Florida Department of Environmental Protection

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

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

September 25, 2009

Electronic Mail – Received Receipt Requested

rbrunk@cfifl.com

Mr. Ronald L. Brunk
Superintendent Environmental Affairs
CF Industries, Inc. (CFI)
Post Office Box Drawer L
Plant City, FL 33564

Re: Air Permit No. 0570005-034-AC
CFI – Plant City Phosphate Complex
BART Exemption Project

Dear Mr. Brunk:

The Department issued (clerked) a "Written Notice of Intent to Issue Air Permit" on December 24, 2007 for an air construction permit for CFI's Plant City Phosphate Complex Best Available Retrofit Technology (BART) determination, Draft Permit No. 0570005-023-AC. Final action has not been taken on this permit due to a petition filed by the applicant, CFI, on January 25, 2008. The Department hereby withdraws the "Written Notice of Intent to Issue Air Permit."

On July 23, 2009, an air construction permit application was submitted to escape the requirements of BART pursuant to Rule 62-296.340(5)(c), Florida Administrative Code for the emissions units at the facility identified above. Enclosed are the following documents:

- The Technical Evaluation & Preliminary Determination 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 the specific conditions that regulate the emissions units covered by the proposed project.
- The Written Notice of Intent to Issue Air Permit provides important information regarding: the Permitting Authority's intent to issue an air permit for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue an air permit; the procedures for submitting comments on the Draft Permit; the process for filing a petition for an administrative hearing; and the availability of mediation.
- The Public Notice of Intent to Issue Air Permit 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 Mr. Syed Arif, P.E. by telephone at 850/921-9528 or by e-mail at Syed.Arif@dep.state.fl.us.

Sincerely,

Trina L. Vielhauer, Chief
Bureau of Air Regulation

Enclosures

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an
Application for Air Permit by:

CF Industries, Inc. (CFI)
Post Office Box Drawer L
Plant City, FL 33564

Authorized Representative:
Mr. Ronald L. Brunk, Superintendent Environmental Affairs

Draft Permit No. 0570005-034-AC
Facility ID No. 0570005
Plant City Phosphate Complex
BART Exemption Project
Hillsborough County, Florida

Facility Location: The applicant, CFI, operates the existing Plant City Phosphate Complex, which is located in Hillsborough County at 10608 Paul Buchman Highway, Plant City, Florida.

Project: The Department issued (clerked) a "Written Notice of Intent to Issue Air Permit" on December 24, 2007 for an air construction permit for CFI's Plant City Phosphate Complex Best Available Retrofit Technology (BART) determination, Draft Permit No. 0570005-023-AC. Final action has not been taken on this permit due to a petition filed by the applicant, CFI, on January 25, 2008. The Department hereby withdraws the "Written Notice of Intent to Issue Air Permit" issued on December 24, 2007.

On July 23, 2009, CFI submitted an air construction permit application to escape the requirements of Best Available Retrofit Technology (BART) pursuant to Rule 62-296.340(5)(c), Florida Administrative Code (F.A.C.) for the emissions units at the facility identified above. Details of the project are provided in the application and the enclosed Technical Evaluation & Preliminary Determination.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters F.A.C. 62-4, 62-210 and 62-212. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, 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.

Project File: A complete project file is 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 address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation & Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above. In addition, electronic copies of these documents are available on the following web site: http://www.dep.state.fl.us/air/emission/apds/listpermits.asp.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice 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 Air 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) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 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: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the 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 decision 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 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, 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 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 (in a proceeding initiated by another party) 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 when and how each petitioner received notice of the agency action or proposed decision; (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 including an explanation of how the alleged facts relate to the specific rules or statutes; 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 of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application 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 L. Vielhauer, Chief
Bureau of Air Regulation

TLV/sa

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Intent to Issue Air Permit package (including the Written Notice of Intent to Issue Air Permit, Public Notice of Intent to Issue Air Permit, the Technical Evaluation & Preliminary Determination, and the Draft Permit), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested before the close of business on 9/25/09 to the persons listed below.

