Operation Permit to the applicant for the projects described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the projects will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. For the Draft Air Construction Permit, the Permitting Authority will issue a Final Permit in accordance with the conditions of the Draft Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions. For the DRAFT Title V Air Operation Permit, the Permitting Authority will issue a PROPOSED Permit and subsequent FINAL Permit in accordance with the conditions of the DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Comments on the Revised Air Construction Permit Project: The Permitting Authority will accept written comments concerning the Revised Draft Air Construction Permit for a period of fourteen (14) days from the date of publication of the Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 14-day period by the Permitting Authority at the above address, email or facsimile. If written comments result in a significant change to the Draft Permit, the Permitting Authority will issue a revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Comments on the DRAFT Title V Air Operation Permit Project: The Permitting Authority will accept written comments concerning the DRAFT Permit for a period of thirty (30) days from the date of publication of the Public Notice. Written comments must be post-marked, and all e-mail or facsimile comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address, email or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices at <a href="http://tlhora6.dep.state.fl.us/onw">http://tlhora6.dep.state.fl.us/onw</a> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permit, the Permitting Authority will issue a Revised DRAFT Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decisions may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this "Written Notice of Intent". Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the attached "Public Notice" or within fourteen (14) days of receipt of this "Written Notice", whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when each petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged,

## PUBLIC NOTICE OF INTENT TO ISSUE REVISED AIR CONSTRUCTION PERMIT/TITLE V AIR OPERATION PERMIT

including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this "Written Notice". Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on these applications have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Objections to the DRAFT Title V Permit: Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within sixty (60) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the thirty (30) day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <a href="http://www.epa.gov/region4/air/permits/Florida.htm">http://www.epa.gov/region4/air/permits/Florida.htm</a>.

# TECHNICAL EVALUATION & PRELIMINARY DETERMINATION

#### **PROJECT**

Draft Air Construction Permit No. 0470002-053-AC (PSD-FL-297B)

Clarification of Conditions in PSD-FL-297

And Permanent Shutdown of Emission Units

#### **COUNTY**

Hamilton County, Florida

#### **APPLICANT**

White Springs Agricultural Chemicals, Inc. Suwannee River/Swift Creek Complex ARMS Facility ID No. 0470002

#### PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Air Permitting North



#### 1. GENERAL PROJECT INFORMATION

#### **Facility Description and Location**

White Springs Agricultural Chemicals, Inc. operates the existing Suwannee River/Swift Creek Complex (SIC 2874), which is located 15843 SE 78<sup>th</sup> Street, White Springs, Hamilton County, Florida. Latitude and longitude are 30° 26' 27" North and 82° 47' 16" West, respectively. UTM coordinates of the site are: Zone 17, 328.3 km East and 3368.8 km North. This site is in an area that is currently in attainment (or designated as unclassifiable) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS).

#### Regulatory Categories

Title III: The facility is identified as a major source of hazardous air pollutants (HAP).

<u>Title V</u>: The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

<u>PSD</u>: The facility is a PSD-major facility of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: Some units are subject to a New Source Performance Standard (NSPS) in 40 CFR 60.

<u>NESHAP</u>: Some units are subject to a National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63.

#### **Project Description**

The air construction permit will revise Permit No. 0470002-039-AC (PSD-FL-297) to clarify the use of the filters, scrubbers and stacks from Phosphoric Acid Plant A and C in conjunction with Phosphoric Acid Plant B. Permit No. 0470002-039-AC (PSD-FL-297) was issued on November 22, 2000. This construction permit allows the permittee to increase production at Phosphoric Acid Plant B to 100 ton/hour and 600,000 tons per consecutive 12 months of P2Os input. The permit also limited fluoride emissions to 1.2 lb/hour and 3.6 tons per consecutive 12 months, based on 0.012 lb/ton of P2Os input. After construction and commercial operation of B and D plants, the permittee is to permanently shutdown Phosphoric Acid Plants A and C (Specific Condition 20). However, this condition does not state the intended use of Plant A's filter, scrubber and stack and plant C's scrubber and stack. The permittee intends to use portions of Plant A and Plant C to assist with the production of phosphoric acid at plant B. Below is the revised flow diagram of Plant B incorporating Plants A and C. This permit will also recognize the permanent shutdown of six emissions units (EU) at the facility.

#### **Processing Schedule**

1/26/05: Received request to permanently shutdown six emissions units

1/24/06: Received application for the revisions to project No. 0470002-039-AC (PSD-FL-297).

#### 2. APPLICABLE REGULATIONS

#### **Federal Regulations**

This emission unit is subject to the following federal regulations. However, none of these regulations will be affected by this permit modification.

<u>Part</u>	Subpart	Description
40 CFR 60	T	NSPS for Wet Process Phosphoric Acid Plant
40 CFR 63	AA	NESHAP for Phosphoric Acid Manufacturing Plants

#### State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). In general, this project is subject to the applicable rules and regulations defined in the following Chapters of the F.A.C.

#### TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

<u>Chapter</u>	Description
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements and Federal Regulations Adopted by Reference
62-210	Required Permits, Public Notice, Reports, Circumvention, Excess Emissions, and Forms
62-212	Preconstruction Review
62-213	Operation Permits for Major Sources of Air Pollution
62-296	Emission Limiting Standards
62-297	Testing, Continuous Monitoring, and Alternate Sampling Procedures

#### General PSD Applicability

The Department regulates major air pollution sources in accordance with the Prevention of Significant Deterioration (PSD) program. A pre-construction PSD review is required only in areas currently in attainment with the National Ambient Air Quality Standard (NAAQS) or areas designated as "unclassifiable" for a given pollutant. A new facility is considered "major" with respect to PSD if it emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant, or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories, or
- 5 tons per year of lead.

For new projects at PSD-major facilities, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates defined in Rule 62-210.200, F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant". The applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it must install BACT controls for each "significant" regulated pollutants.

#### **PSD** Applicability for Project

The removal of emissions units from the facility will not result in any increases at the facility. Permit No. 0470002-039-AC (PSD-FL-297) established the PSD emission requirements for Phosphoric Acid Plant B. There will be no changes to the previously established emissions limits. The project is not subject to PSD preconstruction review. Nevertheless, an air construction permit is required to conduct the proposed work.

#### 3. APPLICATION REVIEW

This facility 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, 2 diammonium phosphate (DAP) plants, one monoammonium (MAP)/DAP storage building, one MAP/DAP screen/shipping building, four sulfuric acid plants, two phosphoric acid filters, four superphosphoric acid plants, one green superphosphoric plant, the Swift Creek Mine (SCM) rock dryer, and one acid clarification plant. The facility also has storage silos associated with the Swift Creek Mine and the DFP plant. The permit revision will clarify the operation of Phosphoric Acid plant B (EU 020). The clarifying conditions will define the use of Phosphoric Acid Plant A's filter, scrubber and stack and the B Phosphoric Acid Plant's scrubber and stack once construction on B plant is completed. This permit will also permanently shutdown six emissions units currently not in operation at the Suwannee River and Swift Creek complexes. The emissions units are: 1) EU 006- Suwannee River Mine (SRM) Silos, 2) EU 009- SRM East Rock Dryer, 3) EU 013- SRM Rock Grinder, 4) EU 016-#1 Phosphate Rock Grinder, 5) EU 017- SRM Rock Dryer, and 6) EU 041- Dical Acid Prep.

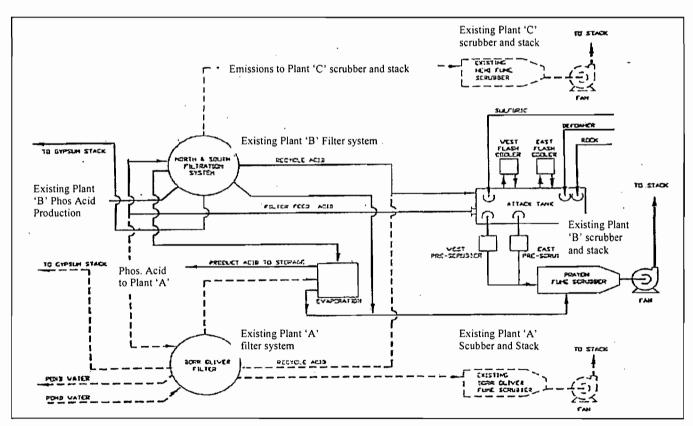
Based on the current Title V permit, EU 020 is regulated under NSPS - 40 CFR 60, Subpart T, Standards of Performance (NSPS) for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)26., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants.

#### Permanent Shutdown of Emissions Units

The permittee requested EUs 006, 009, 013, 016, 017, and 041 be permanently shutdown. Currently, none these units are operating and the permittee has no intention to operate them in the future. The original operating permit or associated air construction permit will no longer be valid for the six emission units. Any future plans to restart any of these units will require the permittee to submit an air construction permit application.

#### Clarification of Existing Conditions in Permit No. 0470002-039-AC (PSD-FL-297)

Permit No. 0470002-039-AC (PSD-FL-297) was issued on November 22, 2000. This construction permit allows the permittee to increase production at Phosphoric Acid Plant B to 100 ton/hour and 600,000 tons per consecutive 12 months of P2Os input. The permit also limited fluoride emissions to 1.2 lb/hour and 3.6 tons per consecutive 12 months, based on 0.012 lb/ton of P2Os input. After construction and commercial operation of B and D plants, the permittee is to permanently shutdown Phosphoric Acid Plants A and C (Specific Condition 20).



However, this condition does not state the intended use of Plant A's filter, scrubber and stack and plant C's scrubber and stack. The permittee intends to use portions of Plant A and Plant C to assist with the production of phosphoric acid at plant B. Above is the revised flow diagram of Plant B incorporating Plants A and C.

Plant A will not be operational. Plant A's filter system will be used when more acid is produced than can be accommodated by the Plant B filter system. The Plant A filter system will not operate independently and will assist Plant B. Fluoride emissions from Plant A filter system will controlled by the existing Plant A scrubber system and will vent through the existing Plant A stack.

Plant C will not be operational. The Plant C scrubber and stack will be used to control emissions from the plant B product produced and filtered from Plant B. Plant C scrubber will operate continuously with the operation of Plant B. Plant C scrubber and stack will essentially become the second scrubber and stack for Plant B (i.e. Plant B scrubber and stack #2) used to control fluoride emissions.

Plants A and C specific conditions will be removed from the existing Title V permit as specified in the permit. Permit No. 0470002-039-AC (PSD-FL-297) will be revised to include the Plant A (filter, scrubber and stack) and C (scrubber and stack) components as part of B Plant. All emissions from stacks A, B, and C shall comply with all emissions standards for Plant B. Fluoride emissions from stacks A, B, and C shall not exceed 1.2 lb/hour and 3.6 tons per consecutive 12 months based on the 0.012 lb/ton of P2O5 input. Initial and annual testing requirements will be established for the testing scenarios required to comply with the emissions standard. Initial testing will require the plant to test stacks B and C to meet the limit once the plant has commenced commercial operation. Within 45 days after initial start up of the Plant A filters, the permittee must test all three stacks to show compliance with the standard. Annual stack tests will require all three stacks be tested to show compliance. Specific Condition 11 will be revised to reflect testing requirements.

#### Conclusion

The six emissions units will be identified as shutdown units. The permittee shall comply with the emission limits established in Permit No. 0470002-039-AC (PSD-FL-297) at all times including when all three stacks are operating or when only B and C are operating. Initial and annual testing will be required to show compliance.

#### 4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with the applicable air pollution regulations. This determination is based on a technical review of the application, the preliminary design, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Bobby Bull is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

#### NOTICE OF FINAL PERMIT REVISION

In the Matter of an Application for Permit by:

Mr. W. K. Thornton, General Manager White Springs Agricultural Chemicals, Inc. Suwannee River/Swift Creek Complex PO Box 300 White Springs, Florida 32096

Suwannee River/Swift Creek Complex Permit No. 0470002-053-AC (PSD-FL-297B) Project- Permit Modification

White Springs Agricultural Chemicals submitted an application to revise several conditions of Permit No. 0470002-039-AC (PSD-FL-297), and permanently shut down six emissions units. These permits regulate Emissions Units at the Suwannee River/Swift Creek Complex, which is located 15843 SE 78<sup>th</sup> Street, White Springs, Hamilton County, Florida.

Enclosed is Final Permit Revision, which modifies the following air construction permit: 0470002-039-AC (PSD-FL-297). A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes 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 thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

(DRAFT)

Joseph Kahn, Acting Director Division of Air Resource Management

#### **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this <u>Notice of Final Permit</u> (including the Final permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on to the persons listed:

W. K. Thornton, White Springs\*
Charles Pults, White Springs
Pradeep Rayal, Koogler and Associates
Chris Kirts, DEP- NED
Rita Felton-Smith, DEP-NED

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) (Date)

#### Permit No. 0470002-039-AC; PSD-FL-297

No further construction is authorized by this action. The following permit conditions are revised as follows. All other conditions are unchanged and the affected emissions units remain subject to the applicable requirements.

#### Specific Condition 20 is hereby revised:

The permittee shall permanently shut down A and C Phosphoric Acid Plants upon commencing commercial operation of the B and D Phosphoric Acid Plants. Stacks A, B, and C shall be subject to all process requirements of Phosphoric Acid Plant B. Phosphoric Acid Plants A and C will no longer produce phosphoric acid independently, however integral portions of both Phosphoric Acid Plants A and C will assist Phosphoric Acid Plant B to filter the phosphoric acid and control fluoride emissions. The Phosphoric Acid Plant A filter system, scrubber and stack will be used with B Phosphoric Acid Plant when additional filtering is required. Phosphoric Acid Plant A components will not operate independently or when Phosphoric Acid Plant B is not operating. Phosphoric Acid Plant C scrubber and stack will be used continuously with Phosphoric Acid Plant B to control emissions from the Phosphoric Acid Plant B production. Phosphoric Acid Plant C components will not operate independently or when Phosphoric Acid Plant B is not operating. The sum total of emissions from all three stacks (A, B, and C) shall comply with the maximum daily average and annual operating rates in condition 3 and fluoride emission rate of 1.2 lb/hr and 3.6 tpy in condition 5 of this permit. Initial and annual testing must be in compliance with this permit. [Application No. 0470002-053-AC (PSD-FL-297B) and Rules 62-4.070(3) and 62-210.200, F.A.C. (Definitions - Potential Emissions)]

#### Specific Condition 11 is hereby revised:

Before this construction permit expires, the subject emission units shall be tested for compliance with the above emission limits in accordance with the requirements of Rule 62-297-310, F.A.C. For the duration of all tests the emission unit shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90% of the maximum operating rate allowed by the permit); in this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.

Phosphoric Acid Plant B: Phosphoric acid plant B is required to initially test both B and C stacks. The six combined runs will be required to be completed in the 5-day period, and may be performed sequentially, provided that each valid run is within 10% of the previously tested capacity. The combined emissions from both B and C stacks shall not exceed 1.2 lb/hour of fluoride. Until filtering commences at the A Phosphoric Acid Filters, annual compliance will be based on emissions from B and C stacks. Within 45 days of start up of the A phosphoric acid filters, the permittee shall conduct stack tests on stacks A, B, and C. The nine combined runs shall be completed in the 5-day period, and may be performed sequentially, provided that each valid run is within 10% of the previously tested capacity. The sum total of emissions from stacks A, B, and C shall not exceed the 1.2 lb/hour of fluoride. Upon startup of the A phosphoric acid filter, the permittee shall conduct annual testing of all three stacks during each federal fiscal year (October 1- September 30) to demonstrate compliance with the emissions standards.

[Rule 62-4.070(3) and 62-297.310, F.A.C.]

#### Emissions Units 006, 009, 013, 016, 017, and 041

The following emission units are permanently shutdown and are no longer permitted to operate. The permittee shall submit an application for an air construction permit prior to restarting any of these units.

<b>Emissions Unit</b>	Description	Operation Status
006	SRM Silos	Permanently Shutdown
009	SRM East Dryer	Permanently Shutdown .
013	SRM Rock Grinder	Permanently Shutdown 🤏
016	#1 SRCC Phosphate Rock	Permanently Shutdown 📉
	Grinder	
017	SRM West Rock Dryer	Permanently Shutdown
041	Dical Acid Prep	Permanently Shutdown:

#### **STATEMENT OF BASIS**

White Spring Agricultural Chemicals, Inc. Suwannee River/Swift Creek Complex Facility ID No. 0470002 Hamilton County

Title V Air Operation Permit Renewal DRAFT Permit No. 0470002-048-AV

This Title V Air Operation Permit Renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. 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.

The subject of this permit is for the renewal of Title V Air Operation Permit and the incorporation of air construction permits, No. 0470002-038-AC, No. 0470002-039-AC, No. 0470002-050-AC, and No. 0470002-053-AC. Permit No. 0470002-038-AC modifies Emissions Unit (EU) No. 004 by adding a baghouse to the materials handling area for additional particulate matter emissions and fugitive dust control. Permit No. 0470002-039-AC (PSD-FL-297) increases production rates for the B and D phosphoric acid plants, acid clarification plant, and C and D superphosphoric acid plants. Permit No. 0470002-050-AC modified the existing Y-Train Fertilizer Plant to MAP with a pipe reactor. Permit No. 0470002-053-AC clarifies the operation of phosphoric acid plant B after construction is complete as authorized in Permit No. 0470002-039-AC (PSD-FL-297). Permit 0470002-053-AC also requires the permanent shutdown of the following EU's: 1) EU No. 006- Suwannee River Mine (SRM) Silos, 2) EU No. 009- SRM East Rock Dryer, 3) EU No. 013-SRM Rock Grinder, 4) EU No. 016 #1 Phosphate Rock Grinder, 5) EU No. 017- SRM Rock Dryer, and 6) EU No. 041- Dical Acid Prep.

This facility 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 DFP feed prep plant one dical process, two diammonium phosphate (DAP) plants, one monoammonium (MAP)/DAP/ granular triple superphosphate (GTSP) storage building, one MAP/DAP screen/shipping building, four sulfuric acid plants, two phosphoric acid filters, four superphosphoric acid plants, one green superphosphoric plant, the Swift Creek Mine (SCM) rock dryer, and one acid clarification plant. The facility also has storage silos associated with the Swift Creek Mine and the DFP plant. CAM applies to the two DFP plants and the DFP feed prep plant for particulate matter, fluoride and sulfur dioxide. CAM does not apply to the two DAP plants since testing was done at the plants to show the pond water scrubbers were not used to control particulate matter, and fluoride emissions are subject to 40 CFR 63 Subpart BB.

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

Based on the Title V Air Operation Permit Renewal application received November 11, 2003 and additional information provided to the Department, this facility is a major source of hazardous air pollutants (HAPs). This facility is a PSD major facility subject to F.A.C.: Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; 62-212.400, F.A.C., Prevention of Significant Deterioration; Rule 62-296.320, F.A.C.

In addition, this facility is subject to the following state and federal rules: Chapter 403, F.S., and F.A.C. Chapters 62-4, 62-210, 62-204, 62-213, 62-296, and 62-297; 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid; 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants; 40 CFR 60, Subpart T, Standards of Performance (NSPS) for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants; 40 CFR 60, Subpart U, Standards of Performance for Phosphate Fertilizer Industry: Superphosphoric Acid Plants; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants; 40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants; 40 CFR 64- Compliance Assurance Monitoring (CAM).

### **APPENDIX CAM**

### **Compliance Assurance Monitoring Requirements**

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

Facility ID No: 0470002

White Springs Agricultural Chemicals, Inc.
Suwannee River/Swift Creek Complex
Facility ID No. 0470002
Hamilton County

Title V Air Operation Permit Renewal **DRAFT Permit No.** 0470002-048-AV

Permitting Authority:
State of Florida

Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-0144 Fax: 850/922-6979

Compliance Authority:

Florida Department of Environmental Protection Northeast District 7825 Baymeadows Way, Suite B-200 Jacksonville, Florida 32056-7590 Telephone: 904-807-3300

Fax: 904-448-4363

## Initial Title V Air Operation Permit **DRAFT Permit No.:** 0470002-048-AV

#### **Table of Contents**

Section			Page Number
Placard Pag	ge		1
A. B.	Facility Des	Emissions Unit ID No(s). and Brief Description(s).	2
II. Facility	-wide Condit	ions	4
III. Emissi	ons Unit(s) a	nd Conditions	
Sub .	E.U. ID	Brief Description	
<u>-section</u>	<u>No.</u>	#0.P1 1 . P 1.G ! 1	7
Α.	001	#2 Phosphate Rock Grinder	7
B.	003	"A" Defluorinated Phosphate (DFP) Plant	9
C.	004	X-Train (Dical process)	11
D.	008	"Y" Train-#1 Diammonium Phosphate (DAP) Plant	15
E.	010	#1 Monoammonium (MAP)/DAPStorage Building	20
F.	015	MAP/DAP Shipping and Screening Facility	22
G.	020	"B" Phosphoric Acid Plant	· 24 29
H.	021	"C" Sulfuric Acid Plant	
I.	022	"D" Sulfuric Acid Plant	34
J.	032	Z-Train (#2 DAP)	39
K.	034	South Phosphoric Acid Filters	44
L.	035	North Phosphoric Acid Filters	46
M.	036	"A" and "B" Superphosphoric Acid Plants	47
N.	038	"B" Defluorinated Phosphate (DFP) Plant	51
O.	039	"C" Auxiliary Boiler	53
P.	040	"D" Auxiliary Boiler	56
Q.	042	Defluorinated Phosphate (DFP) Feed Prep	59
R.	044	"A" and "B" DFP Coolers	63 65
S.	054	Molten Sulfur System	
T.	061	Green Superphosphoric Acid Plant	67 68
U.	062	Defluorinated Phosphate (DFP) Silos	68 70
V.	064	Swift Creek Mine (SCM) Rock Dryer	
W.	065	Swift Creek Mine Silos Mineral Storage and Conveyo	or . 73
37	0.66	System System	7.5
X	066	"E" Sulfuric Acid Plant	75
Y.	067	"F" Sulfuric Acid Plant	. 80

#### Table of Contents - Cont'd

<u>Sub</u>	<u>E.U. ID</u>	Brief Description	Page
-section	No.		
Z.	068	"E" Auxiliary Boiler	85
AA.	069	"D" Phosphoric Acid Plant	88
BB.	070	"C" and "D" Superphosphoric Acid Plants	92
CC.	071	Acid Clarification Plant	96
DD.	072	Molten Sulfur System	97
EE.		Common Conditions - Used Oil/Lead	99
FF.		Common Conditions - F.A.C. Test Requirements	100
GG.		Common Conditions – 40 CFR 63 Subpart AA Monitoring	109
		and Testing Requirements	
HH.		Common Conditions – 40 CFR 63 Subpart BB Monitoring	114
		and Testing Requirements	
II		Common Conditions – F.A.C. Excess Emissions Rules	120

Please Note that Defluorinated Phosphate (DFP) is the new name for Pollyphos, which is a registered trademark of Occidental Chemical and, therefore, can no longer be used by White Springs Agricultural Chemicals.



## Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

Permittee:

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

**DRAFT Permit No.:** 0470002-048-AV

**Facility ID No.: 0470002** 

SIC Nos.: 2874

Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit and incorporate construction permits, No. 0470002-038-AC, issued on July 25, 2000, No. 0470002-039-AC (PSD-FL-297), issued on November 22, 2000, No. 0470002-050-AC, issued on October 13, 2004, and No. 0470002-053-AC (PSD-FL-297B). This existing facility is located at 15843 SE 78<sup>th</sup> Street, White Springs, Hamilton County; UTM coordinates: Zone 17, 328.3 km East and 3368.8 km North; and, Latitude: 30° 26' 27" North and Longitude: 82° 47' 16" West.

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or 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 U-1, List of Unregulated Emissions Units and/or Activities
APPENDIX TV-6, TITLE V CONDITIONS (version dated 03/28/05)
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS
EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT version dated 07/96
Memorandum of Understanding for Sulfuric Acid Plants
CAM Appendix
Alternative Monitoring Plan dated 10/4/04
40 CFR PART 63 Subpart A- Combined General Provisions for Subparts AA and BB - Phosph

40 CFR PART 63 Subpart A- Combined General Provisions for Subparts AA and BB - Phosphoric Acid Manufacturing and Phosphate Fertilizers Production Plants
40 CFR PART 60 Subpart A- General Provisions
Appendix CP-2, Compliance Plan

Effective Date: ARMS Day 55 Renewal Application Due Date: TBA

**Expiration Date: TBA** 

#### DRAFT

Joseph Kahn, P.E., Acting Director Division of Air Resource Management

JK/rlb

"More Protection, Less Process"

Printed on recycled paper.

#### DRAFT Permit No.: 0470002-048-AV

#### Section I. Facility Information.

#### Subsection A. Facility Description.

This facility 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, two phosphoric acid filters, four superphosphoric acid plants, one green superphosphoric plant, the Swift Creek Mine (SCM) rock dryer, and one acid clarification plant. The facility also has storage silos associated with the Swift Creek Mine and the DFP plant.

Based on the Title V Air Operation Permit Renewal application received November 11, 2003 and additional information provided to the Department, this facility is a major source of hazardous air pollutants (HAPs).

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

Sub-	E.U. ID	Brief Description
<u>section</u>	<u>No.</u>	
Α.	001	#2 Phosphate Rock Grinder
B.	003	"A" Defluorinated Phosphate (DFP) Plant
C.	004	X-Train (Dical process)
D.	800	"Y" Train-#1 Diammonium Phosphate (DAP) Plant
E.	010	#1 Monoammonium (MAP)/DAP/ Granular Triple
		Superphosphate (GTSP) Storage Building
F.	015	MAP/DAP Shipping and Screening Facility
G.	020	"B" Phosphoric Acid Plant
H.	021	"C" Sulfuric Acid Plant
I.	022	"D" Sulfuric Acid Plant
J.	032	Z-Train (#2 DAP)
K.	034	South Phosphoric Acid Filters
L.	035	North Phosphoric Acid Filters
M.	036	"A" and "B" Superphosphoric Acid Plants
N.	038	"B" Defluorinated Phosphate (DFP) Plant
O.	039	"C" Auxiliary Boiler
P.	040	"D" Auxiliary Boiler
Q.	042	DFP Feed Prep
R.	044	"A" and "B" DFP Coolers
S.	054	Molten Sulfur System
Τ.	061	Green Superphosphoric Plant
U.	062	Defluorinated Phosphate (DFP) Silos
V.	064	Swift Creek Mine (SCM) Rock Dryer
W.	065	Swift Creek Mine Silos Mineral Storage and Conveyor
		System
X.	066	"E" Sulfuric Acid Plant
Y.	067	"F" Sulfuric Acid Plant
Z.	068	"E" Auxiliary Boiler
AA.	069	"D" Phosphoric Acid Plant
BB.	070	"C" and "D" Superphosphoric Acid Plants
CC.	071	Acid Clarification Plant
DD.	072	Molten Sulfur System for "E" & "F" Sulfuric Acid Plants

White Springs Agricultural Chemicals, Inc. DRAFT Permit No.: 0470002-048-AV Suwannee River/Swift Creek Complex

EE.	 Common Conditions - Used Oil/Lead
FF.	 Common Conditions - F.A.C. Test Requirements'
GG.	 Common Conditions – 40 CFR 63 Subpart AA Monitoring
	and Testing Requirements
HH.	 Common Conditions - 40 CFR 63 Subpart BB Monitoring
	and Testing Requirements
II.	 Common Conditions – F.A.C. Excess Emissions Rules

Permitting Note: The following emissions units are permanently shutdown: EU-006 (SRM silos), EU-009 (SRM East Dryer), EU-013 (SRM Rock Grinder), EU-016 (#1 SRCC Phosphate Rock Grinder, EU-017 (SRM West Rock Dryer), and EU-041 (Dical Acid Prep).

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.

#### These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Changes

Appendix I-1, Insignificant Activities

#### These documents are on file with permitting authority:

Initial Title V Permit Application received 06-13-96

Initial Title V Permit Application Attachments received 03-24-97

Renewal Title V Permit Application received 11-11-03

Additional Information Request Dated 1-9-04

Additional Information Response received 6-10-04

Additional Information Request dated 6-28-04

Additional Information Response received 8-2-04

Additional Information Request dated 9-01-04

Alternative Monitoring Plan issued dated 10-04-04

Additional Information Response received 10-29-04

Additional Information Response received 6-23-05

Additional Information Response received 9-14-05

Additional Information received 1-20-06

Section II. Facility-wide Conditions.

#### The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit. {Permitting note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

DRAFT Permit No.: 0470002-048-AV

- 2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not 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. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 1515
Lanham-Seabrook, MD 20703-1515
Telephone: 301/429-5018

and,

- **b.** The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C. [40 CFR 68]
- 5. <u>Unregulated Emissions Units and/or Activities.</u> 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. <u>Compliance Plan.</u> White Springs Agricultural Chemicals, Inc. shall comply with the Compliance Plan attached at Appendix CP-2. [Rule 62-213.440(2), F.A.C., OGC Case 02-0862]
- 7. Not federally enforceable. 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 (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems. Nothing was deemed necessary and ordered by the Department at this time.

[Rule 62-296.320(1)(a), F.A.C.]

DRAFT Permit No.: 0470002-048-AV

8. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

#### **Facility**

The particulate matter on roadways and any storage piles shall be controlled from entrainment into the air by moisture applications if necessary.

[Rule 62-296.320(4)(c)2., F.A.C.]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C. (see condition 57. of APPENDIX TV-6, TITLE V CONDITIONS.)"

9. When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which is day one. Monthly reports will be defined as the beginning of each month, and quarterly will be defined as the beginning of each calendar quarter.

[Rule 62-213.440, F.A.C.]

10. Startup, Shutdown, Malfunction Plan. The Permittee shall adopt and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction. The plan shall meet the requirements of 40 CFR 63.6(e)(3) including containing a program of corrective action for malfunctioning processes and the air pollution control and monitoring equipment used to comply with the relevant standards of 40 CFR Part 63. The current SSM Plan shall be maintained at the facility and be available for inspection and copying by the Administrator upon request. If the SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), the Permittee shall maintain at the facility each previous (i.e., superseded) version of the SSM Plan, and shall make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 CFR 63.6(e), shall not be deemed to constitute a Part 70 or 71 permit revision. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield.

Note: This condition is applicable to Emissions Units 002, 008, 010, 015, 019, 020, 032, 034, 035, 036, 061, 064, 069, 070, and 071.

[40 CFR 63.6(e)]

- 11. This facility shall comply with all the applicable requirements of 40 CFR Part 63, Subparts AA and BB, National Emissions Standards for Hazardous Air Pollutants Phosphoric Acid Manufacturing and Phosphate Fertilizers Production. This facility shall also comply with the General Provisions of 40 CFR 63 Subpart A, as applicable.
- 12. This facility shall comply with all the applicable requirements of the Alternative Monitoring Plan dated October, 4, 2004.
- 13. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C. [Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51.-of APPENDIX TV-6, TITLE V CONDITIONS.}"

DRAFT Permit No.: 0470002-048-AV

- 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. <u>Submittals.</u> All reports, tests, notifications or other submittals required by this permit shall be submitted to the Department's Northeast District, Air Section:

Florida Department of Environmental Protection Northeast District Office, Air Program 7825 Baymeadows Way, Suite B-200 Jacksonville, Florida 32256-7590 Telephone: 904/807-3300 Fax: 904/448-4363

16. 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

DRAFT Permit No.: 0470002-048-AV

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

001

#2 Phosphate Rock Grinder

#2 Phosphate Rock Grinder controlled by a Bag Collector to control particulate matter. CAM does not apply for particulate matter.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

#### **Essential Potential to Emit (PTE) Parameters**

A.1. <u>Permitted Capacity.</u> The rate shall not exceed the Maximum 12-MRA Hourly Rate = 40 TPH of Phosphate Rock, Dry Basis or Maximum Daily 1-Hour Average Rate = 45 TPH of Phosphate Rock, Dry Basis.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AO24-20269; Permit No. AO24-166153; Permit No. 0470002-034-AC]

A.2. <u>Hours of Operation</u>. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AO24-166153]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

**A.3.** Particulate Matter Emissions shall not exceed 22.03 lbs/hr and 96.5 TPY. [Permit No. AO24-20269; Permit No. AO24-166153]

**A.4.** Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.; Permit No. AO24-20269; Permit No. AO24-166153]

#### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

DRAFT Permit No.: 0470002-048-AV

A.5. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed on request. [Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-90783; Permit No. AO24-166153]

**A.6.** Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. [Rule 62-296. 320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-20269]

#### Common Conditions - F.A.C. Test Requirements

A.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection B. This section addresses the following emissions unit(s).

<u>E.U.</u>

ID No. Brief Description

"A" Defluorinated Phosphate (DFP) Plant

"A" DFP Plant with fluoride and particulate matter emissions are controlled by a Cross-Flow Packed Scrubber (13A). CAM does apply to this emission unit for fluoride, particulate matter and sulfur dioxide.

DRAFT Permit No.: 0470002-048-AV

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

#### Essential Potential to Emit (PTE) Parameters

**B.1.** Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 8.25 tons of product or Maximum Daily 1-Hour Average Rate = 10 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

**B.2.** Methods of Operation. Natural gas shall be the fuel fired in this emissions unit. [Rule 62-213.410, F.A.C.]

**B.3.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

- **B.4.** Total Fluoride. Total Fluoride emissions shall not exceed 2.5 lbs/hr and 10.5 TPY. [Rule 62-296.403(2), F.A.C.; Construction Permit No. AC24-255802]
- **B.5.** Particulate Matter. Particulate Matter Emissions shall not exceed 14.05 lbs/hr and 59.00 TPY. [Rule 62-296.320(4)(a), F.A.C.; Construction Permit No. AC24-255802]
- **B.6.** Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 8.00 lbs/hr and 35.04 TPY. [Construction Permit No. AC24-255802]
- **B.7.** Visible Emissions. Visible Emissions shall not exceed 40% opacity.

DRAFT Permit No.: 0470002-048-AV

[Rule 62-296.320(4)(b)2., F.A.C.; Construction Permit No. AC24-15084 amended 6/28/88; Construction Permit No. AC24-255802]

#### **Compliance Assurance Monitoring (CAM) Requirements**

**B.8.** This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

#### **Excess Emissions**

**B.9.** The Permittee shall meet the Excess Emissions Rules stated in Common Conditions II.1., II.4.-II.6.

#### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**B.10.** Total Fluoride. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually, once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

**B.11.** Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

**B.12.** Sulfur Dioxide. Sulfur Dioxide Emissions stack test method shall be EPA Method 6/6C incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years prior to operation permit renewal.

The 5-year testing frequency is justified by the low emission rate documented in previous emissions tests. The applicant has consistently presented test results that are more than 97% below the applicable standards. Furthermore, in accordance with Rule 62-297.310(7)(a)4.b., F.A.C., an annual Sulfur Dioxide compliance test is required if there is an applicable standard and if the emissions unit has a potential to emit 100 tons per year or greater. The permitted Sulfur Dioxide limit for Emissions Unit Number 003 is 8.00 pounds per hour and 35.04 tons per year.

[Rule 62-297.310(7)(a), F.A.C.; Rule 62-297.401(6), F.A.C.; Air Construction Permit No. 0470002-040-AC; Admin. Correction No. 0470002-035-AV]

**B.13.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

#### Common Conditions - F.A.C. Test Requirements

**B.14.** This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection C. This section addresses the following emissions unit(s).

E.U. ID No. **Brief Description** 004 X-Train (Dical Process)

X-Train (Dical Process) with emissions controlled from EP (Emissions Points) by the following control devices: 1) X-Train with Venturi and Cyclonic Scrubbers, 2) Dedust bin with Baghouse, 3) Shipping area with Baghouse, 4) Limestone silo with Baghouse, 5) Reclaim bin with Baghouse, and 6) Material Handling with Baghouse. CAM does not apply for particulate matter or fluoride.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

#### The following specific conditions apply to the emissions unit(s) listed above:

#### Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 40 tons of product or Maximum Daily 1-Hour Average Rate = 45 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC]

#### **C.2.** Methods of Operation are as follows:

Mode 1 - Dical (dicalcium phosphate) with 18.5% P is produced.

Mode 2 - Dical (dicalcium phosphate) with 21.0% P is produced.

Fuels fired are natural gas or fuel oil with a maximum sulfur content of 1.50%. [Rule 62-213.410, F.A.C.]

C.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

### **Emission Point 01 (X-Train)** Mode 1:

C.4. Total Fluoride. Total Fluoride emissions shall not exceed 0.63 lb/hr and 2.76 TPY. [Rule 62-296.403(2), F.A.C.]

DRAFT Permit No.: 0470002-048-AV

C.5. <u>Particulate Matter</u>. Particulate Matter Emissions shall not exceed 46.11 lbs/hr and 201.96 TPY. [Rule 62-296.320(4)(a), F.A.C.]

C.6. <u>Sulfur Dioxide</u>. Sulfur Dioxide Emissions shall not exceed 11.10 lbs/hr and 48.62 TPY. [From PSD FL-083]

C.7. <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Emission Point 01 (X-Train) Mode 2:

C.8. <u>Total Fluoride</u>. Total Fluoride emissions shall not exceed 0.63 lb/hr and 2.76 TPY. [Rule 62-296.403(2), F.A.C.]

C.9. Particulate Matter. Particulate Matter Emissions shall not exceed 45.11 lbs/hr and 197.62 TPY. [Rule 62-296.320(4)(a), F.A.C.]

**C.10.** Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.10 lbs/hr and 48.62 TPY. [From PSD FL-083]

C.11. <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Emission Point 02 (Dedust) Modes 1 and 2:

**C.12.** <u>Visible Emissions</u>. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

Emission Point 03 (Shipping) Modes 1 and 2:

**C.13.** <u>Visible Emissions</u>. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

Emission Point 04 (Limestone Silo) Modes 1 and 2:

C.14. <u>Visible Emissions</u>. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

Emission Point 05 (Reclaim Bin) Modes 1 and 2:

**C.15.** <u>Visible Emissions</u>. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

Emission Point 06 (Fugitive Dust) Modes 1 and 2:

DRAFT Permit No.: 0470002-048-AV

C.16. Visible Emissions shall not exceed 5% opacity. [Air Construction Permit No. 0470002-038-AC; Rule 62-296.320(4)(b), F.A.C.; and Rule 62-297.620(4)]

#### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

# Emission Point 01 (X-Train) Modes 1 and 2:

C.17. <u>Total Fluoride</u>. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.]

**C.18.** Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.]

- C.19. Sulfur Dioxide. In lieu of stack testing, the Permittee shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually prior to March 1 of each year.
- C.20. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

# **Emission Point 02 (Dedust)**

Modes 1 and 2:

C.21. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

# **Emission Point 03 (Shipping)**

Modes 1 and 2:

C.22. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Emission Point 04 (Limestone Silo) Modes 1 and 2:

C.23. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

DRAFT Permit No.: 0470002-048-AV

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

# Emission Point 05 (Reclaim Bin)

Modes 1 and 2:

C.24. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

# Emission Point 06 (Fugitive Dust)

Modes 1 and 2:

C.25. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

### Compliance Assurance Monitoring (CAM) Requirements

C.26. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

# Common Conditions - On-Spec Used Oil/Lead

C.27. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE.

#### Common Conditions - F.A.C. Test Requirements

C.28. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection D. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

908 Y-Train (No. 1 Diammonium Phosphate (DAP) Plant )

The Y Train DAP/MAP Plant is permitted to produce up to 60 tons per hour of product on a monthly rolling average or 66 tons per hour on a one-hour daily rolling average. The plant is capable of producing fertilizer by five different modes (Mode 1: DAP by Split Flows of 30% & 50% P2O5 phosphoric acid; Mode 2: DAP by 40% P2O5 acid; Mode 3: Triplesuperphosphate (TSP) – no longer produced; Mode 4: MAP by Split Flows of 30% & 50% P2O5 acid; Mode 5: MAP by 40% P2O5 acid; Mode 6: MAP by reacting ammonia and acid in two pipe reactors. The plant consists of the two separate pipe reactors (Mode 6), a tank reactor for the other modes, two pug mills, granulator, dryer, cooler, screens, mills, and other associated process equipment. Particulate matter, fluoride, and sulfur dioxide emissions are controlled by cyclones, venturi and cyclonic scrubbers. Emissions from the pipe reactors are vented to the reactor scrubber for ammonia removal and then to a pond water scrubber for fluoride control. The permittee conducted testing on the pond water scrubbers for CAM applicability. CAM does not apply for this emissions unit. Fluoride emissions are covered by the 40 CFR 63 Subpart BB and testing was done by the permittee to show the pond water scrubbers are not designed for PM control.

DRAFT Permit No.: 0470002-048-AV

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)28., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; 62-212.400, F.A.C., Prevention of Significant Deterioration; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C. The inclusion of project 0470002-050-AC makes EU 008 subject to 40 CFR 60 Subpart V for DAP production}.

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

#### Essential Potential to Emit (PTE) Parameters

#### D.1. Permitted Capacity.

- a. The production rate for Modes 1-2 and 4-6 shall not exceed 60 tons of product per hour based on a 12-month rolling average (12-MRA Hourly Rate Maximum) or 66 tons of product per hour based on a one-hour daily rolling average. The P<sub>2</sub>O<sub>5</sub> feed shall not exceed 36.33 tons per hour.
  - 12-MRA (MRA Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.
- b. The annual production rate for Mode 6 shall not exceed 525,600 tons of product per year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC; Construction Permit No. 0470002-050-AC]

# **D.2.** Methods of Operation are as follows:

Mode 1 - DAP (Diammonium Phosphate) produced by Split Acid (30% & 50% P<sub>2</sub>O<sub>5</sub> INPUT) phosphoric acid.

Mode 2 - DAP (Diammonium Phosphate) produced by 40% P<sub>2</sub>O<sub>5</sub> INPUT phosphoric acid.

Mode 4 - MAP (Monoammonium Phosphate) produced by Split Acid (30% & 50% P<sub>2</sub>O<sub>5</sub> INPUT) phosphoric acid.

Mode 5 - MAP (Monoammonium Phosphate) produced by 40% P<sub>2</sub>O<sub>5</sub> INPUT phosphoric acid.

Mode 6 – MAP produced by reacting ammonia and acid in two pipe reactors.

Only one of the five operating modes shall be in operation at one time. Process fuels fired are natural gas or fuel oil with a maximum sulfur content of 1.5%.

DRAFT Permit No.: 0470002-048-AV

[Rule 62-213.410, F.A.C.; Construction Permit No. 0470002-050-AC]

**D.3.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-050-AC]

#### Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

#### **Emission Point 01**

#### MODES 1-2:

**D.4.a.** Total Fluorides. Total Fluoride emissions shall not exceed 4.17 lb/hr and 18.26 TPY. [Rule 62-296.403(2), F.A.C.]

**D.4.b.** Total Fluorides. Total Fluoride emissions shall not exceed 30 grams/metric ton of equivalent P<sub>2</sub>O<sub>5</sub> feed (0.060 lb/ton), 2.18 lb/hr, and 9.54 TPY.

[40 CFR 63.622(a); 40 CFR 60.222(a); and Air Construction Permit 0470002-050-AC]

#### MODES 4-6:

**D.4.c.** Total Fluorides. Total Fluoride emissions shall not exceed 4.17 lb/hr and 18.26 TPY. [Rule 62-296.403(2), F.A.C.]

**D.4.d.** Total Fluorides. Total Fluoride emissions shall not exceed 30 grams/metric ton of equivalent P<sub>2</sub>O<sub>5</sub> feed (0.060 lb/ton), 2.18 lb/hr, and 9.54 TPY. [40 CFR 63.622(a) and Air Construction Permit 0470002-050-AC]

#### MODES 1-2, 4-5:

**D.5.** Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.10 lbs/hr and 48.62 TPY. [From 11/82 PSD model]

# **ALL MODES:**

**D.6.** <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

# DRAFT Permit No.: 0470002-048-AV

# MODES 1 or 2:

D.7. Particulate Matter. Particulate Matter Emissions shall not exceed 33.33 lbs/hr and 145.99 TPY. [Rule 62-296.320(4)(a), F.A.C.]

#### MODES 4, 5, or 6:

D.8. Particulate Matter. Particulate Matter Emissions shall not exceed 45.15 lbs/hr and 197.74 TPY. [Rule 62-296.320(4)(a), F.A.C., and Air Construction Permit 0470002-050-AC]

#### Operating Requirements

D.9. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition HH.6.(1) or (2). [Rule 62-204.800, F.A.C.; 40 CFR 63.624]

#### Monitoring Requirements

- **D.10.** Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.
- [Rule 62-204.800, F.A.C.; 40 CFR 60.203(a)]
- **D.11.** P<sub>2</sub>O<sub>5</sub> Feed. The Permittee shall maintain a daily record of equivalent P<sub>2</sub>O<sub>5</sub> feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition G.7. and then by proceeding according to Condition G.11.(c)(3). [Rule 62-204.800, F.A.C.; 40 CFR 60.203(b)]
- **D.12.** Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of  $\pm 5$  percent over its operating range. [Rule 62-204.800, F.A.C.; 40 CFR 60.203(c)]
- D.13. The Permittee shall meet the 40 CFR 63 Subpart BB monitoring requirements stated in Common Conditions HH.1 – HH.3.

#### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

## **Emission Point 01 ALL MODES:**

#### **D.14.** Total Fluorides.

(a) The test method shall be EPA Method 13A or EPA Method 13B, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet.

DRAFT Permit No.: 0470002-048-AV

(b) Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401(13), F.A.C.; Construction Permit No. 0470002-050-AC]

**D.15.** Total Fluorides. The Permittee shall meet the 40 CFR 63 Subpart BB performance testing requirements stated in Common Conditions HH.7 – HH.9.

### MODES 1, 2, 4 and 5:

**D.16.** Sulfur Dioxide. In lieu of stack testing, the Permittee shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually prior to March 1 of each year.

#### **ALL MODES:**

**D.17.** Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.; Rule 62-297.401(5), F.A.C.; Construction Permit No. 0470002-050-AC]

**D.18.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401(9), F.A.C.; Construction Permit No. 0470002-050-AC]

# Notification, Recordkeeping, Reporting Requirements

- **D.19.** The Permittee shall meet the 40 CFR 63 Subpart BB notification, recordkeeping, and reporting requirements stated in Common Conditions HH.11. HH.13.
- **D.20.** This emissions unit is subject to specific requirements of 40 CFR 63 Subpart BB, Appendix A to Subpart BB– Applicability to General Provisions to Subpart BB, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:
  - 1) Must comply with all conditions of the Order No. 04-I-AP,
  - 2) Must comply with all applicable requirements of Subparts A and BB,
  - 3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and BB,
  - 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
  - 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

- DRAFT Permit No.: 0470002-048-AV
- 6) All tests shall be submitted to the Department in accordance with Subparts A and BB,
- 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or BB, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart BB; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

#### Compliance Assurance Monitoring (CAM) Requirements

**D.21.** This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

## Common Conditions - On-Spec Used Oil/Lead

**D.22.** This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE.

## **Common Conditions** - F.A.C. Test Requirements

**D.23.** This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

#### Common Conditions - General Provisions of 40 CFR 63

**D.24.** This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

DRAFT Permit No.: 0470002-048-AV

# Subsection E. This section addresses the following emissions unit(s).

# <u>E.U.</u>

# ID No. Brief Description

010 #1 Monoammonium (MAP)/ Diammonium Phosphate (DAP) Storage Building

The #1 Storage & Shipping building. Particulate matter emissions are controlled by a Buffalo wet scrubber when shipping Monocal or Dical or Defluorinated Phosphate (DFP) or DAP (Diammonium Phosphate) or MAP (Monoammonium Phosphate). CAM does not apply for particulate matter for this emission unit.

{Permitting note(s): These emissions units are regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

#### Essential Potential to Emit (PTE) Parameters

- **E.1.** Permitted Capacity. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 175 tons of product or Maximum Daily 1-Hour Average Rate = 195 tons of product for each mode and only one mode at a time.
- 12-MRA (MRA Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Air Construction Permit 0470002-034-AC]

- **E.2.** Methods of Operation are as follows:
  - DAP (Diammonium Phosphate), MAP (Monoammonium Phosphate), Monocal, Dical, DFP (Defluorinated Phosphate) Shipment
- **E.3.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

- **E.4.** Particulate Matter. Particulate Matter Emissions shall not exceed 36.17 lbs/hr and 158.42 TPY. [Rule 62-296.320(4)(a), F.A.C.]
- **E.5.** <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

DRAFT Permit No.: 0470002-048-AV

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**E.6.** Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.; Rule 62-297.401, F.A.C.]

**E.7.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

## **Common Conditions** - F.A.C. Test Requirements

**E.8.** This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection F. This section addresses the following emissions unit(s).

<u>E.U.</u>

ID No. Brief Description

015 MAP/DAP Shipping Facility

MAP (Monoammonium Phosphate) or DAP (Diammonium Phosphate) or Monocal or Dical or Defluorinated Phosphate (DFP) Shipping Facility. The MAP/DAP product is transported by front-end loaders from storage piles located in the MAP/DAP shipping and screening facility area into hoppers where product is sorted and transported to loading silos for railcar or truck loading. Particulate matter emissions from the MAP/DAP shipping and screening facility are controlled by a single cyclone in series with a Venturi wet scrubber. CAM does not apply for particulate matter for this emission unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

#### Essential Potential to Emit (PTE) Parameters

F.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 215 tons of product or Maximum Daily 1-Hour Average Rate = 240 tons of product for each mode and only one mode at a time. The modes are defined as the operating modes for the Dical Plant (EU 004), MAP/DAP Plants (EUs 008 and 032) and the DFP Plants (EUs 003 and 038).

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC; air construction permit 0470002-042-AC]

**F.2.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **F.3.** Particulate Matter Emissions shall not exceed 40.41 lbs/hr and 177.00 TPY. [Rule 62-296.320(4)(a), F.A.C.]
- **F.4.** Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

#### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**F.5.** Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years with a frequency base day of 09/15/94.

DRAFT Permit No.: 0470002-048-AV

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.]

**F.6.** Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually with a frequency base date of 09/15/94. Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

# Common Conditions - F.A.C. Test Requirements

F.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection G. This section addresses the following emissions unit(s).

E.U.