Mr. Ronald L. Brunk, CF Industries, Inc.: rbrunk@cfifl.com
Mr. David A. Buff, P.E., Golder Associates Inc.: dbuff@golder.com
Mr. Sal Mohammad, Golder Associates Inc.: smohammad@golder.com
Ms. Katy Forney, EPA Region 4: forney.kathleen@epa.gov
Ms. Catherine Collins, Fish & Wildlife Service: catherine_collins@fws.gov
Ms. Cindy Zhang-Torres, P.E., DEP SWD: zhang-torres@dep.state.fl.us
Ms. Diana Lee, P.E., EPCHC: (lee@epchc.org)
Mr. Tom Rogers, DEP OPAPM: tom.rogers@dep.state.fl.us
Ms. Ronda L. Moore, DEP OGC: ronni.moore@dep.state.fl.us
Ms. Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for reading file)

Clerk Stamp

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

(Clerk) 9/25/09 (Date)

Memorandum

Florida Department of Environmental Protection

TO: Trina Vielhauer, Bureau of Air Regulation

FROM: Syed Arif, New Source Review Section SA 9/24

DATE: September 24, 2009

SUBJECT: Air Permit No. 0570005-034-AC
CF Industries, Inc. – Plant City Phosphate Complex
BART Exemption Project

This project is subject to BART exemption preconstruction review. Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit;
- Public Notice of Intent to Issue Air Permit;
- Technical Evaluation and Preliminary Determination;
- Draft Permit;
- Appendices; and
- P.E. Certification.

Day 90 for the project is December 7, 2009. I recommend your approval of the attached Draft Permit package.

Attachments

PROFESSIONAL ENGINEER CERTIFICATION STATEMENT

PERMITTEE

CF Industries, Inc. (CFI)
P.O. Box Drawer L
Plant City, FL 33564

Air Permit No. 0570005-034-AC
Plant City Phosphate Complex
BART Exemption Project
Hillsborough County, Florida

PROJECT DESCRIPTION

The Department issued (clerked) a "Written Notice of Intent to Issue Air Permit" on December 24, 2007 for an air construction permit for CFI's Plant City Phosphate Complex Best Available Retrofit Technology (BART) determination, Draft Permit No. 0570005-023-AC. Final action has not been taken on this permit due to a petition filed by the applicant, CFI, on January 25, 2008. The Department hereby withdraws the "Written Notice of Intent to Issue Air Permit."

On July 23, 2009, CFI submitted an air construction permit application to escape the requirements of Best Available Retrofit Technology (BART) pursuant to Rule 62-296.340(5)(c), Florida Administrative Code (F.A.C.) for the existing Plant City Phosphate Complex.

The BART-eligible units at this facility are listed in the draft permit and the Technical Evaluation and Preliminary Determination. The Department of Environmental Protection (Department) reviewed the application and makes a preliminary determination regarding the air pollution controls and measures, emission standards and limitations in the draft air construction permit for the facility to escape BART.

The applicant has proposed two emission reduction scenarios A and B for the BART-eligible emissions units at the Plant City Phosphate Complex. As part of this application, the applicant performed additional modeling under both scenarios at reduced air pollutant emission levels. The air dispersion modeling at the lower air pollutant levels brings this facility's visibility impact to below the 0.5 deciview (dv) threshold under both scenarios allowing the facility to escape a BART determination pursuant to Rule 62-296.340(5)(c), F.A.C. The facility's modeled visibility impact to the nearest Class I area (Chassahowitzka National Wilderness Area) under the BART exemption for scenario A is 0.499 dv and under scenario B is 0.433 dv.

In scenario A, CFI proposes to reduce production rates of C and D Sulfuric Acid Plants (SAPs) from 2,962 tons per day (TPD) to 2,600 TPD and reduce lower daily average sulfur dioxide (SO_2) emissions rates from the A, B, C and D SAPs. SO_2 emissions from the A and B SAPs will be reduced from the currently permitted 250.0 lb/hr and 233.3 lb/hr to 75.8 lb/hr and 93.3 lb/hr, 24-hour average, respectively. SO_2 emissions from the C and D SAPs will be reduced from the currently permitted 401.1 lb/hr to 303.3 lb/hr, 24-hour average. CFI is not proposing any changes to the currently permitted particulate matter (PM) emission limits for the A, Z, X and Y Diammonium Phosphate/Monoammonium Phosphate (DAP/MAP) plants or the A and B Shipping Baghouses.