ID No.
020

Brief Description
"B" Phosphoric Acid Plant

"B" Phosphoric Acid Plant with fluoride and particulate matter emissions are continuously controlled by 2 packed wet scrubbers (Stack B and C). When more phosphoric acid is produced than the main "B" filters can accommodate, the additional acid will be filtered through the "A" filter system (Dorr Oliver filter) and emissions will be controlled by the "A" Multi-Staged Wet Cyclone and High Efficiency Wet Scrubber in series (venting through Stack A). "A" filter system will not operate alone. CAM does not apply for fluoride or particulate matter for this emissions unit.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart T, Standards of Performance (NSPS) for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)26., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants.

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

#### **Essential Potential to Emit (PTE) Parameters**

G.1. Permitted Capacity. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 74.99 tons of 100%  $P_2O_5$  input or Maximum Daily 1-Hour Average Rate = 100 tons 100%  $P_2O_5$  input. 12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. The operation rate shall not exceed 600,000 tons during any 12 consecutive months 100%  $P_2O_5$  input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC, and PSD-FL-297]

**G.2.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and PSD-FL-297]

### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

**G.3.** Total Fluorides. Total Fluoride emissions from this emissions unit shall not exceed 0.012 lb/ton of equivalent  $P_2O_5$  feed, 1.20 lb/hr and 3.6 TPY.

[Rule 62-204.800(7)(b)25., F.A.C.; 40 CFR 60.202; 40 CFR 63.602(a), and PSD-FL-297] {Permitting Note: The limits are established in PSD-FL-297 and are more stringent than the MACT Standard.}

White Springs Agricultural Chemicals, Inc.

DRAFT Permit No.: 0470002-048-AV
Suwannee River/Swift Creek Complex

- **G.4.** Particulate Matter. Particulate Matter Emissions shall not exceed 5.0 lbs/hr and 21.9 TPY. [PSD model allocation]
- G.5. <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]
- G.6. Stacks A, B, and C shall be subject to all process requirements of Phosphoric Acid Plant B. Phosphoric Acid Plants A and C will no longer produce phosphoric acid independently, however integral portions of both Phosphoric Acid Plants A and C will assist Phosphoric Acid Plant B to filter the phosphoric acid and control fluoride emissions. The Phosphoric Acid Plant A filter system, scrubber and stack will be used with B Phosphoric Acid Plant when additional filtering is required. Phosphoric Acid Plant A components will not operate independently or when Phosphoric Acid Plant B is not operating. Phosphoric Acid Plant C scrubber and stack will be used continuously with Phosphoric Acid Plant B to control emissions from the Phosphoric Acid Plant B production. Phosphoric Acid Plant C components will not operate independently or when Phosphoric Acid Plant B is not operating. The sum total of emissions from all three stacks (A, B, and C) shall comply with conditions G.3., G.4., and G.5. of this permit. Initial and annual testing must be in compliance with this permit. [Application No. 0470002-053-AC (PSD-FL-297B) and Rules 62-4.070(3) and 62-210.200, F.A.C. (Definitions Potential Emissions)]

#### **Operating Requirements**

G.7. <u>Scrubber Parameter Daily Averages</u>. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition GG.4(1) or (2). [Rule 62-204.800, F.A.C.; 40 CFR 63.604]

#### **Monitoring Requirements**

- G.8. Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of  $\pm 5$  percent over its operating range. [Rule 62-204.800, F.A.C.; 40 CFR 60.203(a)]
- G.9.  $\underline{P_2O_5}$  Feed. The Permittee shall maintain a daily record of equivalent  $P_2O_5$  feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition G.7. and then by proceeding according to Condition G.8. [Rule 62-204.800, F.A.C.; 40 CFR 60.203(b)]
- G.10. <u>Scrubber Pressure Drop.</u> The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range. [Rule 62-204.800, F.A.C.; 40 CFR 60.203(c)]
- **G.11.** The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 GG.4.

DRAFT Permit No.: 0470002-048-AV

### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **G.12.** Total Fluorides. The Permittee shall use the following procedures:
- (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).
- (b) The owner or operator shall determine compliance with the total fluorides standard in § 60.202 as follows:
  - (1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi}\right) I(PK)$$

where:

E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P2O5 feed.

Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).

Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).

N=number of emission points associated with the affected facility.

P=equivalent P2O5 feed rate, Mg/hr (ton/hr).

K=conversion factor, 1000 mg/g (7,000 gr/lb).

- (2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).
- (3) The equivalent P2O5 feed rate (P) shall be computed for each run using the following equation:

P=Mp Rp

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).

Rp=P2O5 content, decimal fraction.

- (i) The accountability system of § 60.203(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.
- (ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P2O5 content (Rp) of the feed. [Rule 62-204.800, F.A.C.; 40 CFR 60.204(a) and (b)]
- **G.13.** Total Fluorides. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5 GG.7.
- **G.14.** Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed once every five years prior to operation permit renewal.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4., F.A.C.; Rule 62-297.401, F.A.C.]

DRAFT Permit No.: 0470002-048-AV

**G.15.** <u>Visible Emissions.</u> Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually, once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

**G.16.** Testing Requirements: The mass emissions from stacks A, B, and C shall comply with the limits in specific conditions G.1. and G.3., G.4., and G.5. Initial testing of stacks B and C are required under 0470002-053-AC (PSD-FL-297) and Compliance Plan CP-2, and annual tests are required until startup of Plant A phosphoric acid filter. Testing of stacks A, B, and C will be required annually upon startup of Plant A phosphoric acid filter and compliance has been met with 0470002-053-AC (PSD-FL-297) and Compliance Plan CP-2. The sum total of emissions from all three stacks (A, B, and C) shall comply with conditions G.3., G.4., and G.5. of this permit. [0470002-053-AC (PSD-FL-297) and Compliance Plan CP-2]

#### Notification, Recordkeeping, Reporting Requirements

- **G.17.** The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. GG.12.
- **G.18.** This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA— Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:
  - 1) Must comply with all conditions of the Order No. 04-I-AP,
  - 2) Must comply with all applicable requirements of Subparts A and AA,
  - 3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,
  - 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
  - 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
  - 6) All tests shall be submitted to the Department in accordance with Subparts A and AA,
  - 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A, 40 CFR 63-Subpart AA, and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

DRAFT Permit No.: 0470002-048-AV

# **Common Conditions** - F.A.C. Test Requirements

G.19. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

# Common Conditions - General Provisions of 40 CFR 63

G.20. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

DRAFT Permit No.: 0470002-048-AV

# Subsection H. This section addresses the following emissions unit(s).

E.U.

ID No.

021

Brief Description

"C" Sulfuric Acid Plant

"C" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO<sub>2</sub>) emissions and has a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

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

#### Essential Potential to Emit (PTE) Parameters

**H.1.** Permitted Capacity. The production rate shall not exceed 2300 TPD, expressed as 100 percent  $H_2SO_4$  or 95.83 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-146402]

H.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-146402; Construction Permit No. 0470002-034-AC]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

- H.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>, 383.33 lbs/hr and 1679.00 TPY. [Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-146402]
- **H.4.** Sulfuric Acid Mist (SAM). SAM emissions, expressed as H<sub>2</sub>SO<sub>4</sub>, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>, 14.38 lbs/hr and 63.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1); Construction Permit No. AC24-146402]

H.5. <u>Visible Emissions</u>. Visible Emissions shall not exceed 10% opacity. [Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2); Construction Permit No. AC24-146402]

### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**H.6.** Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).
- (b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

E = emission rate of  $SO_2$  kg/metric ton (lb/ton) of 100 percent  $H_2SO_4$  produced.

C = concentration of SO<sub>2</sub>, g/dscm (lb/dscf).

Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

 $P = \text{production rate of } 100 \text{ percent } H_2SO_4, \text{ metric ton/hr (ton/hr)}.$ 

K = conversion factor, 1000 g/kg (1.0 lb/lb).

- (2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- (3) Suitable methods shall be used to determine the production rate (P) of 100 percent H<sub>2</sub>SO<sub>4</sub> for each run. Material balance over the production system shall be used to confirm the production rate.
- (4) N/A
- (c) The following may be used as alternatives to the reference methods and procedures specified in this condition:
  - (1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:
    - (i) The integrated technique of Method 3 is used to determine the O<sub>2</sub> concentration and, if required, CO<sub>2</sub> concentration.
    - (ii) The SO<sub>2</sub> emission rate is calculated as described in Condition J.12. substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-146402]

DRAFT Permit No.: 0470002-048-AV

- **H.7.** Sulfuric Acid Mist. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).
- (b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

 $E = \text{emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H}_2SO_4$  produced.

C = concentration of acid mist, g/dscm (lb/dscf).

Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

 $P = \text{production rate of } 100 \text{ percent } H_2SO_4, \text{ metric ton/hr (ton/hr)}.$ 

K = conversion factor, 1000 g/kg (1.0 lb/lb).

- (2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- (3) Suitable methods shall be used to determine the production rate (P) of 100 percent H<sub>2</sub>SO<sub>4</sub> for each run. Material balance over the production system shall be used to confirm the production rate.
- (4) N/A
- (c) The following may be used as alternatives to the reference methods and procedures specified in this condition:
  - (1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:
    - (i) The integrated technique of Method 3 is used to determine the O<sub>2</sub> concentration and, if required, CO<sub>2</sub> concentration.
    - (ii) The acid mist emission rate is calculated as described in Condition H.12. substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-146402]

H.8. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.; Construction Permit No. AC24-146402]

# DRAFT Permit No.: 0470002-048-AV

#### Continuous Monitoring Requirements

H.9. Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO<sub>2</sub>). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.

[40 CFR 60.84(a); Construction Permit No. AC24-146402]

**H.10.** Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

 $CF = k[(1.000 \cdot 0.015r)/(r \cdot s)]$ 

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).

k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.

- r = percentage of sulfur dioxide by volume entering the gas converter.
   Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
- s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under Condition J.9.

[40 CFR 60.84(b)]

H.11. All conversion factors and values under Condition H.10. from which they were computed (i.e., CF, r, and s) shall be recorded.[40 CFR 60.84(c)]

H.12. Sulfur Dioxide Alternative. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO<sub>2</sub> emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO<sub>2</sub>, O<sub>2</sub>, and CO<sub>2</sub> (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO<sub>2</sub> monitor shall be as specified in Condition H.10. The span value for CO<sub>2</sub> (if required) shall be 10 percent and for O<sub>2</sub> shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO<sub>2</sub> emission rate as follows:

 $Es=(CsS)/[0.265\cdot(0.126\%O_2)\cdot(A\%CO_2)]$ 

where:

DRAFT Permit No.: 0470002-048-AV

Es = emission rate of  $SO_2$ , kg/metric ton (lb/ton) of 100 percent of  $H_2SO_4$  produced. Cs = concentration of  $SO_2$ , kg/dscm (lb/dscf).

 $S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent <math>H_2SO_4$  produced.

 $%O_2$  = oxygen concentration, percent dry basis.

A = auxiliary fuel factor,

= 0.00 for no fuel.

= 0.0226 for methane.

= 0.0217 for natural gas.

= 0.0196 for propane.

= 0.0172 for No 2 oil.

= 0.0161 for No 6 oil.

= 0.0148 for coal.

= 0.0126 for coke.

 $%CO_2$  = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations:

Use the following table for such conversions:

From—	To-	Multiply by—
g/scm	kg/scm	10 <sup>-3</sup>
mg/scm	kg/scm	$10^{-6}$
ppm (SO <sub>2</sub> )	kg/scm	$2.660 \times 10^{-6}$
ppm (SO <sub>2</sub> )	lb/scf	$1.660 \times 10^{-7}$

[40 CFR 60.84(d)]

**H.13.** Sulfur Dioxide Excess Emissions. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under Condition H.3.

[40 CFR 60.84(e)]

#### Common Conditions - F.A.C. Test Requirements

H.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection I. This section addresses the following emissions unit(s).

E.U. ID No. **Brief Description** "D" Sulfuric Acid Plant 022

"D" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO<sub>2</sub>) emissions. This emissions unit has a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H. Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10. F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

# The following specific conditions apply to the emissions unit(s) listed above:

#### Essential Potential to Emit (PTE) Parameters

I.1. Permitted Capacity. The production rate shall not exceed 2300 TPD expressed as 100 percent H<sub>2</sub>SO<sub>4</sub> or 95.83 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

I.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

- I.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>, 383.33 lbs/hr and 1679.00 TPY. [Rule 62-204.800(7)(b)10., F.A.C.: 40 CFR 60.82(a)]
- I.4. Sulfuric Acid Mist (SAM). SAM emissions, expressed as H<sub>2</sub>SO<sub>4</sub>, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>, 14.38 lbs/hr and 63.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1)]

I.5. Visible Emissions. Visible Emissions shall not exceed 10% opacity. [Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2)]

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

DRAFT Permit No.: 0470002-048-AV

- **I.6.** Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).
- (b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

E=(COsd)/(PK)

where:

 $E = \text{emission rate of SO}_2 \text{ kg/metric ton (lb/ton) of 100 percent } H_2SO_4 \text{ produced.}$ 

C = concentration of SO<sub>2</sub>, g/dscm (lb/dscf).

Osd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

 $P = \text{production rate of } 100 \text{ percent } H_2SO_4, \text{ metric ton/hr (ton/hr)}.$ 

K = conversion factor, 1000 g/kg (1.0 lb/lb).

- (4) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- (5) Suitable methods shall be used to determine the production rate (P) of 100 percent H<sub>2</sub>SO<sub>4</sub> for each run. Material balance over the production system shall be used to confirm the production rate.
- (4) N/A
- (c) The following may be used as alternatives to the reference methods and procedures specified in this condition:
  - (1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:
    - (iii) The integrated technique of Method 3 is used to determine the O<sub>2</sub> concentration and, if required, CO<sub>2</sub> concentration.
    - (iv) The SO<sub>2</sub> emission rate is calculated as described in Condition I.12. substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.]

- I.7. <u>Sulfuric Acid Mist.</u> The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H<sub>2</sub>SO<sub>4</sub> produced.

C = concentration of acid mist, g/dscm (lb/dscf).

Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

P = production rate of 100 percent  $H_2SO_4$ , metric ton/hr (ton/hr).

K = conversion factor, 1000 g/kg (1.0 lb/lb).

- (6) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- (7) Suitable methods shall be used to determine the production rate (P) of 100 percent H<sub>2</sub>SO<sub>4</sub> for each run. Material balance over the production system shall be used to confirm the production rate.
- (4) N/A
- (c) The following may be used as alternatives to the reference methods and procedures specified in this condition:
  - (1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:
    - (v) The integrated technique of Method 3 is used to determine the O<sub>2</sub> concentration and, if required, CO<sub>2</sub> concentration.
- (vi) The acid mist emission rate is calculated as described in Condition I.12. substituting the acid mist concentration for C as appropriate.

  [40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.]

**I.8.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.]

#### Continuous Monitoring Requirements

**I.9.** Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO<sub>2</sub>). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide. [40 CFR 60.84(a)]

DRAFT Permit No.: 0470002-048-AV

**I.10.** Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

 $CF = k[(1.000 \cdot 0.015r)/(r \cdot s)]$ 

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).

- k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
- r = percentage of sulfur dioxide by volume entering the gas converter.

  Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
- s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under Condition K.9.

[40 CFR 60.84(b)]

- I.11. All conversion factors and values under Condition I.10. from which they were computed (i.e., CF, r, and s) shall be recorded.

  [40 CFR 60.84(c)]
- I.12. Sulfur Dioxide Alternative. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO<sub>2</sub> emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO<sub>2</sub>, O<sub>2</sub>, and CO<sub>2</sub> (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO<sub>2</sub> monitor shall be as specified in Condition I.10. The span value for CO<sub>2</sub> (if required) shall be 10 percent and for O<sub>2</sub> shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO<sub>2</sub> emission rate as follows:

Es= $(CsS)/[0.265\cdot(0.126\%O_2)\cdot(A\%CO_2)]$ 

where:

Es = emission rate of  $SO_2$ , kg/metric ton (lb/ton) of 100 percent of  $H_2SO_4$  produced.

 $Cs = concentration of SO_2$ , kg/dscm (lb/dscf).

 $S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent <math>H_2SO_4$  produced.

 $%O_2$  = oxygen concentration, percent dry basis.

- A = auxiliary fuel factor.
  - = 0.00 for no fuel.
  - = 0.0226 for methane.
  - $\approx 0.0217$  for natural gas.

DRAFT Permit No.: 0470002-048-AV

- = 0.0196 for propane.
- = 0.0172 for No 2 oil.
- = 0.0161 for No 6 oil.
- = 0.0148 for coal.
- = 0.0126 for coke.

 $%CO_2$  = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations:

Use the following table for such conversions:

From—	To	Multiply by-
g/scm	kg/scm	$10^{-3}$
mg/scm	kg/scm	10 <sup>-6</sup>
ppm (SO <sub>2</sub> )	kg/scm	$2.660 \times 10^{-6}$
ppm (SO <sub>2</sub> )	lb/scf	$1.660 \times 10^{-7}$

[40 CFR 60.84(d)]

I.13. <u>Sulfur Dioxide Excess Emissions</u>. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under Condition I.3.

[40 CFR 60.84(e)]

# Common Conditions - F.A.C. Test Requirements

I.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection J. This section addresses the following emissions unit(s).

<u>E.U.</u>	
ID No.	Brief Description
032	Z-Train – No. 2 Diammonium Phosphate (DAP) Plant

Z-Train (#2 DAP Plant) with two emissions points (EP). The first EP is the main part of DAP process which is controlled by several cyclones followed by several cyclonic and venturi scrubbers (EP TG). The cooler (EP C) is controlled by a cyclone and a venturi scrubber. CAM does not apply for this emissions unit. The permittee conducted testing on the pond water scrubbers for CAM applicability for particulate matter. Fluoride emissions are covered by the 40 CFR 63 Subpart BB and testing was done by the permittee to show the pond water scrubbers are not designed for PM control.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)28., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; 62-212.400, F.A.C., Prevention of Significant Deterioration; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.

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

#### **Essential Potential to Emit (PTE) Parameters**

- J.1. <u>Permitted Capacity</u>. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 75 tons of product or Maximum Daily 1-Hour Average Rate = 83 tons of product. The  $P_2O_5$  feed shall not exceed 36.33 Tons per hour.
- 12-MRA (MRA Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-032-AC; Construction Permit No. 0470002-034-AC]

#### **J.2.** Methods of Operation are as follows:

- Mode 1 DAP (Diammonium Phosphate) produced by Split Acid (30% & 50% P<sub>2</sub>O<sub>5</sub> input) phosphoric acid.
- Mode 2 MAP (Monoammonium Phosphate) produced by Split Acid (30% & 50% P<sub>2</sub>O<sub>5</sub> input) phosphoric acid.
- Mode 3 DAP (Diammonium Phosphate) produced by 40% P<sub>2</sub>O<sub>5</sub> input phosphoric acid.
- Mode 4 MAP (Monoammonium Phosphate) produced by 40% P<sub>2</sub>O<sub>5</sub> input phosphoric acid.

Process fuels fired are natural gas, fuel oil with a maximum sulfur content of 1.00%, or on-spec used oil with a maximum sulfur content of 1.00%. [Rule 62-213.410, F.A.C.]

White Springs Agricultural Chemicals, Inc.

DRAFT Permit No.: 0470002-048-AV
Suwannee River/Swift Creek Complex

**J.3.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

## **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

#### **ALL MODES:**

From EP (TG):

- J.4. Total Fluorides. Total Fluoride emissions shall not exceed 30 grams/metric ton of equivalent  $P_2O_5$  feed (0.060 lb/ton); 2.18 lbs/hr and 9.50 TPY. [Rule 62-204.800(7)27., F.A.C.; 40 CFR 60.222, 40 CFR 63.622(a)]
- J.5. Particulate Matter. Particulate Matter Emissions shall not exceed 47.37 lbs/hr and 206.90 TPY. [Rule 62-296.320(4)(a), F.A.C.]
- **J.6.** Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.80 lbs/hr and 51.50 TPY. [Construction Permit No. AC24-56215/ PSD-FL-083]
- J.7. <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

#### From EP (C):

J.8. <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.; Construction Permit No. 0470002-032-AC]

#### **Operating Requirements**

J.9. <u>Scrubber Parameter Daily Averages</u>. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition HH.6.(1) or (2). [Rule 62-204.800, F.A.C.; 40 CFR 63.624]

## **Monitoring Requirements**

J.10. <u>Phosphorus-bearing feed material</u>. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.223(a)]

J.11.  $P_2O_5$  Feed. The Permittee shall maintain a daily record of equivalent  $P_2O_5$  feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition J.9. and then by proceeding according to J.10.

[Rule 62-204.800, F.A.C.; 40 CFR 60.223(b)]

**J.12.** Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range. [Rule 62-204.800, F.A.C.; 40 CFR 60.223(c)]

DRAFT Permit No.: 0470002-048-AV

**J.13.** The Permittee shall meet the 40 CFR 63 Subpart BB monitoring requirements stated in Common Conditions HH.1 – HH.3.

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**ALL MODES:** 

From EP (TG):

- **J.14.** Total Fluorides. (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).
- (b) The owner or operator shall determine compliance with the total fluorides standard in § 60.222 as follows:
  - (1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{ski}\right) / (PK)$$

where:

E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P2O5 feed.

Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).

Osdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).

N=number of emission points associated with the affected facility.

P=equivalent P2O5 feed rate, Mg/hr (ton/hr).

K=conversion factor, 1000 mg/g (7,000 gr/lb).

- (2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).
- (3) The equivalent P2O5 feed rate (P) shall be computed for each run using the following equation:

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).

Rp=P2O5 content, decimal fraction.

- (i) The accountability system of § 60.223(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.
- (ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorported by reference -- see § 60.17) shall be used to determine the P2O5 content (Rp) of the feed.

DRAFT Permit No.: 0470002-048-AV

[Rule 62-204.800, F.A.C.; 40 CFR 60.224; Rule 62-296.403(3), F.A.C.]

- J.15. <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart BB performance testing requirements stated in Common Conditions HH.7 HH.9.
- J.16. <u>Particulate Matter</u>. Particulate Matter emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.; Rule 62-297.401, F.A.C.]

- **J.17.** Sulfur Dioxide. Sulfur Dioxide Emissions in lieu of stack testing shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually prior to March 1 of each year.
- **J.18.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

From EP (C):

**J.19.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

#### Notification, Recordkeeping, Reporting Requirements

- **J.20**. The Permittee shall meet the 40 CFR 63 Subpart BB notification, recordkeeping, and reporting requirements stated in Common Conditions HH.11. –HH.13.
- **J.21.** This emissions unit is subject to specific requirements of 40 CFR 63 Subpart BB, Appendix A to Subpart BB Applicability to General Provisions to Subpart BB, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:
  - 1) Must comply with all conditions of the Order No. 04-I-AP,
  - 2) Must comply with all applicable requirements of Subparts A and BB,
  - 3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and BB,
  - 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
  - 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

- DRAFT Permit No.: 0470002-048-AV
- 6) All tests shall be submitted to the Department in accordance with Subparts A and BB,
- 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or BB, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart BB; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

## Exemption from New Source Performance Standards.

J.22. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart BB. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions J.9., J.10, J.13., and J.15. have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart BB, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V is no longer valid.}
[40 CFR 63.631]

# Compliance Assurance Monitoring (CAM) Requirements

J.23. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

#### Common Conditions - On-Spec Used Oil/Lead

J.24. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE.

# Common Conditions - F.A.C. Test Requirements

J.25. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

# Common Conditions - General Provisions of 40 CFR 63

J.26. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

DRAFT Permit No.: 0470002-048-AV

# Subsection K. This section addresses the following emissions unit(s).

E.U. ID No.

**Brief Description** 

034

South Phosphoric Acid Filters

The South Phosphoric Acid Filters has fluoride emissions which are controlled by a counter-current packed wet scrubber (D). Also, "A" & "B" Superphosphoric Acid (SPA) Plants and storage tanks are controlled by this scrubber. The filter aid and filter media emit particulate matter, and are controlled by a common bag collector (EF). CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

# Essential Potential to Emit (PTE) Parameters

**K.1.** Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 44.68 tons of  $P_2O_5$  input or Maximum Daily 1-Hour Average Rate = 50 tons  $P_2O_5$  input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

**K.2.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**K.3.** From stack (D), Fluoride emissions shall not exceed 0.05 lb FL per ton P<sub>2</sub>O<sub>5</sub> INPUT; 2.23 lbs/hr and 9.80 TPY.

[Rule 62-210.200(42), F.A.C.; BACT]

**K.4.** From stack (EF), Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

# Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**K.5.** From stack (D), Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually during the federal fiscal year (October 1- September 30).

[Rule 62-297.401, F.A.C.]

K.6. From stack (EF), Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually during the federal fiscal year

DRAFT Permit No.: 0470002-048-AV

(October 1- September 30). [Rule 62-297.401, F.A.C.]

# **Common Conditions** - F.A.C. Test Requirements

K.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection L. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

North Phosphoric Acid Filters consists of 6 rotary drum filters to filter 48% P<sub>2</sub>O<sub>5</sub>

Phosphoric Acid

North Phosphoric Acid Filters and storage tanks emit fluoride emissions, and are controlled by a counter-current packed wet scrubber (B). CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

# The following specific conditions apply to the emissions unit(s) listed above:

# Essential Potential to Emit (PTE) Parameters

L.1. <u>Permitted Capacity.</u> The rate shall not exceed the Maximum 12-MRA Hourly Rate = 92.8 tons of  $P_2O_5$  input or Maximum Daily 1-Hour Average Rate = 102.1 tons  $P_2O_5$  input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

**L.2.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**L.3.** Fluoride emissions shall not exceed 1.86 lbs/hr and 8.15 TPY. [Permit #AC24-188960]

#### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

L.4. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually during the federal fiscal year (October 1- September 30). [Rule 62-297.401, F.A.C.]

# Common Conditions - F.A.C. Test Requirements

L.5. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection M This section addresses the following emissions unit(s).

<u>E.U.</u>	
ID No.	Brief Description
036	"A" & "B" Superphosphoric Acid (SPA) Plants (Vacuum Evaporation Process)

"A" & "B" Superphosphoric Acid (SPA) Plants emit fluoride, and are ducted to the South Phosphoric Acid Filters counter-current packed wet scrubber. CAM does not apply for fluoride for this emissions unit.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart U, Standards of Performance for Phosphate Fertilizer Industry: Superphosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)27., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants.

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

# Essential Potential to Emit (PTE) Parameters

M.1. Permitted Capacity. The operation rate shall not exceed:

- "A" SPA the Maximum 12-MRA Hourly Rate = 42.1 tons of 100%  $P_2O_5$  input or Maximum Daily 1-Hour Average Rate = 46.4 tons of 100%  $P_2O_5$  input.
- "B" SPA the Maximum 12-MRA Hourly Rate = 42.1 tons of 100%  $P_2O_5$  input or Maximum Daily 1-Hour Average Rate = 46.4 tons of 100%  $P_2O_5$  input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC]

M.2. <u>Hours of Operation</u>. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

# **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

M.3. Total Fluorides. Total Fluoride emissions at the sample port from both A & B SPA units combined shall not exceed 5.0 gram/metric ton of equivalent  $P_2O_5$  feed (0.010 lb/ton); 0.84 lbs/hr and 3.68 TPY.

[Rule 62-204.800(7)(b), F:A.C.; 40 CFR 60.212; 40 CFR 63.602(b)(1)]

# DRAFT Permit No.: 0470002-048-AV

# **Operating Requirements**

M.4. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition G.G.4.(1) or (2). [Rule 62-204.800, F.A.C.; 40 CFR 63.604]

# Monitoring Requirements

M.5. Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.: 40 CFR 60.213(a)]

M.6. P<sub>2</sub>O<sub>5</sub> Feed. The Permittee shall maintain a daily record of equivalent P<sub>2</sub>O<sub>5</sub> feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition M.4. and then by proceeding according to M.5.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(b)]

- M.7. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range. [Rule 62-204.800, F.A.C.; 40 CFR 60.213(c)]
- M.8. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 - GG.4.

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- M.9. Total Fluorides. (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).
- (b) The owner or operator shall determine compliance with the total fluorides standard in § 60.212 as follows:
- (1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi}\right) / (PK)$$

where:

E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P2O5 feed. Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf). Osdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr). N=number of emission points associated with the affected facility.

DRAFT Permit No.: 0470002-048-AV

P=equivalent P2O5 feed rate, Mg/hr (ton/hr). K=conversion factor, 1000 mg/g (7,000 gr/lb).

- (2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).
- (3) The equivalent P2O5 feed rate (P) shall be computed for each run using the following equation:

# P=Mp Rp

#### where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr). Rp=P2O5 content, decimal fraction.

- (i) The accountability system of § 60.213(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.
- (ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P2O5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.214]

**M.10.** Total Fluorides. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5 – GG.7.

# Notification, Recordkeeping, Reporting Requirements

- M.11. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. GG.12.
- M.12. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:
  - 1) Must comply with all conditions of the Order No. 04-I-AP,
  - 2) Must comply with all applicable requirements of Subparts A and AA,
  - 3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,
  - 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
  - 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
  - 6) All tests shall be submitted to the Department in accordance with Subparts A and AA,
  - 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition,

DRAFT Permit No.: 0470002-048-AV

Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

# **Exemption from New Source Performance Standards.**

M.13. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U. To be exempt, a source must have a current operating permit pursuant to Title V of the Clean Air Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions M.4., M.9., and M.11. have been met. [40 CFR 63.610]

# **Common Conditions** - F.A.C. Test Requirements

M.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

# Common Conditions - General Provisions of 40 CFR 63

M.15. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

DRAFT Permit No.: 0470002-048-AV

# Subsection N. This section addresses the following emissions unit(s).

<u>E.U.</u>

ID No. Brief Description

038 "B" Defluorinated Phosphate (DFP) Plant

"B" DFP Plant emits fluoride and particulate matter emissions, and is controlled by a Cross-Flow Packed Scrubber (13B). CAM applies for particulate matter, sulfur dioxide and fluoride.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

#### The following specific conditions apply to the emissions unit(s) listed above:

# **Essential Potential to Emit (PTE) Parameters**

N.1. <u>Permitted Capacity.</u> The rate shall not exceed the Maximum 12-MRA Hourly Rate = 8.25 tons of product or Maximum Daily 1-Hour Average Rate = 10 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0470002-034-AC]

# N.2. Methods of Operation are as follows:

Fuel fired is natural gas.

[Rule 62-213.410, F.A.C.]

**N.3.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

N.4. <u>Total Fluoride</u>. Fluoride emissions shall not exceed 2.5 lbs/hr and 10.5 TPY. [Rule 62-296.403(2), F.A.C.; Construction Permit No. AC24-255802]

N.5. <u>Particulate Matter</u>. Particulate Matter Emissions shall not exceed 14.05 lbs/hr and 59.00 TPY. [Rule 62-296.320(4)(a), F.A.C.; Construction Permit No. AC24-255802]

N.6. <u>Sulfur Dioxide</u>. Sulfur Dioxide Emissions shall not exceed 8.00 lbs/hr and 35.04 TPY. [Permit AC24-255802]

N.7. Visible Emissions. Visible Emissions are limited to 40% opacity.

White Springs Agricultural Chemicals, Inc. DRAFT Permit No.: 0470002-048-AV Suwannee River/Swift Creek Complex

[Rule 62-296.320(4)(b)2., F.A.C.; Construction Permit No. AC24-255802; Construction Permit No. AC24-15083 amendment dated 6/28/88]

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

N.8. <u>Total Fluoride</u>. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

N.9. <u>Particulate Matter</u>. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

N.10. <u>Sulfur Dioxide</u>. Sulfur Dioxide Emissions testing shall comply with the applicable in requirements Rule 62-297.401(6), F.A.C. and be performed every 5 years prior to operation permit renewal[Air Construction Permit No. 0470002-040-AC]

The 5-year testing frequency is justified by the low emission rate documented in previous emissions tests. The applicant has consistently presented test results that are more than 97% below the applicable standards. Furthermore, in accordance with Rule 62-297.310(7)(a)4.b., F.A.C., an annual Sulfur Dioxide compliance test is required if there is an applicable standard and if the emissions unit has a potential to emit 100 tons per year or greater. The permitted Sulfur Dioxide limit for Emissions Unit Number 038 is 8.00 pounds per hour and 35.04 tons per year.

N.11. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. [Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

#### Compliance Assurance Monitoring (CAM) Requirements

N.12. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

# Common Conditions - F.A.C. Test Requirements

N.13. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection O. This section addresses the following emissions unit(s).

# <u>E.U.</u>

# ID No. Brief Description

"C" Auxiliary Boiler. This emissions unit shares a common stack with the "D" Auxiliary Boiler.

"C" Auxiliary Boiler has a design capacity of 120,000 pounds per hour of steam. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process. The boiler is permitted to fire natural gas with No. 6 fuel oil as a stand-by fuel. The maximum heat input rate is 155 MMBTU/hr. Pollutants emitted are particulate matter, sulfur dioxide and visible emissions. CAM does not apply for sulfur dioxide and particulate matter for this emissions unit.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD), Permit No. PSD-FL-083; Rule 62-212.400(6), F.A.C.; and Best Available Control Technology (BACT) Determination dated 11/7/82. Though subject to 40 CFR 63 Subpart DDDDD, I/C/I Boilers and Process Heaters, this emissions unit is considered to be an existing large gaseous fuel boiler and is not subject to any requirements, other than the previously submitted initial notification, unless it is reconstructed as defined in 40 CFR 63.2.}

# The following specific conditions apply to the emissions unit(s) listed above: Essential Potential to Emit (PTE) Parameters

- O.1. Permitted Capacity. The heat input rate shall not exceed 155 MMBTU/hr. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56214; Amendment dated 3/22/85]
- O.2. <u>Methods of Operation</u>. This emissions unit shall be fired primarily with natural gas. No. 6 fuel oil, or on-spec used oil may be fired as stand-by fuels. The sulfur content in the No. 6 fuel oil and the On-spec used oil shall not exceed 1.00% by weight.

[Rule 62-213.410, F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.3. <u>Hours of Operation</u>. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

# **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

O.4. Particulate Matter. Particulate Matter Emissions shall not exceed 1.2 lbs/hr and 5.3 TPY when firing natural gas, 10.7 lbs/hr and 46.7 TPY when firing fuel oil. [Rule 62-210.200(42), F.A.C., BACT Determination dated 11/7/82; Rule 62-296.406(2), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

- DRAFT Permit No.: 0470002-048-AV
- O.5. <u>Sulfur Dioxide</u>. Sulfur Dioxide Emissions shall not exceed 1.1 lb per MMBtu heat input, and 128.7 lbs/hr and 563.9 TPY when firing fuel oil, and 0.1 lbs/hr and 0.3 TPY when firing natural gas. [Rule 62-210.200(42), F.A.C., (BACT); Rule 62-296.406(3), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]
- O.6. <u>Visible Emissions</u>. Visible Emissions shall not exceed 20% opacity except 27% for one 6 min. period per hour.

[Rule 62-296.406(1), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

- O.7. <u>Nitrogen Oxides</u>. Nitrogen oxides emissions shall not exceed 49.2 lb per hour and 215.5 TPY when firing fuel oil, and 21.0 lbs/hr and 92.0 TPY when firing natural gas. [Construction Permit No. AC24-56214, PSD-FL-083]
- O.8. <u>Carbon Monoxide</u>. Carbon Monoxide emissions shall not exceed 4.1 lb per hour and 18.0 TPY when firing fuel oil, and 2.0 lbs/hr and 8.9 TPY when firing natural gas. [Construction Permit No. AC24-56214, PSD-FL-083]
- O.9. <u>Volatile Organic Compounds</u>. VOC emissions shall not exceed 0.8 lb per hour and 3.6 TPY when firing fuel oil, and 0.4 lbs/hr and 1.6 TPY when firing natural gas. [Construction Permit No. AC24-56214, PSD-FL-083]

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- O.10. Particulate Matter. This emissions unit shall be assumed to be in compliance with the Particulate Matter emission limits stated in Condition No. O.4., if the unit complies with the Visible Emissions limitations stated in Condition No. O.6 and the fuel sulfur content restrictions stated in Condition No. O.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year. The permittee shall conduct a particulate matter compliance test using EPA Method 5 upon Department request.

  [Construction Permit No. AC24-56214, PSD-FL-083, Amendment dated March 22, 1985]
- O.11. <u>Sulfur Dioxide</u>. In lieu of an annual compliance stack test for sulfur dioxide emissions, the Permittee shall comply with the fuel sulfur content restrictions stated in Condition No. O.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct sulfur dioxide compliance test using EPA Method 6 upon Department request.

[Construction Permit No. AC24-56214, PSD-FL-083, Amendment dated 2/22/84]

**O.12.** <u>Visible Emissions</u>. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.13 <u>Nitrogen Oxides</u>. The test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

DRAFT Permit No.: 0470002-048-AV

[Construction Permit No. AC24-56210, PSD-FL-083]

**O.14.** Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-083]

- O.15. 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)(b), F.A.C.]
- O.16. Excess Emissions Startup, Shutdown, Malfunction. Excess Emissions resulting from startup, shutdown or malfunction 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 2 hours in any 24 hour period unless authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **O.17.** Excess Emissions- Malfunction. In case of excess emissions resulting from malfunctions, the 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. [Rule 62-210.700(6), F.A.C.]

#### Common Conditions - On-Spec Used Oil/Lead

O.18. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE.

# Common Conditions - F.A.C. Test Requirements

**O.19.** This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection P. This section addresses the following emissions unit(s).

<u>E.U.</u>				
ID No.	<b>Brief Description</b>	•		
040	"D" Auxiliary Boiler.	This emissions unit shares a commo	n stack with "C" Au	xiliary
	Boiler			•

"D" Auxiliary Boiler has a design capacity of 100,000 pounds per hour of steam. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process. The boiler is permitted to fire natural gas with No. 6 fuel oil as a stand-by fuel. The maximum heat input rate is 155 MMBTU/hr. Pollutants emitted are particulate matter, sulfur dioxide and visible emissions. CAM does not apply for sulfur dioxide and particulate matter for this emissions unit.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units, Rule 212.400(5), F.A.C.; Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-083; Rule 62-212.400(6), F.A.C., and Best Available Control Technology (BACT) Determination dated 11/7/82. Though subject to 40 CFR 63 Subpart DDDDD, I/C/I Boilers and Process Heaters, this emissions unit is considered to be an existing large gaseous fuel boiler and is not subject to any requirements, other than the previously submitted initial notification, unless it is reconstructed as defined in 40 CFR 63.2.}

# The following specific conditions apply to the emissions unit(s) listed above: Essential Potential to Emit (PTE) Parameters

- P.1. <u>Permitted Capacity.</u> The heat input rate shall not exceed 155 MMBTU/hr. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56213, Amendment dated 3/22/85]
- P.2. Methods of Operation. This emissions unit shall be fired primarily with natural gas. No. 6 fuel oil or on-spec used oil may be fired as a stand-by fuel. The sulfur content in the No. 6 fuel oil and the On-spec used oil shall not exceed 1.00% by weight.

[Rule 62-213.410, F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.3. <u>Hours of Operation</u>. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

P.4. Particulate Matter. Particulate Matter Emissions shall not exceed 1.2 lbs/hr and 5.3 TPY when firing natural gas, and 10.7 lbs/hr and 47 TPY when firing fuel oil. [Rule 62-210.200(42), F.A.C.; BACT Determination dated 11/7/82; Rule 62-296.406(2), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

- DRAFT Permit No.: 0470002-048-AV
- P.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 1.1 lb per MMBtu heat input, and 128.7 lbs/hr and 564 TPY when firing fuel oil and 0.1 lbs/hr and 0.3 TPY when firing natural gas. [Rule 62-210.200(42), F.A.C.; BACT Determination dated 11/7/82; Rule 62-296.406(3), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]
- P.6. <u>Visible Emissions</u>. Visible Emissions shall not exceed 20% opacity except 27% for one 6 min. period per hour.
- [Rule 62-296.406(1), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]
- P.7. <u>Nitrogen Oxides</u>. Nitrogen oxides emissions shall not exceed 49.2 lb per hour and 215.5 TPY when firing fuel oil and 21.0 lbs/hr and 92.0 TPY when firing natural gas. [Construction Permit No. AC24-56213, PSD-FL-083]
- **P.8.** <u>Carbon Monoxide</u>. Carbon Monoxide emissions shall not exceed 4.1 lb per hour and 18.0 TPY when firing fuel oil and 2.0 lbs/hr and 9 TPY when firing natural gas. [Construction Permit No. AC24-56213, PSD-FL-083]
- **P.9.** Volatile Organic Compounds. VOC emissions shall not exceed 0.8 lbs/hr and 4 TPY when firing fuel oil and 0.4 lbs/hr and 2 TPY when firing natural gas. [Construction Permit No. AC24-56213, PSD-FL-083]

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

P.10. Particulate Matter. This emissions unit shall be assumed to be in compliance with the Particulate Matter emission limits stated in Condition No. P.4., if the unit complies with the Visible Emissions limitations stated in Condition No. P.6 and the fuel sulfur content restrictions stated in Condition No. P.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct a particulate matter compliance test using EPA Method 5 upon Department request.

[Construction Permit No. AC24-56213, PSD-FL-083, Amendment dated March 22, 1985, Applicant Request]

P.11. Sulfur Dioxide. In lieu of an annual compliance stack test for sulfur dioxide emissions, the Permittee shall comply with the fuel sulfur content restrictions stated in Condition No. P.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct sulfur dioxide compliance testing using EPA Method 6 upon Department request.

[Construction Permit No. AC24-56213, PSD-FL-083, Amendment dated 2/22/84]

DRAFT Permit No.: 0470002-048-AV

**P.12.** <u>Visible Emissions</u>. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.13 <u>Nitrogen Oxides</u>. The test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-083]

P.14. <u>Carbon Monoxide</u>. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-083]

- P.15. 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)(b), F.A.C.]
- P.16. Excess Emissions Startup, Shutdown, Malfunction. Excess Emissions resulting from startup, shutdown or malfunction 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 2 hours in any 24 hour period unless authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- **P.17.** Excess Emissions- Malfunction. In case of excess emissions resulting from malfunctions, the 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. [Rule 62-210.700(6), F.A.C.]

# Common Conditions - On-Spec Used Oil/Lead

P.18. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE

# **Common Conditions** - F.A.C. Test Requirements

P.19. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection Q. This section addresses the following emissions unit(s).

E.	U	

ID No. Brief Description

042 Defluorinated Phosphate (DFP) Feed Prep

DFP Feed Prep consists of the following systems: The feed prep area where the limestone, phosphate rock, and other ingredients are mixed, the soda ash storage and handling system, and a limestone handling system. CAM does apply for particulate matter, sulfur dioxide and fluoride for this emissions unit.

The soda ash system consists of a pneumatic transfer system, which conveys soda ash from a vacuum railcar unloading hopper to a 330 ton storage silo (Emissions Point 06/EP SA1). From this silo, soda ash is then transferred to a 20 tons soda ash bin/day tank (Emission Point 07/EP SA2). A baghouse and bin filter control particulate Matter emissions from the silo and bin, respectively.

Limestone handling system: Limestone is unloaded via truck into a 50 ton storage silo (Emissions Point 04/EP L1) to a 3 ton limestone surge bin (Emissions Point 03/EP L2). A baghouse and bin filter control particulate matter emissions from the silo and bin, respectively. Remaining Emissions points are identified as Emissions Point 01 (Rock bin Baghouse), Emissions Point 02 (Baghouse), and Emissions Point 05 (Dryer wet scrubber). CAM does apply for particulate matter from the scrubber.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

# Essential Potential to Emit (PTE) Parameters

Q.1.a. <u>Permitted Capacity</u>. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 48.94 tons of input or Maximum Daily 1-Hour Average Rate = 54 tons of input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0470002-034-AC]

Emission Points 03 and 04/L1 and L2 Limestone System:

Q.1.b. <u>Permitted Capacity – Limestone System.</u> The maximum loading rate for the Limestone Silo (EP 03/EP L1) shall not exceed 50,000 lbs/hr. The maximum loading rate for the Limestone Surge bin (EP 04/EP L2) shall not exceed 10,000 lbs/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AC24-191394]

# Q.2. Methods of Operation are as follows:

Fuels fired are natural gas or fuel oil with a maximum sulfur content of 1.50%. [Rule 62-213.410, F.A.C.]

Q.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760

DRAFT Permit No.: 0470002-048-AV

hours/year. The soda ash storage equipment may operate continuously. The soda ash silo vacuum pump (EP 06/EP SA1) operating hours shall not exceed 1800 hours per year. The soda ash bin blower/exhaust fan (EP 07/EP SA2) operating hours shall not exceed 2700 hours.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-165588]

# **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

#### Emission Point 05/ Feed Prep Scrubber:

- Q.4. Particulate Matter. Particulate Matter Emissions shall not exceed 31.99 lbs/hr and 134.35 TPY. [Rule 62-296.320(4)(a), F.A.C.]
- Q.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 4.90 lbs/hr and 20.58. [Used in a SO2 model]
- Q.6. Visible Emissions. Visible Emissions shall not be equal to greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

# **Emission Point 02/ Baghouse:**

**Q.7.** Visible Emissions. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

#### Emission Point 01/ Rock Bin:

Q.8. <u>Visible Emissions</u>. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

#### Emission Point 03/L1 Lime Silo:

- O.9.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.10 lbs/hr and 0.44 TPY. [Construction Permit No. AC24-191394]
- **Q.9.b.** Visible Emissions. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

# Emission Point 04/L2 Lime Bin:

- Q.10.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.10 lbs/hr and 0.44 TPY. [Construction permit No. AC24-191394]
- **O.10.b.** Visible Emissions. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

White Springs Agricultural Chemicals, Inc. DRAFT Permit No.: 0470002-048-AV Suwannee River/Swift Creek Complex

#### Emission Point 06/ SA1 Soda Ash Silo:

**Q.11.a.** Particulate Matter. Particulate Matter emissions shall not exceed 0.25 lb/hr and 0.23 TPY. [Construction Permit No. AC24-165588]

Q.11b. <u>Visible Emissions</u>. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

# Emission Point 07/ SA2 Soda Ash Bin:

Q.12.a. <u>Particulate Matter</u>. Particulate Matter emissions shall not exceed 0.02 lb/hr and 0.027 TPY. [Construction Permit No. AC24-165588]

Q.12.b. <u>Visible Emissions</u>. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Q.13. From EP 05, Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.]

- Q.14. From EP 05, Sulfur Dioxide Emissions in lieu of testing shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually once each federal fiscal year.
- Q.15. From EP 05, Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. [Rule 62-297.401, F.A.C.]
- Q.16. From EP 02, Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. [Rule 62-297.401, F.A.C.]
- Q.17. From EP 01, Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. [Rule 62-297.401, F.A.C.]

#### Emission Point 03/L1 Lime Silo:

- Q.18.a. <u>Particulate Matter</u>. Compliance with the particulate matter limitation in Condtion Q.9. shall be demonstrated by compliance with the Visible emissions standard in Condition Q.9.
- Q.18.b. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. The test shall be conducted while the silo is being loaded. [Rule 62-297.401, F.A.C.; Construction Permit No. AC24-191394]

#### DRAFT Permit No.: 0470002-048-AV

#### Emission Point 04/ L2 Lime Bin:

- Q.19.a. <u>Particulate Matter</u>. Compliance with the particulate matter limitation in Condtion Q.10. shall be demonstrated by compliance with the Visible emissions standard in Condition Q.10.
- Q.19.b. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. The test shall be conducted while the bin is being loaded. [Rule 62-297.401, F.A.C.; Construction Permit No. AC24-191394]

#### Emission Point 06/ SA1 Soda Ash Silo:

Q.20. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-165588]

#### Emission Point 07/ SA2 Soda Ash Bin:

Q.21. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-165588]

# Compliance Assurance Monitoring (CAM) Requirements

Q.22. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.].

# Common Conditions - F.A.C. Test Requirements

Q.23. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection R. This section addresses the following emissions unit(s).

<u>E.U.</u>	
ID No.	Brief Description
044	"A" & "B" Defluorinated Phosphate (DFP) Coolers

"A" & "B" DFP Coolers emit particulate matter, and each are controlled by a cyclonic wet scrubber that exhaust through a common stack (EP 12). CAM does not apply for particulate matter and fluoride for this emissions unit.

{Permitting note(s): These emissions units are regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

# Essential Potential to Emit (PTE) Parameters

R.1. Permitted Capacity. The rate for each DFP Cooler "A" & "B" shall not exceed the Maximum 12-MRA Hourly Rate = 8.25 tons of product or Maximum Daily 1-Hour Average Rate = 10 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

R.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

**R.3.** Fluoride emissions shall not exceed 1.42 lbs/hr and 5.96 TPY. [Rule 62-296.403(2), F.A.C.; Permit No. AO24-31725]

R.4. Particulate Matter Emissions shall not exceed 25.04 lbs/hr and 105.17 TPY. [Rule 62-296.320(4)(a), F.A.C.; AO24-31725]

**R.5.** Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.; Permit No. AO24-31725]

# DRAFT Permit No.: 0470002-048-AV

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**R.6.** <u>Total Fluoride</u>. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-31725]

**R.7.** <u>Particulate Matter</u>. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-31725]

**R.8.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

# Common Conditions - F.A.C. Test Requirements

R.9. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

als, Inc. DRAFT Permit No.: 0470002-048-AV

Subsection S. This section addresses the following emissions unit(s).

<u>E.U.</u>

ID No. Brief Description

Molten Sulfur System for "C" & "D" Sulfuric Acid Plants

Molten Sulfur System for "C" & "D" Sulfuric Acid Plants consist of a rail & truck unloading system with transfer point venting, receiving pit, supply pit, and storage tank. The EU has an emission limitation for visible emissions. CAM does not apply.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.411, F.A.C., Sulfur Storage and Handling Facilities.}

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

# Essential Potential to Emit (PTE) Parameters

- **S.1.** Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 77.08 tons of throughput or Maximum Daily 1-Hour Average Rate = 85 tons throughput.
- 12-MRA (MRA Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. Throughput rate corresponds to the sulfur feed rate to the sulfuric acid plants. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]
- S.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

- **S.3.** Molten sulfur transfer. 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 areas and stationary pipes shall seat effectively around the entire circumference to minimize spillage. [Rule 62-296.411(1)(a)]
- **S.4.** Pipe disconnection point. All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks or tailraces 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 noncorrosible drip pans or other secondary containment, positioned to collect spill, that are adequate to contain amounts of sulfur that may escape during routine disconnection, reconnection or operation of the piping system.

  [Rule 62-296.411(1)(b)]

65

S.5. Molten sulfur spills. 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.

[Rule 62-296.411(1)(d)]

DRAFT Permit No.: 0470002-048-AV

- **S.6.** Vent surfaces. All vent surfaces shall be cleaned monthly to remove captured particles. [Rule 62-296.411(1)(e)]
- S.7. <u>Visible Emissions</u>. Visible Emissions from any emission point within this emissions unit shall not exceed 20% opacity (six minute average). [Rule 62-296.411(1)(g), F.A.C.]
- **S.8.** Operational procedures. Approved operational procedures, by the Department, shall be established to minimize spills from any moveable loading arm or pipe upon disconnection, reconnection or operation.

  [Rule 62-296.411(1)(h)]

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**S.9.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years prior to operation permit renewal.

[Rule 62-296.411(1)(j), F.A.C.; Rule 62-297.401, F.A.C.; Air Construction Permit No. AC24-171596; Title V Permit Revision No. 0470002-041-AV]

# Recordkeeping and Reporting Requirements

**S.10.** 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.

[Rule 62-296.411(1)(f), F.A.C.]

# Common Conditions - F.A.C. Test Requirements

**S.11.** This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection T. This section addresses the following emissions unit(s).

<u>E.U.</u>

ID No. Brief Description

Of Green Superphosphoric Acid (SPA) Plant (Vacuum Evaporation Process)

Green Superphosphoric Acid (SPA) Plant emits fluoride emissions which are controlled by a cross-flow packed wet scrubber. This process changes the color of hot SPA from black to green using an oxidant. CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

# Essential Potential to Emit (PTE) Parameters

**T.1.** Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 25.2 tons of  $100\% \ P_2O_5$  input or Maximum Daily 1-Hour Average Rate = 27.7 tons of  $100\% \ P_2O_5$  input. 12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

T.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

# **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**T.3.** At sample port, fluoride emissions shall not exceed 0.23 lb/hr and 1.01 TPY. [Requested by applicant; Permit #AC24-205170]

#### Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**T.4.** Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. [Rule 62-297.401, F.A.C.]

# Common Conditions - F.A.C. Test Requirements

T.5. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Agricultural Chemicals, Inc. DRAFT Permit No.: 0470002-048-AV

# Subsection U. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

Defluorinated Phosphate (DFP) Product Silos

DFP Product Silos emit particulate matter, which is controlled by the following emissions points (EP); EP 14, Product sizing & crushing controlled by a baghouse, and EP 16, Product storage silos "A", "B" and "C" & shipping operations controlled by a baghouse. CAM does not apply for this emissions unit.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.411, F.A.C., Sulfur Storage and Handling Facilities; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

# The following specific conditions apply to the emissions unit(s) listed above:

# **Essential Potential to Emit (PTE) Parameters**

**U.1.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year, and shall be recorded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-250411]

U.2. <u>Permitted Capacity</u>. The maximum total discharge rate from the three silos, Nos. A, B, and C, shall not exceed 100 TPH of DFP. One or more silos may discharge at the same time. [Construction Permit No. AC24-250411]

# **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

From EP 14:

U.3. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.; Operation Permit No. AC24-226519]

From EP 16:

U.4. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.; Operation Permit No. AC24-226519]

# Compliance Monitoring and Testing Requirements

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

From EP 14:

U.5. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C., and shall conduct a formal compliance test during each federal fiscal year (October 1 - September 30) unless otherwise specified by rule, order, or permit. [Rule 62-297.401, F.A.C. and Rule 62-297.310(7)(a)4.a, F.A.C.; Operation Permit No. AC24-226519]

DRAFT Permit No.: 0470002-048-AV

# From EP 16:

U.6. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C., and shall conduct a formal compliance test during each federal fiscal year (October 1 - September 30) unless otherwise specified by rule, order, or permit. [Rule 62-297.401, F.A.C. and Rule 62-297.310(7)(a)4.a, F.A.C.; Operation Permit No. AC24-226519]

# Common Conditions - F.A.C. Test Requirements

U.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

Subsection V. This section addresses the following emissions unit(s).

<u>E.U.</u>

ID No. Brief Description

O64 Swift Creek Mine Rock Dryer

SCM Rock Dryer is a phosphate rock dryer, with a fluid bed exhausting through a two-stage wet cyclonic scrubber to control particulate matter emissions. CAM does not apply for particulate matter and sulfur dioxide for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. The Part 40 CFR 63 Subparts A and AA take precedence, however these units are subject to all applicable State Implementation Plan (SIP) rules if these units are out of compliance with the NESHAP.}

# The following specific conditions apply to the emissions unit(s) listed above: Essential Potential to Emit (PTE) Parameters

**V.1.** Permitted Capacity. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 475 tons of input or Maximum Daily 1-Hour Average Rate = 525 tons of input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC]

V.2. Methods of Operation - It is fired primarily with natural gas. No. 6 fuel oil with sulfur content not to exceed 1.30 % which may contain on-spec used oil with sulfur content not to exceed 1.0 % is fired as fuel when natural gas is not available.

[Rule 62-213.410, F.A.C.]

V.3. <u>Hours of Operation</u>. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

- **V.4.** Particulate Matter. Particulate Matter Emissions shall not exceed 46.40 lbs/hr and 203.23 TPY. [Rule 62-296.320(4)(a)., F.A.C.]
- **V.5.** <u>Sulfur Dioxide</u>. Sulfur Dioxide Emissions shall not exceed 38.10 lbs/hr and 166.88 TPY. [Used in 02/81 model]
- **V.6.** <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

# DRAFT Permit No.: 0470002-048-AV

# **Operating Requirements**

V.7. <u>Scrubber Parameter Daily Averages</u>. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition II.4.(1) or (2). [Rule 62-204.800, F.A.C.; 40 CFR 63.604]

#### **Monitoring Requirements**

**V.8.** The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **V.9.** <u>Particulate Matter</u>. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5, GG.6, and GG.8.
- **V.10.** Sulfur Dioxide. Sulfur Dioxide Emissions in lieu of testing shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired. A report shall be submitted on an annual basis prior to 03/01 of each year.
- **V.11.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually, once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.]

# Notification, Recordkeeping, Reporting Requirements

- **V.12.** The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. GG.12.
- V.13. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:
  - 1) Must comply with all conditions of the Order No. 04-I-AP,
  - 2) Must comply with all applicable requirements of Subparts A and AA,
  - 3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,
  - 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

- DRAFT Permit No.: 0470002-048-AV
- 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
- 6) All tests shall be submitted to the Department in accordance with Subparts A and AA,
- 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

# Common Conditions - On-Spec Used Oil/Lead

V.14. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE.

# Common Conditions - F.A.C. Test Requirements

V.15. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

# Common Conditions - General Provisions of 40 CFR 63

V.16. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

DRAFT Permit No.: 0470002-048-AV

Subsection W. This section addresses the following emissions unit(s).

<u>E.U.</u>

ID No. Brief Description

065 Swift Creek Mine Silos

Swift Creek Mine Silos Mineral Storage and Conveyor System use a wet scrubber to control particulate matter emissions. CAM does not apply for particulate matter for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

#### Essential Potential to Emit (PTE) Parameters

W.1. <u>Permitted Capacity.</u> The rate shall not exceed the Maximum 12-MRA Hourly Rate = 475 tons of input or Maximum Daily 1-Hour Average Rate = 525 tons of input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

W.2. <u>Hours of Operation</u>. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

# **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

W.3. <u>Particulate Matter.</u> Particulate Matter Emissions shall not exceed 46.40 lbs/hr and 203.20 TPY. [Rule 62-296.320(4)(a), F.A.C.]

W.4. <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**W.5.** Particulate Matter. Particulate Matter emissions test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296. 320(4)(a)3., F.A.C.; Rule 62-297.401, F.A.C.]

DRAFT Permit No.: 0470002-048-AV

W.6. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296. 320(4)(b)4., F.A.C.; Rule 62-297.401, F.A.C.]

# **Common Conditions** - F.A.C. Test Requirements

W.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection X. This section addresses the following emissions unit(s).

E.U.

ID No.
066

Brief Description
"E" Sulfuric Acid Plant

"E" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO<sub>2</sub>) emissions. The emissions unit uses a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

DRAFT Permit No.: 0470002-048-AV

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-082; and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

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

# Essential Potential to Emit (PTE) Parameters

**X.1.** Permitted Capacity. The production rate shall not exceed 2500 TPD, expressed as 100 percent  $H_2SO_4$  or 104.20 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

**X.2.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8736 hours/year.

[Permit No. 0470005-004-AO and Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

**X.3.** Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>, and 416. 7 lb per hour, and 1820.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-56211, PSD-FL-082]

**X.4.** Sulfuric Acid Mist (SAM). SAM Emissions shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>, and 15.62 lbs/hr and 68.20 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1); Construction Permit No. AC24-56211, PSD-FL-082]

X.5. <u>Visible Emissions</u>. Visible Emissions shall not exceed 10% opacity. [Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2); Construction Permit No. AC24-56211, PSD-FL-082]

# DRAFT Permit No.: 0470002-048-AV

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **X.6.** Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).
- (b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

E = emission rate of  $SO_2$  kg/metric ton (lb/ton) of 100 percent  $H_2SO_4$  produced.

C = concentration of SO<sub>2</sub>, g/dscm (lb/dscf).

Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

 $P = \text{production rate of } 100 \text{ percent } H_2SO_4, \text{ metric ton/hr} \text{ (ton/hr)}.$ 

K = conversion factor, 1000 g/kg (1.0 lb/lb).

- (2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- (3) Suitable methods shall be used to determine the production rate (P) of 100 percent H<sub>2</sub>SO<sub>4</sub> for each run. Material balance over the production system shall be used to confirm the production rate.
- (4) N/A
- (c) The following may be used as alternatives to the reference methods and procedures specified in this condition:
  - (1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:
    - (i) The integrated technique of Method 3 is used to determine the O<sub>2</sub> concentration and, if required, CO<sub>2</sub> concentration.
    - (ii) The  $SO_2$  emission rate is calculated as described in Condition X.12. substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

White Springs Agricultural Chemicals, Inc. DRAFT Permit No.: 0470002-048-AV Suwannee River/Swift Creek Complex

- **X.7.** Sulfuric Acid Mist. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).
- (b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

 $E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent <math>H_2SO_4$  produced.

C = concentration of acid mist, g/dscm (lb/dscf).

Osd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

 $P = \text{production rate of } 100 \text{ percent } H_2SO_4, \text{ metric ton/hr (ton/hr)}.$ 

K = conversion factor, 1000 g/kg (1.0 lb/lb).

- (2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- (3) Suitable methods shall be used to determine the production rate (P) of 100 percent  $H_2SO_4$  for each run. Material balance over the production system shall be used to confirm the production rate.
- (4) N/A
- (c) The following may be used as alternatives to the reference methods and procedures specified in this condition:
  - (1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:
    - (i) The integrated technique of Method 3 is used to determine the O<sub>2</sub> concentration and, if required, CO<sub>2</sub> concentration.
    - (ii) The acid mist emission rate is calculated as described in Condition X.12. substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

**X.8.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

# DRAFT Permit No.: 0470002-048-AV

# **Continuous Monitoring Requirements**

X.9. <u>Sulfur Dioxide</u>. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO<sub>2</sub>). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.

[40 CFR 60.84(a); Construction Permit No. AC24-56211, PSD-FL-082]

**X.10.** Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

 $CF = k[(1.000 \cdot 0.015r)/(r \cdot s)]$ 

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).

- k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
- r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
- s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under Condition 19

[40 CFR 60.84(b); Construction Permit No. AC24-56211, PSD-FL-082]

X.11. All conversion factors and values under Condition X.10. from which they were computed (i.e., CF, r, and s) shall be recorded.

[40 CFR 60.84(c)]

**X.12.** Sulfur Dioxide Alternative. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO<sub>2</sub> emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO<sub>2</sub>, O<sub>2</sub>, and CO<sub>2</sub> (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO<sub>2</sub> monitor shall be as specified in Condition X.10. The span value for CO<sub>2</sub> (if required) shall be 10 percent and for O<sub>2</sub> shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO<sub>2</sub> emission rate as follows:

Es= $(CsS)/[0.265\cdot(0.126\%O_2)\cdot(A\%CO_2)]$ 

where:

Es = emission rate of SO<sub>2</sub>, kg/metric ton (lb/ton) of 100 percent of H<sub>2</sub>SO<sub>4</sub> produced.

DRAFT Permit No.: 0470002-048-AV

Cs = concentration of  $SO_2$ , kg/dscm (lb/dscf).

S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent  $H_2SO_4$  produced.

 $%O_2$  = oxygen concentration, percent dry basis.

A = auxiliary fuel factor,

= 0.00 for no fuel.

= 0.0226 for methane.

= 0.0217 for natural gas.

= 0.0196 for propane.

= 0.0172 for No 2 oil.

= 0.0161 for No 6 oil.

= 0.0148 for coal.

= 0.0126 for coke.

 $%CO_2$  = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations:

Use the following table for such conversions:

From	То—	Multiply by
g/scm	kg/scm	$10^{-3}$
mg/scm	kg/scm	$10^{-6}$
ppm (SO <sub>2</sub> )	kg/scm	$2.660 \times 10^{-6}$
ppm (SO <sub>2</sub> )	lb/scf	$1.660 \times 10^{-7}$

[40 CFR 60.84(d)]

**X.13.** Sulfur Dioxide Excess Emissions. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under Condition X.3.

[40 CFR 60.84(e); Construction Permit No. AC24-56211, PSD-FL-082]

# Common Conditions - F.A.C. Test Requirements

**X.14.** This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

# Subsection Y. This section addresses the following emissions unit(s).

E.U.

ID No.
067

Brief Description
"F" Sulfuric Acid Plant

"F" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO<sub>2</sub>) emissions. The emissions unit uses a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

# The following specific conditions apply to the emissions unit(s) listed above:

# Essential Potential to Emit (PTE) Parameters

**Y.1.** Permitted Capacity. The production rate shall not exceed 2500 TPD, expressed as 100 percent H<sub>2</sub>SO<sub>4</sub> or 104.20 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56209, PSD-FL-082]

**Y.2.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

- **Y.3.** Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>, 416.67 lbs/hr and 1820.00 TPY. [Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-56209, PSD-FL-082]
- Y.4. <u>Sulfuric Acid Mist (SAM)</u>. SAM emissions, expressed as H<sub>2</sub>SO<sub>4</sub>, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H<sub>2</sub>SO<sub>4</sub>, 15.62 lbs/hr and 68.20 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1); Construction Permit No. AC24-56209, PSD-FL-082]

DRAFT Permit No.: 0470002-048-AV

Y.5. <u>Visible Emissions</u>. Visible Emissions shall not exceed 10% opacity. [Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2); Construction Permit No. AC24-56209, PSD-FL-082]

# **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **Y.6.** Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).
- (b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

 $E = \text{emission rate of SO}_2 \text{ kg/metric ton (lb/ton) of 100 percent H}_2SO_4$  produced.

C = concentration of SO<sub>2</sub>, g/dscm (lb/dscf).

Osd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

 $P = \text{production rate of } 100 \text{ percent } H_2SO_4, \text{ metric ton/hr (ton/hr)}.$ 

K = conversion factor, 1000 g/kg (1.0 lb/lb).

- (2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- (3) Suitable methods shall be used to determine the production rate (P) of 100 percent  $H_2SO_4$  for each run. Material balance over the production system shall be used to confirm the production rate.
- (4) N/A
- (c) The following may be used as alternatives to the reference methods and procedures specified in this condition:
  - (1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:
    - (i) The integrated technique of Method 3 is used to determine the O<sub>2</sub> concentration and, if required, CO<sub>2</sub> concentration.
    - (ii) The  $SO_2$  emission rate is calculated as described in Condition Y.12. substituting the acid mist concentration for Cs as appropriate.

(h)10 FAC Puls (2 207 401 FAC Co. 4 4 4 4

DRAFT Permit No.: 0470002-048-AV

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56209, PSD-FL-082]

- Y.7. <u>Sulfuric Acid Mist.</u> The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:
- (a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).
- (b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H<sub>2</sub>SO<sub>4</sub> produced.

C = concentration of acid mist, g/dscm (lb/dscf).

Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

 $P = \text{production rate of } 100 \text{ percent } H_2SO_4, \text{ metric ton/hr} \text{ (ton/hr)}.$ 

K = conversion factor, 1000 g/kg (1.0 lb/lb).

- (2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- (3) Suitable methods shall be used to determine the production rate (P) of 100 percent  $H_2SO_4$  for each run. Material balance over the production system shall be used to confirm the production rate.
- (4) N/A
- (c) The following may be used as alternatives to the reference methods and procedures specified in this condition:
  - (1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:
    - (i) The integrated technique of Method 3 is used to determine the O<sub>2</sub> concentration and, if required, CO<sub>2</sub> concentration.
    - (ii) The acid mist emission rate is calculated as described in Condition Y.12. substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56209, PSD-FL-082]

**Y.8.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

DRAFT Permit No.: 0470002-048-AV

[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.]

#### **Continuous Monitoring Requirements**

- Y.9. Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO<sub>2</sub>). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.

  [40 CFR 60.84(a); Construction Permit No. AC24-56209, PSD-FL-082]
- **Y.10.** Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

 $CF = k[(1.000 \cdot 0.015r)/(r \cdot s)]$ 

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).

- k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
- r = percentage of sulfur dioxide by volume entering the gas converter.

  Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
- s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under Condition 1.9.

[40 CFR 60.84(b); Construction Permit No. AC24-56209, PSD-FL-082]

- Y.11. All conversion factors and values under Condition AA.10. from which they were computed (i.e., CF, r, and s) shall be recorded.

  [40 CFR 60.84(c); Construction Permit No. AC24-56209, PSD-FL-082]
- **Y.12.** Sulfur Dioxide Alternative. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining  $SO_2$  emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring  $SO_2$ ,  $O_2$ , and  $CO_2$  (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the  $SO_2$  monitor shall be as specified in Condition Y.10. The span value for  $CO_2$  (if-required) shall be 10 percent and for  $O_2$  shall be 20.9 percent (air). A

DRAFT Permit No.: 0470002-048-AV

conversion factor based on process rate data is not necessary. Calculate the SO<sub>2</sub> emission rate as follows:

$$Es=(CsS)/[0.265\cdot(0.126\%O_2)\cdot(A\%CO_2)]$$

where:

Es = emission rate of  $SO_2$ , kg/metric ton (lb/ton) of 100 percent of  $H_2SO_4$  produced.

Cs = concentration of  $SO_2$ , kg/dscm (lb/dscf).

S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent  $H_2SO_4$  produced.

 $%O_2$  = oxygen concentration, percent dry basis.

A = auxiliary fuel factor,

= 0.00 for no fuel.

= 0.0226 for methane.

= 0.0217 for natural gas.

= 0.0196 for propane.

= 0.0172 for No 2 oil.

= 0.0161 for No 6 oil.

= 0.0148 for coal.

= 0.0126 for coke.

 $%CO_2$  = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations:

Use the following table for such conversions:

From—	To	Multiply by—
g/scm	kg/scm	10 <sup>-3</sup>
mg/scm	kg/scm	10-6
ppm (SO <sub>2</sub> )	kg/scm	$2.660 \times 10^{-6}$
ppm (SO <sub>2</sub> )	lb/scf	$1.660 \times 10^{-7}$

[40 CFR 60.84(d)]

Y.13. <u>Sulfur Dioxide Excess Emissions</u>. For the purpose of reports under 40 CFR 60.7(c), periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under Condition Y.3.

[40 CFR 60.84(e); Construction Permit No. AC24-56209, PSD-FL-082]

## **Common Conditions** - F.A.C. Test Requirements

Y.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection Z. This section addresses the following emissions unit(s).

E.U.

ID No.
068

Brief Description
"E" Auxiliary Boiler

"E" Auxiliary Boiler has a design capacity of 125,000 pounds per hour of steam. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process. The boiler is permitted to fire natural gas with No. 6 fuel oil as a stand-by fuel. The maximum heat input rate is 156 MMBTU/hr. Pollutants emitted are particulate matter, sulfur dioxide and visible emissions. CAM does not apply for particulate matter and sulfur dioxide.

DRAFT Permit No.: 0470002-048-AV

{Permitting note(s): This emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units, Rule 212.400(5), F.A.C.; Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-082; Rule 62-212.400(6), F.A.C., and Best Available Control Technology (BACT) Determination dated 11/7/82. Though subject to 40 CFR 63 Subpart DDDDD, I/C/I Boilers and Process Heaters, this emissions unit is considered to be an existing large gaseous fuel boiler and is not subject to any requirements, other than initial notification, unless it is reconstructed as defined in 40 CFR 63.2.}

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

## Essential Potential to Emit (PTE) Parameters

- **Z.1.** Permitted Capacity. The heat input rate shall not exceed 156 MMBTU/hr. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]
- **Z.2.** Methods of Operation. This emissions unit shall be fired with natural gas, No. 6 fuel oil, or onspec used oil. The sulfur content in the No. 6 fuel oil and the On-spec used oil shall not exceed 1.00% by weight.

[Rule 62-213.410, F.A.C.; Construction Permit No. AC24-56210, PSD-FL-082]

**Z.3.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year when firing natural gas. When firing No. 6 fuel oil or on-spec used oil, the hours of operation for this emissions unit shall not exceed 8518 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56210, PSD-FL-082]

## **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

**Z.4.** Particulate Matter. Particulate Matter Emissions shall not exceed 13.90 lbs/hr and 59.2 TPY. [Rule 62-210.200(42), F.A.C., BACT Determination dated 11/7/82; Rule 62-296.406(2); Construction Permit No. AC24-56210, PSD-FL-082]

DRAFT Permit No.: 0470002-048-AV

**Z.5**. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 1.1 lb per MMBtu heat input, and 170.70 lb per hour and 727.00 TPY.

[Rule 62-210.200(42), F.A.C., BACT Determination dated 11/7/82; Rule 62-296.406(3); Construction Permit No. AC24-56210, PSD-FL-082]

**Z.6.** <u>Visible Emissions</u>. Visible Emissions shall not exceed 20% opacity except 27% for one 6 min. period per hour.

[Rule 62-296.406(1); Construction Permit No. AC24-56210, PSD-FL-082]

- **Z.7.** Nitrogen Oxides. Nitrogen oxides emissions shall not exceed 64.0 lb per hour. [Construction Permit No. AC24-56210, PSD-FL-082]
- **Z.8.** Carbon Monoxide. Carbon Monoxide emissions shall not exceed 5.3 lb per hour. [Construction Permit No. AC24-56210, PSD-FL-082]
- **Z.9.** Volatile Organic Compounds. VOC emissions shall not exceed 1.1 lb per hour. [Construction Permit No. AC24-56210, PSD-FL-082]

## **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Z.10. Particulate Matter. This emissions unit shall be assumed to be in compliance with the Particulate Matter emission limits stated in Condition No. Z.4, if the unit complies with the Visible Emissions limitations stated in Condition No. Z.6 and the fuel sulfur content restrictions stated in Condition No. Z.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct a particulate matter compliance test using EPA Method 5 upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082, Amendment dated March 22, 1985]

**Z.11.** Sulfur Dioxide. In lieu of an annual compliance stack test for sulfur dioxide emissions, the Permittee shall comply with the fuel sulfur content restrictions stated in Condition No. Z.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct sulfur dioxide compliance test using EPA Method 6 upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082; Amendment dated February 22, 1984]

**Z.12.** <u>Visible Emissions</u>. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit No. AC24-56210, PSD-FL-082]

S Agricultural Chemicals, Inc. DRAFT Permit No.: 0470002-048-AV

**Z.13** Nitrogen Oxides. The test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082]

**Z.14.** Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082]

**Z.15.** 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)(b), F.A.C.]

#### **Excess Emissions**

**Z.16.** The Permittee shall meet Conditions II.1. and II.6.

## Common Conditions - On-Spec Used Oil/Lead

**Z.17.** This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE.

## Common Conditions - F.A.C. Test Requirements

**Z.18.** This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

## Subsection AA. This section addresses the following emissions unit(s).

E.U.

ID No.
069

Brief Description
"D" Phosphoric Acid Plant

"D" Phosphoric Acid Plant emits fluoride and particulate matter emissions, and the emissions are controlled by a wet scrubber. CAM does not apply apply for fluorides and particulate matter for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards. 40 CFR 63, Subpart A - General Provisions; NSPS - 40 CFR 60, Subpart T, Standards of Performance (NSPS) for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)26., F.A.C.; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants.

# The following specific conditions apply to the emissions unit(s) listed above: Essential Potential to Emit (PTE) Parameters

**AA.1.** Permitted Capacity. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 85.22 tons of 100%  $P_2O_5$  input (from 274.92 TPH of 31% phosphate rock) or Maximum Daily 1-Hour Average Rate = 110 tons 100%  $P_2O_5$  input. The operation rate shall not exceed 800,000 tons during any 12 consecutive months of 100%  $P_2O_5$  input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC, and PSD-FL-297]

**AA.2.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and PSD-FL-297]

## **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

**AA.3**. Total Fluorides. Total Fluoride emissions from this emissions unit shall not exceed 0.012 lb/ton of equivalent  $P_2O_5$  feed, 1.32 lb/hr and 4.8 TPY.

[Rule 62-204.800(7)(b)25., F.A.C.; 40 CFR 60.202; 40 CFR 63.602(a); and PSD-FL-297] {Permitting Note- the limits established in PSD-FL-297 are more stringent than the MACT standard.}

**AA.4.** Particulate Matter. Particulate Matter Emissions shall not exceed 42.52 lbs/hr and 185.73 TPY. [Rule 62-296.320(4)(a), F.A.C.]

AA.5. <u>Visible Emissions</u>. Visible Emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

## DRAFT Permit No.: 0470002-048-AV

## **Operating Requirements**

AA.6. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition G.G.4.(1) or (2). [Rule 62-204.800, F.A.C.; 40 CFR 63.604]

## **Monitoring Requirements**

**AA.7.** Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of  $\pm 5$  percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(a)]

AA.8.  $P_2O_5$  Feed. The Permittee shall maintain a daily record of equivalent  $P_2O_5$  feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition AA.7. and then by proceeding according to Condition AA.111.(c)(3). [Rule 62-204.800, F.A.C.; 40 CFR 60.203(b)]

**AA.9.** Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range. [Rule 62-204.800, F.A.C.; 40 CFR 60.203(c)]

AA.10. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

## **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- AA.11. <u>Total Fluorides</u>. (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).
- (b) The owner or operator shall determine compliance with the total fluorides standard in § 60.202 as follows:
  - (2) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi}\right) / (PK)$$

where:

E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P2O5 feed.

Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).

Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).

N=number of emission points associated with the affected facility.

P=equivalent P2O5 feed rate, Mg/hr (ton/hr).

K=conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

DRAFT Permit No.: 0470002-048-AV

(3) The equivalent P2O5 feed rate (P) shall be computed for each run using the following equation:

P=Mp Rp

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).

Rp=P2O5 content, decimal fraction.

- (i) The accountability system of § 60.203(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.
- (ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P2O5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.204(a) and (b)]

- **AA.12.** <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5 GG.7.
- **AA.13.** Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed once every five years prior to operation permit renewal.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4., F.A.C.; Rule 62-297.401, F.A.C.]

**AA.14.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

#### Notification, Recordkeeping, Reporting Requirements

- **AA.15.** The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. GG.12.
- AA.16. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:
  - 1) Must comply with all conditions of the Order No. 04-I-AP,
  - 2) Must comply with all applicable requirements of Subparts A and AA,
  - 3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,

- 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods.
- 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

DRAFT Permit No.: 0470002-048-AV

- 6) All tests shall be submitted to the Department in accordance with Subparts A and AA,
- 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

## Exemption from New Source Performance Standards.

AA.17. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T. To be exempt, a source must have a current operating permit pursuant to Title V of the Clean Air Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions AA.6., AA.10., and AA.12. have been met.

[40 CFR 63.610]

## **Common Conditions** - F.A.C. Test Requirements

AA.18. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

#### Common Conditions – General Provisions of 40 CFR 63

AA.19. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

Subsection BB This section addresses the following emissions unit(s).

E.U.

ID No.
070

Brief Description

"C" & "D" Superphosphoric Acid (SPA) Plants (Vacuum Evaporation Process)

"C" & "D" Superphosphoric Acid (SPA) Plants and east & west phosphoric acid storage tanks emit fluoride, and are controlled by a scrubber. Since the Synspar Plant has no air emissions, the limerock (LR) bin associated with this emission unit is included here for recordkeeping purposes. The particulate matter emissions from this bin are controlled by a bag collector. CAM does not apply for fluoride for this emissions unit.

DRAFT Permit No.: 0470002-048-AV

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart U, Standards of Performance for Phosphate Fertilizer Industry: Superphosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)27., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants.

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

## Essential Potential to Emit (PTE) Parameters

**BB.1.** Permitted Capacity. The combined operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 84.2 tons of 100%  $P_2O_5$  input or Maximum Daily 1-Hour Average Rate = 110 tons of 100%  $P_2O_5$  input. The operation rate shall not exceed 876,000 tons during any 12 consecutive months of 100%  $P_2O_5$  input. 12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC, and PSD-FL-297]

**BB.2.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and PSD-FL-297]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

**BB.3.** Total Fluorides. Total Fluoride emissions at the sample port shall not exceed 0.0087 lb/ton of equivalent  $P_2O_5$  feed; 0.96 lbs/hr and 3.8 TPY.

[Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.212; 40 CFR 63.602(b)(1), and PSD-FL-297]

White Springs Agricultural Chemicals, Inc. DRAFT Permit No.: 0470002-048-AV Suwannee River/Swift Creek Complex

Emission Point LR:

**BB.4.** <u>Visible Emissions</u>. Visible Emissions shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]

## Operating Requirements

**BB.5.** Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition II.4.(1) or (2). [Rule 62-204.800, F.A.C.; 40 CFR 63.604]

#### **Monitoring Requirements**

**BB.6.** Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of  $\pm 5$  percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(a)]

**BB.7.**  $\underline{P_2O_5}$  Feed. The Permittee shall maintain a daily record of equivalent  $P_2O_5$  feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition BB.6. and then by proceeding according to BB.13.(c)(3).

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(b)]

**BB.8.** Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range. [Rule 62-204.800, F.A.C.; 40 CFR 60.213(c)]

**BB.9.** The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

#### **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

- **BB.10.** Total Fluorides. (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).
- (b) The owner or operator shall determine compliance with the total fluorides standard in § 60.212 as follows:
- (1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{ski}\right) / (PK)$$

where:

E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P2O5 feed.

Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).

Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).

N=number of emission points associated with the affected facility.

P=equivalent P2O5 feed rate, Mg/hr (ton/hr).

K=conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

DRAFT Permit No.: 0470002-048-AV

(3) The equivalent P2O5 feed rate (P) shall be computed for each run using the following equation:

P=Mp Rp

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).

Rp=P2O5 content, decimal fraction.

- (i) The accountability system of § 60.213(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.
- (ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P2O5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.;40 CFR 60.214]

**BB.11.** Total Fluorides. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5 – GG.7.

From vent (LR):

BB.12. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C. and Rule 62-297.310(7)(a)4.a., F.A.C.]

## Notification, Recordkeeping, Reporting Requirements

- **BB.13.** The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. GG.12.
- **BB.14.** This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:
  - 1) Must comply with all conditions of the Order No. 04-I-AP,
  - 2) Must comply with all applicable requirements of Subparts A and AA,
  - 3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,

- DRAFT Permit No.: 0470002-048-AV
- 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
- 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
- 6) All tests shall be submitted to the Department in accordance with Subparts A and AA,
- 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

## **Exemption from New Source Performance Standards.**

**BB.15.** This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U. To be exempt, a source must have a current operating permit pursuant to Title V of the Clean Air Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions BB.4., BB.9., and BB.11. have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart AA, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V is no longer valid.}
[40 CFR 63.610]

## **Common Conditions** - F.A.C. Test Requirements

BB.16. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

#### Common Conditions – General Provisions of 40 CFR 63

BB.17. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

DRAFT Permit No.: 0470002-048-AV

Subsection CC. This section addresses the following emissions unit(s).

E.U.

ID No. **Brief Description** 

071 Acid Clarification Plant

Acid Clarification Plant utilizes a series of 6 rotary drum filters to filter 48% P2Os phosphoric acid prior to evaporation to superphosphoric acid. Fluoride emissions are controlled by a packed, countercurrent, wet scrubber. CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Best Available Control Technology (BACT) Determination, dated February 28, 1978}

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

## **Essential Potential to Emit (PTE) Parameters**

CC.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 90.18 tons of 100% P<sub>2</sub>O<sub>5</sub> input or Maximum Daily 1-Hour Average Rate = 110 tons 100% P<sub>2</sub>O<sub>5</sub> input. 12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. Annual emissions shall not exceed 876,000 tons during any 12 consecutive months of 100% P2Os input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC, and PSD-FL-297]

CC.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and PSD-FL-297]

#### **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

CC.3. Fluoride emissions shall not exceed (0.03 lb FL/ton P<sub>2</sub>O<sub>5</sub> input)<sup>1</sup>; 3.3 lbs/hr and 13.1 TPY. [Rule 62-210.200(42), F.A.C.; (BACT from AC24-2722 issued 02-28-78), and <sup>1</sup>PSD-FL-297]

## **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

CC.4. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually with a frequency base date of 06/17.

[Rule 62-297.401, F.A.C.]

## Common Conditions - F.A.C. Test Requirements

CC.5. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

DRAFT Permit No.: 0470002-048-AV

Subsection DD. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

Molten Sulfur System for "E" & "F" Sulfuric Acid Plants

The Molten Sulfur System for "E" & "F" Sulfuric Acid Plants consists of a rail & truck unloading system with the following emission points: 1) RP - receiving pit, 2) FP - feed pit, 3) S1 - storage tanks vents (1-7), and 4) S2 - storage tanks vents (1-7). CAM does not apply.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.411, F.A.C., Sulfur Storage and Handling Facilities.}

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

## Essential Potential to Emit (PTE) Parameters

**DD.1.** Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 68.75 tons of throughput or Maximum Daily 1-Hour Average Rate = 76 tons throughput.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

Throughput rate corresponds to the sulfur feed rate to the sulfuric acid plants. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC and 0470005-009-AO]

**DD.2.** Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

## **Emission Limitations and Standards**

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

- **DD.3.** Molten sulfur transfer. 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 areas and stationary pipes shall seat effectively around the entire circumference to minimize spillage. [Rule 62-296.411(1)(a)]
- **DD.4.** Pipe disconnection point. All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks or tailraces 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 noncorrosible 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.

[Rule 62-296.411(1)(b)]

White Springs Agricultural Chemicals, Inc. DRAFT Permit No.: 0470002-048-AV Suwannee River/Swift Creek Complex

DD.5. Molten sulfur spills. 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.

[Rule 62-296.411(1)(d)]

**DD.6.** <u>Vent surfaces</u>. All vent surfaces shall be cleaned monthly to remove captured particles. [Rule 62-296.411(1)(e)]

**DD.7.** Visible Emissions shall not exceed 20% opacity (six minute average) from each vent below:

RP - receiving pit

FP - feed pit

S1 - storage tanks vents (1-7)

S2 - storage tanks vents (1-7)

[Rule 62-296.411(1)(g), F.A.C. and Operation Permit No. 0470005-009-AO]

**DD.8.** Operational procedures. Approved operational procedures, by the Department, shall be established to minimize spills from any moveable loading arm or pipe upon disconnection, reconnection or operation.

[Rule 62-296.411(1)(h)]

## **Test Methods and Procedures**

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**DD.9.** <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years prior to operation permit renewal for each vent below:

RP - receiving pit

FP - feed pit

S1 - storage tanks vents (1-7)

S2 - storage tanks vents (1-7)

[Rule 62-297.401, F.A.C.]

## Recordkeeping and Reporting Requirements

**DD.10.** 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.

[Rule 62-296.411(1)(f), F.A.C.]

## Common Conditions - F.A.C. Test Requirements

**DD.11.** This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

## Subsection EE. Common Conditions - On-Spec Used Oil/Lead

<u>E.U.</u>	Sub-	
ID No.	section	<b>Brief Description</b>
039	Q	'C' Auxiliary Boiler
040	R	'D' Auxiliary Boiler
068	BB	'E' Auxiliary Boiler
064	X	SCM Rock Dryer
004	D	X-Train
800	E	Y-Train
032	L	Z-Train

## The following conditions apply to the emissions unit(s) listed above:

EE.1. The lead emissions cap for the facility is 9.4 TPY. The on-specification used oil fired in the 'C', 'D' & 'E' Auxiliary Boilers should not exceed 23,000,000 gallons per year which at 100 ppm yields 9.0 TPY of lead emissions. The on-specification used oil fired in the other emissions unit(s) listed above shall not exceed 0.4 TPY of lead emissions. [Requested by the Applicant]

**EE.2.** The on-spec used oil prior to blending shall comply with the limits listed below and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS			
Constituent/Property	Allowable Level		
Arsenic	5 ppm maximum		
Cadmium	2 ppm maximum		
Chromium	10 ppm maximum		
Lead	100 ppm maximum		
Total Halogens	1,000 ppm maximum		
Flash Point	100°F minimum		

[40 CFR 761]

#### **EE.3.** On-specification used oil may be fired as follows:

- 1. At any time provided the maximum concentration of PCBs shall be less than 2 ppm and whether generated on or off-site. The analysis and recordkeeping requirements apply to each amount prior to blending even if to be blended with 90% virgin oil.
- 2. Only during normal operation temperature and not during startup or shutdown if the maximum concentration of PCBs is ≥ 2 but < 50 ppm.

  [40 CFR 761]
- **EE.4.** A certified on-specification used oil analysis of each delivery prior to blending shall be retained (in lieu of testing) and reported as part of the AOR. [Rule 62-210.370(3), F.A.C.]
- **EE.5.** A lead emissions report shall be submitted by each March 01 as part of the AOR in a table format showing all of data and results required to document that the LEAD CAP has not been exceeded for the previous calendar year. [Rule 62-210.370(3), F.A.C.]

## Subsection FF. Common Conditions - F.A.C. Test Requirements

Sub-	E.U.	Brief Description
sec-	<u>ID</u>	
<u>tion</u> A.	<u>No.</u> 001	#2 Phosphata Pools Caindan
B.	001	#2 Phosphate Rock Grinder  "A" Defluctionated Phosphate (DEP) Plant
C.	003	"A" Defluorinated Phosphate (DFP) Plant X-Train (Dical process)
D.	004	"Y" Train (#1 DAP Plant)
E.	010	#1 MAP/DAP/GTSP Storage Building
F.	015	MAP/DAP Screen/Ship
G.	020	"B" Phosphoric Acid Plant
Н.	020	"C" Sulfuric Acid Plant
I.	022	"D" Sulfuric Acid Plant
J.	032	Z-Train (#2 DAP)
K.	034	South Phosphoric Acid Filters
L.	035	North Phosphoric Acid Filters
M.	036	"A" and "B" Superphosphoric Acid Plants
N.	038	"B" Defluorinated Phosphate (DFP) Plant
O.	039	"C" Auxiliary Boiler
P.	040	"D" Auxiliary Boiler
Q.	042	Defluorinated Phosphate (DFP) Feed Prep
R.	044	"A" and "B" Defluorinated Phosphate (DFP) Coolers
S.	054	Molten Sulfur System
T.	061	Green Superphosphoric Acid Plant
U.	062	Defluorinated Phosphate (DFP) Silos
V.	064	SCM Rock Dryer
W.	065	SCM Silos
X.	066	"E" Sulfuric Acid Plant
Y.	067	"F" Sulfuric Acid Plant
Z.	068	"E" Auxiliary Boiler
AA.	069	"D" Phosphoric Acid Plant
BB.	070	"C" and "D" Superphosphoric Acid Plants
CC.	071	Acid Clarification Plant
DD.	072	Molten Sulfur System

The following specific conditions may apply to the emissions unit(s) listed above:

{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A through FF for applicability.}

62-297.310 General Compliance Test Requirements.

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

(1) 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

DRAFT Permit No.: 0470002-048-AV

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.

- (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 operation at permitted capacity as defined below. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
  - (a) Combustion Turbines. (Reserved)
- (b) All Other Sources. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.
- (3) Calculation of Emission Rate. 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.
  - (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 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 FINAL 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.

DRAFT Permit No.: 0470002-048-AV

(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** REFERENCE **TOLERANCE CALIBRATION INSTRUMENT FREQUENCY** Liquid in glass Annually ASTM Hg in glass ref. +/-2% thermometer thermometer or equivalent, or thermometric points Bimetallic thermometer Calib. liq. in glass Quarterly 5 degrees F thermometer Thermocouple ASTM Hg in glass ref. Annually 5 degrees F thermometer, NBS calibrated reference and potentiometer Barometer Monthly Hg barometer or +/-1% scale NOAA station By construction or Pitot Tube When required or when See EPA Method 2, damaged measurements in wind Fig. 2-2 & 2-3 tunnel D greater than 16" and standard pitot tube +/-0.001" men of at Micrometer Probe Nozzles Before each test or when least three readings .004" nicked, dented, or corroded Max. deviation between readings Dry Gas Meter and 1. Full Scale: Spirometer or 2% calibrated wet test or Orifice Meter When received. When 5% change dry gas test meter observed, Annually 2. One Point: Semiannually 3. Check after each test Comparison check 5% series

- (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.

DRAFT Permit No.: 0470002-048-AV

- (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.
  - (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.
- 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 x 3 inch x 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.
- (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 Rule 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

oltural Chemicals, Inc. DRAFT Permit No.: 0470002-048-AV

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 Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.
- 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- 10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4)(a)1. through 7., F.A.C.
- (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.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.
  - (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.

DRAFT Permit No.: 0470002-048-AV

- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  - 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  - 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
  - 12. The type, manufacturer and configuration of the sampling equipment used.
  - 13. Data related to the required calibration of the test equipment.
  - 14. Data on the identification, processing and weights of all filters used.
  - 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

## 62-297.320 Standards for Persons Engaged in Visible Emissions Observations.

- (1) Training and Certification Required. All persons engaged in determining the opacity of visible emissions in Florida shall attend training and be certified by a training provider in accordance with the procedures and requirements set forth below.
- (a) Certification shall consist of satisfactory attendance and completion of a classroom lecture and a field qualification. For certification purposes, the classroom lecture and field qualification are separate and independent requirements.
- (b) Attendance at the classroom lecture is required no less frequently than every three years. Successful completion of the field qualification is required no less frequently than every six months.
- (c) Proof of certification shall be made by including copies of the signed and dated certificates or cards issued by the training providers with documentation of visible emissions observations submitted to the department, or otherwise upon request of the department.

(2) Requirements for Training Providers. All persons providing training leading to the certification of persons engaged in determining the opacity of visible emissions in Florida shall meet the requirements of subsections 62-297.320(2)-(8), F.A.C.

DRAFT Permit No.: 0470002-048-AV

- (a) For certification purposes, the classroom lecture and field certification are separate and independent requirements. For each course scheduled, each training provider shall offer a classroom lecture and one or more days of field qualification.
- (b) Copies of quality assurance documentation, attendance records and field data sheets shall be maintained for a period of no less than three years after the conclusion of each course and shall be made available to the department upon request.
- (c) Each training provider shall arrange for suitable locations for the classroom lecture and field qualification sessions that facilitate learning and reduce the impact of the smoke on passersby.
- (d) To assure that cigar, pipe or cigarette smoke does not interfere with the observations of the trainees, each training provider shall enforce a policy of no smoking within the field qualification area.
- (3) Classroom Lecture.
- (a) The classroom lecture shall include the following topics and exercises:
- 1. Sources and causes of visible emissions.
- 2. Common types of emission control equipment and their effects on visible emissions observations.
- 3. History of opacity measurement.
- 4. Principles and theory of opacity.
- 5. Plume types and characteristics.
- 6. Legal aspects of visible emissions observations and legal defensibility of Method 9.
- 7. Basic meteorological conditions that influence plume behavior.
- 8. Proper procedures for conducting field observations under a variety of conditions.
- 9. A demonstration of commonly used measurement devices including a compass, a wind speed measurement device, and an inclinometer.
- 10. A written exercise demonstrating the proper procedure for documentation of observations.
- (b) Training providers shall issue a signed and dated certificate or card to all persons attending the classroom lecture.
- (4) Field Qualification.
- (a) The field qualification shall be conducted in accordance with the requirements set forth in 40 CFR Part 60, Subpart A, EPA Method 9, adopted and incorporated by reference at Rule 62-204.800, F.A.C.; EPA Quality Assurance Handbook for Air Pollution Measurement Systems: Volume III, Section 3.12, hereby adopted and incorporated by reference; and EPA Guidelines for Evaluation of Visible Emissions (EPA 340/1-75-007, April 1975), hereby adopted and incorporated by reference.
- (b) Each training provider shall meet requirements for quality assurance at least as stringent as those outlined in EPA Method 9.
- (c) Each training provider shall monitor the attendees so that conferring or copying results during field qualification does not occur.
- (d) Each training provider shall not provide hints of any kind or demonstrate the smoke standards during the field qualification sessions, except during familiarization runs prior to each test.
- (e) Training providers shall issue a signed and dated certificate or card to all persons who successfully complete the field qualification.
- (5) Notification to Department of Training Course Offerings. Each training provider shall notify the Department of all visible emissions training courses such provider offers in Florida at least 30 days prior to the start of each course.
- (6) Notification to Department of Persons Receiving Certification. Each training provider shall provide a list of the names of attendees receiving certification at its courses to the department no later than 30 days after the conclusion of each course.

DRAFT Permit No.: 0470002-048-AV

(7) Audit by the Department. For auditing purposes, each training provider shall allow one or more persons from the Department or a local air pollution control agency to observe each visible emissions training course offered in Florida without advance notice to the training provider. The training provider shall not issue a certificate or card to the observers, and shall not charge a fee for their attendance.

(8) Invalidation of Certificates. After investigation by the department, should any training provider's course be found by the department to not meet the requirements of this section, the certificates or cards offered by such provider for such course shall not be considered valid for visible emissions observations in Florida.

## Subsection GG. Common Conditions - Subparts AA Monitoring and Testing Requirements

Sub-	<u>E.U.</u>	Brief Description	<b>Page</b>
sec-	<u>ID</u>		
<u>tion</u>	<u>No.</u>		
G.	020	"B" Phosphoric Acid Plant	29
K.	034	South Phosphoric Acid Filters	37
L.	035	North Phosphoric Acid Filters	38
M.	036	"A" and "B" Superphosphoric Acid Plants	39
V.	064	SCM Rock Dryer	56
AA.	069	"D" Phosphoric Acid Plant	65
BB.	070	"C" and "D" Superphosphoric Acid Plants	67

## **Monitoring Requirements**

**GG.1.** Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of  $\pm 5$  percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(a)]

- **GG.2.**  $P_2O_5$  Feed and Phosphate Rock Feed. (1) Each owner or operator of a new or existing wetprocess phosphoric acid process line or superphosphoric acid process line subject to the provisions of this subpart shall maintain a daily record of equivalent  $P_2O_5$  feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition II.1. and then by proceeding according to  $\S63.606(c)(3)$ .
- (2) Each owner or operator of a new or existing phosphate rock calciner or phosphate rock dryer subject to the provisions of this subpart shall maintain a daily record of phosphate rock feed by determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition II.1. [Rule 62-204.800, F.A.C.; 40 CFR 63.605(b)(1)and (2)]
- GG.3. <u>Scrubber Pressure Drop and Liquid Flow Rate</u>. Each owner or operator of a new or existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer or phosphate rock calciner using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:
- (1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of  $\pm 5$  percent over its operating range.
- (2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of  $\pm 5$  percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(c)(1) and (2)]

**GG.4.** Operating Parameter Allowable Range Methodology. Following the date on which the performance test required in § 63.606 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (1) or (2) of this Condition:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of

DRAFT Permit No.: 0470002-048-AV

- the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of the baseline average value determined as a requirement of §63.606(c)(4), (d)(4), or (e)(2). The Administrator retains the right to reduce the ±20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than  $\pm 10$  percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to §§63.607(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.
- (2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in §63.606(c)(4), (d)(4), or (e)(2). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in §63.606(c)(4), (d)(4), or (e)(2). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(d)]

## Performance tests and compliance provisions.

## **GG.5.** Performance Tests.

- (1) On or before the applicable compliance date in § 63.609 and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63 Subpart A and in section 63.606.
- (2) As required by §-63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with

DRAFT Permit No.: 0470002-048-AV

the applicable emission standard for each new wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63 Subpart A and in section 63.606.

[40 CFR 63.606(a)]

- GG.6. In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A, or other methods and procedures as specified in this section, except as provided in § 63.7(f).

  [40 CFR 63.606(b)]
- **GG.7.** <u>Total Fluorides</u>. Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line shall determine compliance with the applicable total fluorides standards in § 63.602 or § 63.603 as follows:
- (1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = (\sum_{i=1}^{N} C_{si} Q_{sdi})/(PK)$$

where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent  $P_2O_5$  feed.

 $C_{si}$  = concentration of total fluorides from emission point ``i," mg/dscm (mg/dscf).

 $Q_{sdi}$  = volumetric flow rate of effluent gas from emission point 'i," dscm/hr (dscf/hr).

N = number of emission points associated with the affected facility.

 $P = \text{equivalent } P_2O_5 \text{ feed rate, metric ton/hr (ton/hr)}.$ 

K = conversion factor, 1000 mg/g (453,600 mg/lb).

- (2) Method 13A or 13B (40 CFR part 60, appendix A) shall be used to determine the total fluorides concentration ( $C_{si}$ ) and volumetric flow rate ( $Q_{sdi}$ ) of the effluent gas from each of the emission points. If Method 13B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in section 7.3.3 and 7.3.4. in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).
  - (3) The equivalent P<sub>2</sub>O<sub>5</sub> feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

where:

 $M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).$ 

 $R_p = P_2O_5$  content, decimal fraction.

- (i) The accountability system described in § 63.605(a) and (b) shall be used to determine the mass flow rate  $(M_p)$  of the phosphorus-bearing feed.
- (ii) The  $P_2O_5$  content ( $R_p$ ) of the feed shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:
  - (A) Section IX, Methods of Analysis For Phosphate Rock, No. 1 Preparation

of Sample.

- (B) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P<sub>2</sub>O<sub>5</sub> or Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>, Method A-Volumetric Method.
- (C)-Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P<sub>2</sub>O<sub>5</sub> or Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>, Method B-Gravimetric Quimociac Method.

DRAFT Permit No.: 0470002-048-AV

- (D) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P<sub>2</sub>O<sub>5</sub> or Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>, Method C-Spectrophotometric Method.
- (E) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method A-Volumetric Method.
- (F) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method B-Gravimetric Quimociac Method.
- (G) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method C-Spectrophotometric Method.
- (4) To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2). [40 CFR 63.606(c)]
- **GG.8.** Particulate Matter. Each owner or operator of a new or existing phosphate rock dryer shall demonstrate compliance with the particulate matter standards in § 63.602 or § 63.603 as follows:
- (1) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E = (C_s Q_{sd})/(PK)$$

where:

E = emission rate of particulate matter, kg/Mg (lb/ton) of phosphate rock feed.

 $C_s = \text{concentration of particulate matter, g/dscm (g/dscf)}.$ 

 $Q_{sd}$  = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).

P = phosphate rock feed rate, Mg/hr (ton/hr).

K = conversion factor, 1000 g/kg (453.6 g/lb).

- (2) Method 5 (40 CFR part 60, appendix A) shall be used to determine the particulate matter concentration ( $c_s$ ) and volumetric flow rate ( $Q_{sd}$ ) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).
- (3) The system described in § 63.605(a) shall be used to determine the phosphate rock feed rate (P) for each run.
- (4) To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the particulate matter runs. The arithmetic average of the one-hour averages determined during the three test runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2).

  [40 CFR 63.606(d)]
- **GG.9.** Each owner or operator of a new or existing phosphate rock calciner shall demonstrate compliance with the particulate matter standards in §§ 63.602 and 63.603 as follows:
- (1) Method 5 (40 CFR part 60, appendix A) shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 60 minutes and 1.70 dscm.
- (2) To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each

scrubber in the process scrubbing system during each of the particulate matter runs. The arithmetic average of the one-hour averages determined during the three test runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2).

[40 CFR 63.606(e)]

DRAFT Permit No.: 0470002-048-AV

## Notification, recordkeeping, and reporting requirements.

- **GG.10.** Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in § 63.9. [40 CFR 63.607(a)]
- GG.11. Each owner or operator subject to the requirements of this subpart shall comply with the recordkeeping requirements in § 63.10.

  [40 CFR 63.607(b)]
- **GG.12.** The owner or operator of an affected source shall comply with the reporting requirements specified in § 63.10 as follows:
- (1) <u>Performance test report</u>. As required by § 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in § 63.9.
- (2) Excess emissions report. As required by § 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in § 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in § 63.10.
- (3) <u>Summary report.</u> If the total duration of control system exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in § 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half
- (4) If the total duration of control system operating parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

  [40 CFR 63.607(c)]

## DRAFT Permit No.: 0470002-048-AV

# Subsection HH. Common Conditions - Subparts BB Monitoring and Testing Requirements

Sub-	<u>E.U.</u>	Brief Description		<u>Page</u>
sec-	<u>ID</u>		·	
<u>tion</u>	<u>No.</u>			
D.	800	"Y" Train (#1 DAP Plant)		16
J.	032	Z-Train (#2 DAP)		35

## **Monitoring Requirements**

**HH.1.** Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of  $\pm 5$  percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(a)]

**HH.2.**  $P_2O_5$  Feed. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line subject to the provisions of this subpart shall maintain a daily record of equivalent  $P_2O_5$  feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition JJ.1. and then by proceeding according to  $\S63.626(c)(3)$ .

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(b)]

- HH.3. <u>Scrubber Pressure Drop and Liquid Flow Rate</u>. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:
- (1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of  $\pm 5$  percent over its operating range.
- (2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of  $\pm 5$  percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(c)]

- **HH.4.** The owner or operator of any granular triple superphosphate storage building subject to the provisions of this subpart shall maintain an accurate account of granular triple superphosphate in storage to permit the determination of the amount of equivalent  $P_2O_5$  stored. [Rule 62-204.800, F.A.C.; 40 CFR 63.625(d)]
- **HH.5.** (1) Each owner or operator of a new or existing granular triple superphosphate storage building subject to the provisions of this subpart shall maintain a daily record of total equivalent  $P_2O_5$  stored by multiplying the percentage  $P_2O_5$  content, as determined by § 63.626(d)(3), times the total mass of granular triple superphosphate stored.
- (2) The owner or operator of any granular triple superphosphate storage building subject to the provisions of this subpart shall develop for approval by the Administrator a site-specific methodology including sufficient recordkeeping for the purposes of demonstrating compliance with § 63.622(c)(2) or 63.623(c)(2), as applicable.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(e)]

- DRAFT Permit No.: 0470002-048-AV
- HH.6. Operating Parameter Allowable Range Methodology. Following the date on which the performance test required in § 63.626 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (1) or (2) of this Condition:
- (1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of the baseline average value determined as a requirement of §63.626(c)(4) or (d)(4). The Administrator retains the right to reduce the ±20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but in no instance shall the adjustment be reduced to less than  $\pm 10$  percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to §§63.627(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.
- (2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in §63.626(c)(4) or (d)(4). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in §63.626(c)(4) or (d)(4). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(f)]

## Performance tests and compliance provisions.

## HH.7. Performance Tests.

(1) On or before the applicable compliance date in § 63.630 and once per annum thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of this subpart shall conduct a performance test to demonstrate compliance with the applicable emission

DRAFT Permit No.: 0470002-048-AV

standard for each existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

- (2) As required by § 63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of this subpart shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

  [40 CFR 63.626(a)]
- HH.8. In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A, or other methods and procedures as specified in this section, except as provided in § 63.7(f). [40 CFR 63.626(b)]
- HH.9. <u>Total Fluorides</u>. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line shall determine compliance with the applicable total fluorides standards in § 63.622 or § 63.623 as follows:
- (1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = (\sum_{i=1}^{N} C_{si} Q_{sdi})/(PK)$$

#### where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent  $P_2O_5$  feed.

 $C_{si}$  = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).

Q<sub>sdi</sub> = volumetric flow rate of effluent gas from emission point ``i," dscm/hr (dscf/hr).

N = number of emission points associated with the affected facility.

 $P = \text{equivalent } P_2O_5 \text{ feed rate, metric ton/hr (ton/hr)}.$ 

K = conversion factor, 1000 mg/g (453,600 mg/lb).

- (2) Method 13A or 13B (40 CFR part 60, appendix A) shall be used to determine the total fluorides concentration ( $C_{si}$ ) and volumetric flow rate ( $Q_{sdi}$ ) of the effluent gas from each of the emission points. If Method 13 B is used, the fusion of the filtered material described in section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in sections 7.3.3 and 7.3.4 in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least one hour and 0.85 dscm (30 dscf).
  - (3) The equivalent  $P_2O_5$  feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

where:

 $M_p$  = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).  $R_p = P_2O_5$  content, decimal fraction.

- (i) The accountability system described in  $\S$  63.625(a) and (b) shall be used to determine the mass flow rate ( $M_p$ ) of the phosphorus-bearing feed.
- (ii) The P<sub>2</sub>O<sub>5</sub> content (R<sub>p</sub>) of the feed shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Book of Methods

White Springs Agricultural Chemicals, Inc.

DRAFT Permit No.: 0470002-048-AV
Suwannee River/Swift Creek Complex

Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:

- (A) Section IX, Methods of Analysis For Phosphate Rock, No. 1 Preparation of Sample.
- (B) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P<sub>2</sub>O<sub>5</sub> or Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>, Method A-Volumetric Method.
- (C) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P<sub>2</sub>O<sub>5</sub> or Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub>, Method B-Gravimetric Quimociac Method.
- (D) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus- $P_2O_5$  or  $Ca_3(PO_4)_2$ , Method C-Spectrophotometric Method.
- (E) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method A-Volumetric Method.
- (F) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method B-Gravimetric Quimociae Method.
- (G) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method C-Spectrophotometric Method.
- (4) To comply with § 63.625(f)(1) or (2), the owner or operator shall use the monitoring systems in § 63.625(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.625(f)(1) or (2). [40 CFR 63.626(c)]
- HH.10. <u>Total Fluorides Storage Building</u>. Each owner or operator of a new or existing granular triple superphosphate storage building shall determine compliance with the applicable total fluorides standards in § 63.622 or § 63.623 as follows:
- (1) The owner or operator shall conduct performance tests only when the following quantities of product are being cured or stored in the facility.
- (i) Total granular triple superphosphate is at least 10 percent of the building capacity, and
- (ii) Fresh granular triple superphosphate is at least six percent of the total amount of granular triple superphosphate, or
- (iii) If the provision in paragraph (d)(1)(ii) of this sub-section exceeds production capabilities for fresh granular triple superphosphate, fresh granular triple superphosphate is equal to at least 5 days maximum production.
- (2) In conducting the performance test, the owner or operator shall use as reference methods and procedures the test methods in Part 60, Appendix A, or other methods and procedures as specified in this section, except as provided in § 63.7(f).
- (3). The owner or operator shall determine compliance with the total fluorides standard in §§ 63.622 and 63.623 as follows:
- (i) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = (\sum_{i=1}^{N} \mathbf{C}_{si} \mathbf{Q}_{sdi})/(PK)$$

where:

DRAFT Permit No.: 0470002-048-AV

E = emission rate of total fluorides, g/hr/metric ton (lb/hr/ton) of equivalent  $P_2O_5$  stored.

C<sub>si</sub> = concentration of total fluorides from emission point ``i," mg/dscm (mg/dscf).

Q<sub>sdi</sub> = volumetric flow rate of effluent gas from emission point ``i," dscm/hr (dscf/hr).

N = number of emission points in the affected facility.

 $P = \text{equivalent } P_2O_5 \text{ stored, metric tons (tons).}$ 

K = conversion factor, 1000 mg/g (453,600 mg/lb).

- (ii) Method 13A or 13B (40 CFR part 60, appendix A) shall be used to determine the total fluorides concentration ( $C_{si}$ ) and volumetric flow rate ( $Q_{sdi}$ ) of the effluent gas from each of the emission points. If Method 13B is used, the fusion of the filtered material described in section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in Sections 7.3.3 and 7.3.4 in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least one hour and 0.85 dscm (30 dscf).
  - (iii) The equivalent P<sub>2</sub>O<sub>5</sub> feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

#### where

 $M_p$  = amount of product in storage, metric ton (ton).

 $R_p = P_2O_5$  content of product in storage, weight fraction.

- (iv) The accountability system described in § 63.625(d) and (e) shall be used to determine the amount of product ( $M_p$ ) in storage.
- (v) The  $P_2O_5$  content  $(R_p)$  of the product stored shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:
- (A) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method A-Volumetric Method.
- (B) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P₂O₅, Method B-Gravimetric Quimociac Method.
- (C) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P<sub>2</sub>O<sub>5</sub>, Method C-Spectrophotometric Method, or,
- (vi) The P<sub>2</sub>O<sub>5</sub> content (R<sub>p</sub>) of the product stored shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Official Methods of Analysis of AOAC International, sixteenth Edition, 1995, where applicable:
  - (A) AOAC Official Method 957.02 Phosphorus (Total) In Fertilizers,

Preparation of Sample.

- (B) AOAC Official Method 929.01 Sampling of Solid Fertilizers.
- (C) AOAC Official Method 929.02 Preparation of Fertilizer Sample.
- (D) AOAC Official Method 978.01 Phosphorus (Total) In Fertilizers,

Automated Method.

- (E) AOAC Official Method 969.02 Phosphorus (Total) In Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method.
- (F) AOAC Official Method 962.02 Phosphorus (Total) In Fertilizers, Gravimetric Quinolinium Molybdophosphate Method.
- (G) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizer, Spectrophotometric Molybdovanadophosphate Method.
- (4) To comply with § 63.625(f)(1) or (2), the owner or operator shall use the monitoring systems described in § 63.625(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid

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

to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.625(f)(1) or (2).

DRAFT Permit No.: 0470002-048-AV

[40 CFR 63.626(d)]

### Notification, recordkeeping, and reporting requirements.

- **HH.11.** Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in § 63.9. [40 CFR 63.627(a)]
- **HH.12.** Each owner or operator subject to the requirements of this subpart shall comply with the recordkeeping requirements in § 63.10. [40 CFR 63.627(b)]
- **HH.13.** The owner or operator of an affected source shall comply with the reporting requirements specified in § 63.10 as follows:
- (1) <u>Performance test report</u>. As required by § 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in § 63.9.
- (2) Excess emissions report. As required by § 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in § 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in § 63.10.
- (3) Summary report. If the total duration of control system exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in § 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.
- (4) If the total duration of control system operating parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

  [40 CFR 63.627(c)]

### DRAFT Permit No.: 0470002-048-AV

### Subsection II. Common Conditions - F.A.C. Excess Emissions Rules

Sub-	<u>E.U.</u>	Brief Description	<b>Page</b>
sec-	<u>ID</u>		
<u>tion</u>	No.		
В	003	"A" Defluorinated Phosphate (DFP) Plant	
O.	039	"C" Auxiliary Boiler	43
P.	040	"D" Auxiliary Boiler	45
Z.	068	"E" Auxiliary Boiler	63

- II.1. Excess Emissions—Startup, Shutdown, Malfunction. Excess emissions resulting from startup, shutdown or malfunction 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 2 hours in any 24 hour period unless authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- II.2. Excess Emissions Existing Fossil Fuel Steam Generators. 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.

  [Rule 62-210.700(2), F.A.C.]
- II.3. Excess Emissions Existing Fossil Fuel Steam Generators Soot Blowing and Load Change. Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this subparagraph, for boiler cleaning and load changes, at units which have installed and are operating, or have committed to install or operate, continuous opacity monitors.

Particulate matter emissions shall not exceed an average of 0.3 lbs. per million BTU heat input during the 3-hour period of excess emissions allowed by this subparagraph. [Rule 62-210.700(3), F.A.C.]

- II.4. Excess Emissions. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment of process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- II.5. Excess Emissions. Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest. [Rule 62-210.700(5), F.A.C.]

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

DRAFT Permit No.: 0470002-048-AV

**II.6.** Excess Emissions- Malfunction. In case of excess emissions resulting from malfunctions, the 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. [Rule 62-210.700(6), F.A.C.]

### **Compliance Assurance Monitoring Requirements**

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

### 40 CFR 64.6 Approval of Monitoring.

- The attached CAM plan(s), as submitted by the applicant, is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.
   [40 CFR 64.6(a)]
- 2. The attached CAM plan(s) include the following information:
  - (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
  - (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
- (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable. [40 CFR 64.6(c)(1)]
- The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see CAM Conditions 5. 9.) and reporting exceedances or excursions (see CAM Conditions 10. 14.).
   CFR 64.6(c)(2)]
- 4. The permittee is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see CAM Conditions 5. 17.).

[40 CFR 64.6(c)(3)]

### 40 CFR 64.7 Operation of Approved Monitoring.

- Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.
   CFR 64.7(a)]
- 6. <u>Proper maintenance.</u> At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR 64.7(b)]

7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times

that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR 64.7(c)]

### 8. Response to excursions or exceedances.

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

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

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

[40 CFR 64.7(e)]

### 40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

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

pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

[40 CFR 64.8(a)]

### 11. Elements of a QIP:

- a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
- b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
  - (i) Improved preventive maintenance practices.
  - (ii) Process operation changes.
  - (iii) Appropriate improvements to control methods.
  - (iv) Other steps appropriate to correct control performance.
  - (v) More frequent or improved monitoring (only in conjunction with one or more steps under CAM Condition 11.b(i) through (iv), above).

[40 CFR 64.8(b)]

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

[40 CFR 64.8(c)]

- 13. Following implementation of a QIP, upon any subsequent determination pursuant to CAM Condition 8.b., the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:
  - a. Failed to address the cause of the control device performance problems; or
  - b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

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

[40 CFR 64.8(e)]

### 40 CFR 64.9 Reporting And Recordkeeping Requirements.

### 15. General reporting requirements.

- a. On and after the date specified in **CAM Condition 5.** by which the owner or operator must use monitoring that meets the requirements of this appendix, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
- b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:

- (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10.** through **14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

### 16. General recordkeeping requirements.

- a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to **CAM Conditions 10.** through **14.** and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

### 40 CFR 64.10 Savings Provisions.

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

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

[40 CFR 64.10]

## **Emissions Unit 003**

Defluorinated Phosphate "A" Plant
Fluoride, Particulate Matter, and Sulfur Dioxide Controlled by Cross-flow Packed scrubber with high and low pressure sprays and Tailgas Scrubber

**Monitoring Approach** 

Wolltoring Approach							
	Indicator 1	Indicator 2	Indicator 3				
1. Indicator	Max and Min Fan Amps	Max and Min Liquid Flow Rate	Min dP				
Measuring	Fan Amps are measured with an	Liquid Flow is measured with an	Delta P is measured with an				
Approach	installed Amp Meter	installed Flow Meter	installed dP cell				
2. Indicator	An excursion is defined as any 1	An excursion is defined as any 1	An excursion is defined as any 1				
Range	hour average excluding those	hour average excluding those	hour average excluding those				
	events defined as startup,	events defined as startup,	events defined as startup,				
	shutdown and malfunctions, flow	shutdown and malfunctions, flow	shutdown and malfunctions,				
	rate outside of the following	rate outside of the following	pressure drop outside of the following range:				
	range: . Max Amps > 26	range: High Pressure flow	following range.				
	Min Amps < 18.8	Max flow > 1247 Min flow < 920	Min dP < 7.5				
	1	1217 11111 11011 1720	17111 di - 715				
		Low Pressure flow	Tailgas Scrubber				
		Max flow > 1541	Min dP < 0.7				
		Min flow < 1001					
		Tailgas Scrubber					
		Max flow > 300 Min flow < 290					
	Excursions trigger an inspection,	Excursions trigger an inspection,	Excursions trigger an inspection,				
	corrective action, and reporting	corrective action, and reporting	corrective action, and reporting				
	requirement. The corrective	requirement. The corrective	requirement. The corrective				
	action must be conducted to	action must be conducted to	action must be conducted to				
	restore the flow rate to within the	restore the flow rate to within the	restore the pressure drop to within				
	permitted range and assist in	permitted range and assist in	the permitted range and assist in				
	preventing future scrubber malfunctions from occurring.	preventing future scrubber malfunctions from occurring.	preventing future scrubber malfunctions from occurring.				
3. Performance Cri		manufictions from occurring.	martanetions from occurring.				
A.	All CAM-required	All CAM-required	All CAM-required				
Representative	instrumentation meets or exceeds	instrumentation meets or exceeds	instrumentation meets or exceeds				
Data	the accuracy required by the	the accuracy required by the	the accuracy required by the				
D (A	regulations for this plant. The	regulations for this plant. The	regulations for this plant. The				
	monitoring points are located per	monitoring points are located per	monitoring points are located per				
	the manufacturers	the manufacturers	the manufacturers				
	recommendations and/or best	recommendations and/or best	recommendations and/or best				
	engineering practices guidelines.	engineering practices guidelines.	engineering practices guidelines.				
B. QA/QC	Calibration and maintenance are	Calibration and maintenance are	Calibration and maintenance are				
Practices and	performed annually or on an as-	performed annually or on an as-	performed annually or on an as-				
Criteria	needed basis. Instrument	needed basis. Instrument	needed basis. Instrument				
	readings are observed on a	readings are observed on a	readings are observed on a				
	continuing basis and any reading	continuing basis and any reading	continuing basis and any reading				
	outside the normal operating	outside the normal operating	outside the normal operating				
	range for this plant is	range for this plant is	range for this plant is investigated. This includes				
	investigated. This includes verification that the proper signal	investigated. This includes verification that the proper signal	verification that the proper signal				
	is being produced and that the	is being produced and that the	is being produced and that the				
	instrumentation is working	instrumentation is working	instrumentation is working				
	properly. Any necessary	properly. Any necessary	properly. Any necessary				
	maintenance is performed and the	maintenance is performed and the	maintenance is performed and the				
	instrument re-calibrated, as	instrument re-calibrated, as	instrument re-calibrated, as				
	necessary.	necessary.	necessary.				
C. Monitoring	All parameters are monitored	All parameters are monitored	All parameters are monitored				
Frequency	continuously.	continuously.	continuously.				
4. Data Collection	All parameters are averaged in	All parameters are averaged in					
Procedures	15-minute blocks based on data	15-minute blocks based on data	15-minute blocks based on data				
	collected by the Amp Meter.	collected by the Flow Meter.	collected by the dP cell.				
5. Averaging	All parameters are averaged in	All parameters are averaged in	All parameters are averaged in				
Period	15-minute blocks. These 15-	15-minute blocks. These 15-	15-minute blocks. These 15-				
I CIIOG							
10100	minute blocks are then averaged to produce a 1hr average.	minute blocks are then averaged to produce a 1hr average.	minute blocks are then averaged to produce a 1hr average.				

## **Emissions Unit 038**

Defluorinated Phosphate "B" Plant
Fluoride, Particulate Matter, and Sulfur Dioxide Controlled by Cross-flow Packed
Scrubber

**Monitoring Approach** 

<u>Monitoring Approach</u>						
	Indicator 1	Indicator 2	Indicator 3			
1. Indicator	Max and Min Fan Amps	Max and Min Liquid Flow Rate	Min dP			
Measuring	Fan Amps are measured with an	Liquid Flow is measured with an	Delta P is measured with an			
Approach	installed Amp Meter	installed Flow Meter	installed dP cell			
2. Indicator	An excursion is defined as any I	An excursion is defined as any I	An excursion is defined as any I			
Range	hour average excluding those	hour average excluding those	hour average excluding those			
•	events defined as startup,	events defined as startup,	events defined as startup,			
	shutdown and malfunctions, flow	shutdown and malfunctions, flow	shutdown and malfunctions,			
	rate outside of the following	rate outside of the following	pressure drop outside of the			
	range:	range:	following range:			
	May Amma > 21	High Pressure Flow Max flow > 1403 Min flow < 743	Min dD < 10.4			
	Max Amps > 21 Min Amps < 19	Low Pressure Flow	Min dP < 10.4			
	Willi Amps < 19	Max flow > 1488 Min flow < 952	Toilege Min dD < 2.0			
		Tailgas Flow	Tailgas Min dP < 2.0			
•						
	Evaporations trianger on inspection	Max flow > 339 Min flow < 297	Evapraiana triagar an ingrastian			
	Excursions trigger an inspection,	Excursions trigger an inspection, corrective action, and reporting	Excursions trigger an inspection,			
	corrective action, and reporting requirement. The corrective	requirement. The corrective	corrective action, and reporting requirement. The corrective			
	action must be conducted to	action must be conducted to	action must be conducted to			
	restore the flow rate to within the	restore the flow rate to within the	restore the pressure drop to within			
	permitted range and assist in	permitted range and assist in	the permitted range and assist in			
	preventing future scrubber	preventing future scrubber	preventing future scrubber			
	malfunctions from occurring.	malfunctions from occurring.	malfunctions from occurring.			
3. Performance Cri		a.runono il omi oconi il gi				
Α.	All CAM-required	All CAM-required	All CAM-required			
Representative	instrumentation meets or exceeds	instrumentation meets or exceeds	instrumentation meets or exceeds			
Data	the accuracy required by the	the accuracy required by the	the accuracy required by the			
	regulations for this plant. The	regulations for this plant. The	regulations for this plant. The			
	monitoring points are located per	monitoring points are located per	monitoring points are located per			
	the manufacturers	the manufacturers	the manufacturers			
	recommendations and/or best	recommendations and/or best	recommendations and/or best			
	engineering practices guidelines.	engineering practices guidelines.	engineering practices guidelines.			
B. QA/QC	Calibration and maintenance are	Calibration and maintenance are	Calibration and maintenance are			
Practices and	performed annually or on an as-	performed annually or on an as-	performed annually or on an as-			
Criteria	needed basis. Instrument	needed basis. Instrument	needed basis. Instrument			
	readings are observed on a	readings are observed on a	readings are observed on a			
	continuing basis and any reading	continuing basis and any reading	continuing basis and any reading			
	outside the normal operating	outside the normal operating	outside the normal operating			
	range for this plant is	range for this plant is	range for this plant is			
	investigated. This includes	investigated. This includes	investigated. This includes			
· ·	verification that the proper signal	verification that the proper signal	verification that the proper signal			
	is being produced and that the	is being produced and that the	is being produced and that the			
	instrumentation is working	instrumentation is working .	instrumentation is working			
	properly. Any necessary	properly. Any necessary	properly. Any necessary			
	maintenance is performed and the	maintenance is performed and the	maintenance is performed and the			
	instrument re-calibrated, as	instrument re-calibrated, as	instrument re-calibrated, as			
C Manitarina	necessary.  All parameters are monitored	necessary.  All parameters are monitored	All parameters are monitored			
C. Monitoring Frequency	continuously.	continuously.	continuously.			
4. Data Collection	All parameters are averaged in	All parameters are averaged in	All parameters are averaged in			
Procedures	15-minute blocks based on data	15-minute blocks based on data	15-minute blocks based on data			
_ 100000100	collected by the Amp Meter.	collected by the Flow Meter.	collected by the dP cell.			
5. Averaging	All parameters are averaged in	All parameters are averaged in	All parameters are averaged in			
Period	15-minute blocks. These 15-	15-minute blocks. These 15-	15-minute blocks. These 15-			
- 3	minute blocks are then averaged	minute blocks are then averaged	minute blocks are then averaged			
	to produce a Ihr average.	to produce a Ihr average.	to produce a 1hr average.			
_						

## **Emissions Unit 042**

Defluorinated Phosphate Feed Prep Particulate Matter Controlled by Wet Scrubber **Monitoring Approach** 

	Indicator I	Toring Approach	T
1. Indicator	Max and Min Fan Amps	Indicator 2	Indicator 3
Measuring		Max and Min Liquid Flow Rate	Min dP
Approach	Fan Amps are measured with an	Liquid Flow is measured with an	Delta P is measured with an
2. Indicator	installed Amp Meter	installed Flow Meter	installed dP cell
Range	An excursion is defined as any 1 hour average excluding those	An excursion is defined as any 1	An excursion is defined as any 1
Range		hour average excluding those	hour average excluding those
	events defined as startup, shutdown and malfunctions, flow	events defined as startup,	events defined as startup,
		shutdown and malfunctions, flow	shutdown and malfunctions,
1	rate outside of the following	rate outside of the following	pressure drop outside of the
	range:	range:	'following range:
	Max Amps > 252	Max flow > 269	Min dP < 12.97
•	Min Amps < 225	Min flow < 276	Willi dF < 12.97
	Excursions trigger an inspection,	Excursions trigger an inspection,	Eveursions trigger on inspection
	corrective action, and reporting	corrective action, and reporting	Excursions trigger an inspection, corrective action, and reporting
	requirement. The corrective	requirement. The corrective	requirement. The corrective
	action must be conducted to	action must be conducted to	action must be conducted to
	restore the flow rate to within the	restore the flow rate to within the	restore the pressure drop to within
	permitted range and assist in	permitted range and assist in	the permitted range and assist in
	preventing future scrubber	preventing future scrubber	preventing future scrubber
	malfunctions from occurring.	malfunctions from occurring.	malfunctions from occurring.
3. Performance Cri		martanetions from occurring.	martunetions from occurring.
A.	All CAM-required	All CAM-required	All CAM-required
Representative	instrumentation meets or exceeds	instrumentation meets or exceeds	instrumentation meets or exceeds
Data	the accuracy required by the	the accuracy required by the	the accuracy required by the
Dutu	regulations for this plant. The	regulations for this plant. The	regulations for this plant. The
	monitoring points are located per	monitoring points are located per	monitoring points are located per
	the manufacturers	the manufacturers	the manufacturers
	recommendations and/or best	recommendations and/or best	recommendations and/or best
	engineering practices guidelines.	engineering practices guidelines.	engineering practices guidelines.
B. QA/QC	Calibration and maintenance are	Calibration and maintenance are	Calibration and maintenance are
Practices and	performed annually or on an as-	performed annually or on an as-	performed annually or on an as-
Criteria	needed basis. Instrument	needed basis. Instrument	needed basis. Instrument
	readings are observed on a	readings are observed on a	readings are observed on a
	continuing basis and any reading	continuing basis and any reading	continuing basis and any reading
	outside the normal operating	outside the normal operating	outside the normal operating
	range for this plant is	range for this plant is	range for this plant is
	investigated. This includes	investigated. This includes	investigated. This includes
	verification that the proper signal	verification that the proper signal	verification that the proper signal
	is being produced and that the	is being produced and that the	is being produced and that the
	instrumentation is working	instrumentation is working	instrumentation is working
	properly. Any necessary	properly. Any necessary	properly. Any necessary
	maintenance is performed and the	maintenance is performed and the	maintenance is performed and the
	instrument re-calibrated, as	instrument re-calibrated, as	instrument re-calibrated, as
	necessary.	necessary.	necessary.
C. Monitoring	All parameters are monitored	All parameters are monitored	All parameters are monitored
Frequency	continuously.	continuously.	continuously.
4. Data Collection	All parameters are averaged in	All parameters are averaged in	All parameters are averaged in
Procedures	15-minute blocks based on data	15-minute blocks based on data	15-minute blocks based on data
	collected by the Amp Meter.	collected by the Flow Meter.	collected by the dP cell.
5. Averaging	All parameters are averaged in	All parameters are averaged in	All parameters are averaged in
Period	15-minute blocks. These 15-	15-minute blocks. These 15-	15-minute blocks. These 15-
	minute blocks are then averaged	minute blocks are then averaged	minute blocks are then averaged
	to produce a 1hr average.	to produce a 1hr average.	to produce a 1hr average.

# Compliance Plan CP-2 Title V Renewal 0470002-048-AV And PSD-FL-297 Testing of B Phosphoric Acid Plant

Permit Nos. 0470002-039-AC (PSD-FL-297) and 0470002-053-AC (PSD-FL-297B) are incorporated into the Title V renewal project, 0470002-048-AV. All construction and testing has been completed except for B Phosphoric Acid Plant. All applicable conditions have been incorporated into project 048.

- 1. Within 45 days of B Phosphoric Acid Plant commencing operation, the permittee shall conduct all testing required by Permit No. 0470002-039-AC PSD-FL-297 for B Phosphoric Acid Plant. A permit modification revises conditions 11 and 20 to account for design changes authorized by 0470002-053-AC (PSD-FL-297B). The permittee shall comply with the following conditions regarding the required testing:
- a. The subject emission units shall be tested for compliance with the above emission limits in accordance with the requirements of Rule 62-297-.310, F.A.C. and methods in this permit. For the duration of all tests the emission unit shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90% of the maximum operating rate allowed by the permit); in this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.
- b. Phosphoric Acid Plant B: Phosphoric acid plant B is required to initially test both B and C stacks. The six combined runs will be required to be completed in the 5-day period, and may be performed sequentially, provided that each valid run is within 10% of the previously tested capacity. The combined emissions from both B and C stacks shall not exceed 1.2 lb/hour of fluoride. Until filtering commences at the A Phosphoric Acid Filters, annual compliance will be based on emissions from B and C stacks. Within 45 days of start up of the A phosphoric acid filters, the permittee shall conduct stack tests on stacks A, B, and C. The nine combined runs shall be completed in the 5-day period, and may be performed sequentially, provided that each valid run is within 10% of the previously tested capacity. The sum total of emissions from stacks A, B, and C shall not exceed the 1.2 lb/hour of fluoride. Upon startup of the A phosphoric acid filter, the permittee shall conduct annual testing of all three stacks during each federal fiscal year (October 1- September 30) to demonstrate compliance with the emissions standards.

[Rule 62-4.070(3) and 62-297.310, F.A.C.]

2. Stacks A, B, and C shall be subject to all process requirements of Phosphoric Acid Plant B. Phosphoric Acid Plants A and C will no longer produce phosphoric acid independently, however integral portions of both Phosphoric Acid Plants A and C will assist Phosphoric Acid Plant B to filter the phosphoric acid and control fluoride emissions. The Phosphoric Acid Plant A filter system, scrubber and stack will be used with B Phosphoric Acid Plant when additional filtering is required. Phosphoric Acid Plant A components will not operate independently or when Phosphoric Acid Plant B is not operating. Phosphoric Acid Plant C scrubber and stack will be used continuously with Phosphoric Acid Plant B to control emissions from the Phosphoric Acid Plant B production. Phosphoric Acid Plant C components will not operate independently or when Phosphoric Acid Plant B is not operating. The sum total of emissions from all three stacks (A, B,

and C) shall comply with the maximum daily average and annual operating rates in condition 3 and fluoride emission rate of 1.2 lb/hr and 3.6 tpy in condition 5 of this permit. Initial and annual testing must be in compliance with this permit. [Application No. 0470002-053-AC (PSD-FL-297B) and Rules 62-4.070(3) and 62-210.200, F.A.C. (Definitions - Potential Emissions)]

- 3. The permittee shall meet all the notification, testing and reporting requirements of Rule 62-297, F.A.C., 40 CFR 63 Subparts A (General Provisions) and AA (NESHAP for Phosphoric Acid Plants), and Alternate Sampling Plan 04-I-AP.
- 4. Once the permittee satisfactorily demonstrates compliance with the conditions of this Compliance Plan, compliance demonstrations shall resume in accordance with the specific conditions of the Title V permit.

# Compliance Plan CP-2 Title V Renewal 0470002-048-AV And PSD-FL-297 Testing of B Phosphoric Acid Plant

Permit Nos. 0470002-039-AC (PSD-FL-297) and 0470002-053-AC (PSD-FL-297B) are incorporated into the Title V renewal project, 0470002-048-AV. All construction and testing has been completed except for B Phosphoric Acid Plant. All applicable conditions have been incorporated into project 048.

- 1. Within 45 days of B Phosphoric Acid Plant commencing operation, the permittee shall conduct all testing required by Permit No. 0470002-039-AC PSD-FL-297 for B Phosphoric Acid Plant. A permit modification revises conditions 11 and 20 to account for design changes authorized by 0470002-053-AC (PSD-FL-297B). The permittee shall comply with the following conditions regarding the required testing:
- a. The subject emission units shall be tested for compliance with the above emission limits in accordance with the requirements of Rule 62-297-.310, F.A.C. and methods in this permit. For the duration of all tests the emission unit shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90% of the maximum operating rate allowed by the permit); in this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.
- b. Phosphoric Acid Plant B: Phosphoric acid plant B is required to initially test both B and C stacks. The six combined runs will be required to be completed in the 5-day period, and may be performed sequentially, provided that each valid run is within 10% of the previously tested capacity. The combined emissions from both B and C stacks shall not exceed 1.2 lb/hour of fluoride. Until filtering commences at the A Phosphoric Acid Filters, annual compliance will be based on emissions from B and C stacks. Within 45 days of start up of the A phosphoric acid filters, the permittee shall conduct stack tests on stacks A, B, and C. The nine combined runs shall be completed in the 5-day period, and may be performed sequentially, provided that each valid run is within 10% of the previously tested capacity. The sum total of emissions from stacks A, B, and C shall not exceed the 1.2 lb/hour of fluoride. Upon startup of the A phosphoric acid filter, the permittee shall conduct annual testing of all three stacks during each federal fiscal year (October 1- September 30) to demonstrate compliance with the emissions standards.

[Rule 62-4.070(3) and 62-297.310, F.A.C.]

2. Stacks A, B, and C shall be subject to all process requirements of Phosphoric Acid Plant B. Phosphoric Acid Plants A and C will no longer produce phosphoric acid independently, however integral portions of both Phosphoric Acid Plants A and C will assist Phosphoric Acid Plant B to filter the phosphoric acid and control fluoride emissions. The Phosphoric Acid Plant A filter system, scrubber and stack will be used with B Phosphoric Acid Plant when additional filtering is required. Phosphoric Acid Plant A components will not operate independently or when Phosphoric Acid Plant B is not operating. Phosphoric Acid Plant C scrubber and stack will be used continuously with Phosphoric Acid Plant B to control emissions from the Phosphoric Acid Plant B production. Phosphoric Acid Plant C components will not operate independently or when Phosphoric Acid Plant B is not operating. The sum total of emissions from all three stacks (A, B,

and C) shall comply with the maximum daily average and annual operating rates in condition 3 and fluoride emission rate of 1.2 lb/hr and 3.6 tpy in condition 5 of this permit. Initial and annual testing must be in compliance with this permit. [Application No. 0470002-053-AC (PSD-FL-297B) and Rules 62-4.070(3) and 62-210.200, F.A.C. (Definitions - Potential Emissions)]

- 3. The permittee shall meet all the notification, testing and reporting requirements of Rule 62-297, F.A.C., 40 CFR 63 Subparts A (General Provisions) and AA (NESHAP for Phosphoric Acid Plants), and Alternate Sampling Plan 04-I-AP.
- 4. Once the permittee satisfactorily demonstrates compliance with the conditions of this Compliance Plan, compliance demonstrations shall resume in accordance with the specific conditions of the Title V permit.



## Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

October 4, 2004

Mr. Paul H. Barrett, General Manager White Springs Agricultural Chemicals, Inc. Post Office Box 300 White Springs, Florida 32096

Dear Mr. Barrett:

Enclosed is the department's order approving the alternate monitoring plan at the White Springs Agricultural Chemicals, Inc., (WSA) facility in Hamilton County, Florida. This order is in response to the July 30, 2004, request submitted to the department by Koogler & Associates on behalf of WSA.

This order stipulates that WSA will continuously monitor liquid flow rate and pressure drop for each scrubber used to control hydrogen fluoride emissions. Furthermore, WSA will continuously monitor fan amperage for each fan in the scrubber systems. Allowable ranges (minimum and maximum) for liquid flow and fan amperage must be established and submitted to the department for approval. For pressure drop, only a minimum allowable value must be established and submitted for approval.

Please call me at 850/921-9509 if you have any questions regarding this order.

Sincerely,

Errin Pichard, P.E., Administrator Emissions Monitoring Section Bureau of Air Monitoring and Mobile Sources

Em Puhl

/ep

Enclosure

cc: Chris Kirts, DEP Southwest District
Al Linero, DARM
Pradeep Raval, Koogler & Associates, Process"

Printed on recycled paper.

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	)	Suwannee River/Swift Creek Complex
	)	
White Springs Agricultural Chemicals, Inc.	)	
	)	•
Petitioner.	)	File No.: 04-I-AP

## ORDER ON REQUEST FOR ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), and Title 40 of the Code of Federal Regulations Part 63, section 63.8 (40 CFR 63.8), White Springs Agricultural Chemicals (WSA), located in Hamilton County, has petitioned for approval of alternate monitoring methods for scrubbers at its facility. The Petitioner requested approval to monitor fan amperage in lieu of establishing an upper limit on pressure drop across each scrubber. The basis for this request is the Petitioner's assertion that fan amperage will provide a more accurate indication of scrubber performance and prevent frequent and unnecessary plant monitoring excursions. Petitioner agreed to continue to monitor pressure drop, liquid flow rate, and fan amperage for each scrubber. Petitioner also agreed to establish allowable ranges for liquid flow rate and fan amperage and to establish minimum allowable pressure drops for the scrubber systems.

Having considered Petitioner's written request and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

### FINDINGS OF FACT

- 1. 40 CFR 63, Subparts AA and BB require all phosphate fertilizer and phosphoric acid manufacturing plants that are major sources of hazardous air pollutants to monitor liquid flow rate to each scrubber and pressure drop across each scrubber used to control hydrogen fluoride emissions. Additionally, each affected facility must establish allowable ranges for these parameters by submitting upper and lower values for approval or by accepting the default range of  $\pm 20\%$  of the baseline value as specified in Subparts AA and BB. White Springs Agricultural Chemicals is considered a major source of hazardous air pollutants. Therefore, this facility is subject to these requirements.
- 2. On August 3, 2004, the Department received Petitioner's request for approval of an alternate monitoring plan for WSA. The alternate monitoring plan was requested for scrubbers subject to 40 CFR 63, Subparts AA and BB: the phosphoric acid manufacturing plant (Emission Units (EU) 002, 020, 069), the filtration plants (EUs 034, 035, 071), the SPA plants (EUs 036, 061, 070), the phosphate rock dryer (EU 064) and MAP/DAP plants (EUs 008 and 032).
- 3. Petitioner requested that no maximum limit be placed on the scrubbers because "small deviations in the pressure drop can cause a plant monitoring excursion. Requiring a maximum pressure drop as a limit may result in frequent and unnecessary plant monitoring excursion, while scrubbing efficiency was still maintained."

- 4. In its request, Petitioner asserted, "Fan amperage is a better indicator of scrubber performance than maximum pressure drop. Fan amps provide a good indication of proper operation and maintenance of the pollution control equipment. Fan amps provide an accurate indication of air movement through the evacuation system and can be a reliable indicator of system upsets."
- 5. Petitioner further asserted, "...use of fan amps as an alternate parameter meets the intent of the monitoring requirement to assure proper operation of the pollution control system."

### **CONCLUSIONS OF LAW**

- 1. The Department has jurisdiction to consider Petitioner's request pursuant to Section 403.061, Florida Statutes (F.S.), Rule 62-297.620, F.A.C., and 40 CFR 63.8.
- 2. Petitioner has provided reasonable justification that establishing an upper limit on pressure drop in scrubbers at this facility is impractical.
- 3. Petitioner has provided reasonable justification that monitoring fan amperage in lieu of establishing a maximum pressure drop is no less an effective indicator of scrubber operation than that achieved by monitoring pursuant to 40 CFR 63, Subparts AA and BB.

### ORDER

Having considered Petitioner's written request and supporting documentation, it is hereby ordered that for the emission units listed in Attachment 1:

- 1. Petitioner shall not be required to establish an upper limit on the pressure drop across each scrubber.
- 2. Petitioner shall establish a <u>minimum</u> allowable pressure drop across each scrubber or scrubber system pursuant to the requirements in 40 CFR 63, Subparts AA and BB and shall submit such values to the Department for approval.
- 3. Petitioner shall establish <u>minimum and maximum</u> acceptable fan amperages for each fan in the scrubbing systems pursuant to the requirements in 40 CFR 63, Subparts AA and BB and shall submit such values to the Department for approval.
- 4. Petitioner shall establish minimum and maximum acceptable values for liquid flow rate to each scrubber pursuant to the requirements in 40 CFR 63, Subparts AA and BB and shall submit such values to the Department for approval.
- 5. Petitioner shall continuously monitor pressure drop and liquid flow rate for each scrubber and shall continuously monitor fan amperage for each fan in the scrubbing systems.
- 6. Except as provided by this order, Petitioner shall comply with all applicable provisions of 40 CFR 63, Subparts AA and BB.

File No.: 04-I-AP

7. This order shall expire on September 30, 2014.

### PETITION FOR ADMINISTRATIVE REVIEW

The Department's proposed agency action will become final upon expiration of the petition period described below unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed agency action may petition for an administrative proceeding (hearing) under Sections 120,569 and 120,57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within twenty-one days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3) of the Florida Statutes must be filed within twenty-one days of publication of the public notice or within twenty-one days of receipt of this notice, whichever occurs first. Under Section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within twenty-one days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of how and when petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

File No.: 04-I-AP

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

### NOTICE OF APPEAL RIGHTS

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, 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 thirty days after this order is filed with the clerk of the Department.

DONE AND ORDERED this 4th day of October, 2004 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mulel D- work

MICHAEL G. COOKE, Director Division of Air Resource Management

Mail Station 5500

Twin Towers Office Building 2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(850) 488-0114

### Clerk Stamp

FILING AND ACKNOWLEDGMENT

Marshin Juste Wine 10/4/04
(Clerk) Date)

FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

File No.: 04-I-AP

### Attachment 1: White Springs Agricultural Chemicals, Inc. Alternate Monitoring Plan

All parameters shall be continuously measured. Pressure drop = inches of water. Flow rate = gallons per minute.

Emission Unit		Scrubber Measu		sured Paramet	ured Parameter	
A Phosphoric Acid	002	Venturi/West Cyclone	Flow	Pressure Drop	Fan Amperage	
A Phospholic Acid	002	East Cyclone	Flow	Pressure Drop		
-		Reaction Venturi/Cyclone Scrubber	Flow		Fan Amperage	
•	ĺ	2. Reaction Cooler Scrubber	Flow	Pressure Drop		
		3. Dryer Venturi/Cyclone Scrubber	Flow	Pressure Drop	Fan Amperage	
DAP/MAP Y-Train	800	4. Fluorine Abatement Cyclone Scrubber	Flow			
		5. Dust Venturi/Cyclone Scrubber	Flow	Pressure Drop	Fan Amperage	
		Note: Scrubbers 1 & 2 make up the Reaction Scrubber and have a single fan. Delta P will be read across Scrubbers 1 & 2 as a unit. Scrubber 3 & 4 make up the Dryer Scrubbe and have a single fan. Delta P will be				
B Phosphoric Acid	020	Wet Scrubber	Flow	Pressure Drop	Fan Amperage	
		1. Reaction Venturi/Cyclone Scrubber	Flow		Fan Amperage	
		2. Reaction Pond Water Scrubber	Flow	Pressure Drop		
		3. Dryer Venturi/Cyclone Scrubber	Flow	D	Fan Amperage	
		4. Dryer Pond Water Scrubber	Flow	Pressure Drop		
		5. Dust Venturi/Cyclone Scrubber	Flow	D	Fan Amperage	
DAP/MAP Z-Train	032	6. Dust Pond Water Scrubber	Flow	Pressure Drop		
		7. Tail Gas Scrubber	Flow	Pressure Drop	N/A	
		8. Fugitive Dust Venturi/Cyclone Scrubber	Flow	Pressure Drop	Fan Amperage	
		Note: Scrubbers 1/2, 3/4, and 5/6 have a single fan for both scrubbers. Pressure drop will be read across both scrubbers as a unit. There is no fan for the tail gas scrubber.				
South Phosphoric Acid Filters	034, 036	Wet Scrubber	Flow	Pressure Drop	Fan Amperage	
and A & B SPA 034, 03		Note: SPA A & B is ducted to, and emissions are controlled by, the South Acid Filter Scrubber				
North Phosphoric Acid Filter	035	Wet Scrubber	Flow	Pressure Drop	Fan Amperage	
Green SPA	061	Wet Scrubber	Flow	Pressure Drop	Fan Amperage	
	064	East Cyclone	N/A	Fan Amperage	Pressure Drop	
SCM Rock Dryer		West Cyclone	N/A			
		Wet Scrubber	Flow			
Note:East and West Cyclones operate in parallel and are the dry types.						
D Phosphoric Acid	069	Wet Scrubber	Flow	Pressure Drop	Fan Amperage	
SPA C&D	070	Wet Scrubber	Flow	Pressure Drop	Fan Amperage	
Acid Clarification	071	Wet Scrubber	Flow	Pressure Drop	Fan Amperage	

To:

cpults@pcsphosphate.com; praval@kooglerassociates.com; Kirts, Christopher; Felton-Smith,

Rita

Cc:

Bull, Robert

Subject:

DRAFT Title V Permit Renewal/AC Revision No.: 0470002-048-AV/0470002-053-AC - White

Springs Agricultural Chemicals, Inc.

Attachments: 0470002-048-AV-D.zip; 0470002-053-AC-D.zip

Attached for your records are zip files for the subject DRAFT Title V Permit Renewal/AC Revision.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday Planner II Bureau of Air Regulation (850)921-9524 Barbara.Friday@dep.state.fl.us

From:

System Administrator

To:

Felton-Smith, Rita

Sent:

Subject:

Friday, August 25, 2006 8:58 AM Delivered: DRAFT Title V Permit Renewal/AC Revision No.: 0470002-048-AV/0470002-053-

AC - White Springs Agricultural Chemicals, Inc.

### Your message

To:

'cpults@pcsphosphate.com'; 'praval@kooglerassociates.com'; Kirts, Christopher; Felton-Smith, Rita

Cc:

Subject:

DRAFT Title V Permit Renewal/AC Revision No.: 0470002-048-AV/0470002-053-AC - White Springs Agricultural Chemicals, Inc.

Sent:

8/25/2006 8:58 AM

was delivered to the following recipient(s):

Felton-Smith, Rita on 8/25/2006 8:58 AM

From:

Felton-Smith, Rita

To:

Friday, Barbara

Sent:

Friday, August 25, 2006 9:25 AM

Subject:

Read: DRAFT Title V Permit Renewal/AC Revision No.: 0470002-048-AV/0470002-053-AC -

White Springs Agricultural Chemicals, Inc.

### Your message

To:

'cpults@pcsphosphate.com'; 'praval@kooglerassociates.com'; Kirts, Christopher; Felton-Smith, Rita

Cc:

ull, Robert

Subject:

DRAFT Title V Permit Renewal/AC Revision No.: 0470002-048-AV/0470002-053-AC - White Springs Agricultural Chemicals, Inc.

Sent:

8/25/2006 8:58 AM

was read on 8/25/2006 9:25 AM.

From:

System Administrator

To:

Kirts, Christopher

Sent:

Subject:

Friday, August 25, 2006 8:59 AM
Delivered:DRAFT Title V Permit Renewal/AC Revision No.: 0470002-048-AV/0470002-053-

AC - White Springs Agricultural Chemicals, Inc.

### Your message

To:

'cpults@pcsphosphate.com'; 'praval@kooglerassociates.com'; Kirts, Christopher; Felton-Smith, Rita

Cc:

Bull, Robert

Subject:

DRAFT Title V Permit Renewal/AC Revision No.: 0470002-048-AV/0470002-053-AC - White Springs Agricultural Chemicals, Inc.

Sent:

8/25/2006 8:58 AM

was delivered to the following recipient(s):

Kirts, Christopher on 8/25/2006 8:58 AM

From:

Exchange Administrator

Sent:

Friday, August 25, 2006 8:59 AM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT543255.txt; DRAFT Title V Permit Renewal/AC Revision No.: 0470002-048-

AV/0470002-053-AC - White Springs Agricultural Chemicals, Inc.





ATT543255.txt (290 B)

DRAFT Title V

Permit Renewal/A...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

cpults@pcsphosphate.com

From:

System Administrator

To: Sent: praval@kooglerassociates.com Friday, August 25, 2006 9:00 AM

Subject:

Delivered Mail System Delivery Report

### Your message

To:

cpults@pcsphosphate.com; praval@kooglerassociates.com; Kirts, Christopher; Felton-Smith, Rita

Cc:

Bull, Robert

Subject:

DRAFT Title V Permit Renewal/AC Revision No.: 0470002-048-AV/0470002-053-AC - White Springs Agricultural Chemicals, Inc.

Sent:

8/25/2006 8:58 AM

### was delivered to the following recipient(s):

praval@kooglerassociates.com on 8/25/2006 9:00 AM