In scenario B, Mosaic proposes to reduce production rates of C and D SAPs from 2,962 TPD to 2,900 TPD and reduce lower daily average SO_2 emissions rates from the A, B, C and D SAPs. SO_2 emissions from the A and B SAPs will be reduced from the currently permitted 250.0 lb/hr and 233.3 lb/hr to 81.3 lb/hr and 100.0 lb/hr, 24-hour average, respectively. SO_2 emissions from the C and D SAPs will be reduced from the currently permitted 401.1 lb/hr to 241.7 lb/hr, 24-hour average. CFI is not proposing any changes to the currently permitted PM emission limits for the A, Z, X and Y Diammonium Phosphate/Monoammonium Phosphate (DAP/MAP) plants or the A and B Shipping Baghouses. The applicant will make a decision to implement scenario A or B no later than June 1, 2010.

PROFESSIONAL ENGINEER CERTIFICATION STATEMENT

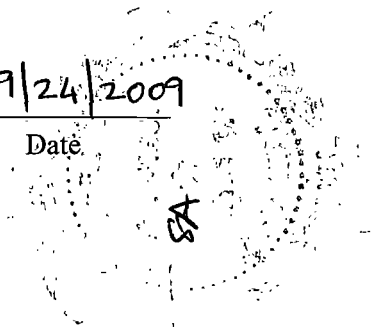
I HEREBY CERTIFY *that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. This permit specifies the specific requirements of Rule 62-296.340(5)(c), (escape BART) F.A.C. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and the visibility impact analysis completed by the project meteorologist). The project meteorologist was Mr. Tom Rogers in the Department's Office of Policy and Program Management.*

Syed Arif

9/24/2009

Syed Arif, P.E.
Registration Number: 51861

Date



Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/921-9528
Fax: 850/921-9533

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Air Construction Permit No. 0570005-034-AC
CF Industries, Inc., Plant City Phosphate Complex
Hillsborough County, Florida

Applicant: The applicant for this project is CF Industries, Inc. (CFI). The applicant's authorized representative and mailing address is: Mr. Ronald L. Brunk, Superintendent Environmental Affairs, CFI, Post Office Box Drawer L, Plant City, FL 33564.

Facility and Location: The applicant, CFI, operates the existing Plant City Phosphate Complex, which is located in Hillsborough County at 10608 Paul Buchman Highway, Plant City, Florida. The Plant City Phosphate Complex is an existing phosphate fertilizer facility.

Project: The Department issued (clerked) a "Written Notice of Intent to Issue Air Permit" on December 24, 2007 for an air construction permit for CFI's Plant City Phosphate Complex Best Available Retrofit Technology (BART) determination, Draft Permit No. 0570005-023-AC. Final action has not been taken on this permit due to a petition filed by the applicant, CFI, on January 25, 2008. The Department hereby withdraws the "Written Notice of Intent to Issue Air Permit" issued on December 24, 2007.

On July 23, 2009, CFI submitted an air construction permit application to escape the requirements of Best Available Retrofit Technology (BART) pursuant to Rule 62-296.340(5)(c), Florida Administrative Code (F.A.C.) for the existing Plant City Phosphate Complex.

The BART-eligible units at this facility are listed in the draft permit and the Technical Evaluation and Preliminary Determination. The Department of Environmental Protection (Department) reviewed the application and makes a preliminary determination regarding the air pollution controls and measures, emission standards and limitations in the draft air construction permit for the facility to escape BART.

The applicant has proposed two emission reduction scenarios A and B for the BART-eligible emissions units at the Plant City Phosphate Complex. As part of this application, the applicant performed additional modeling under both scenarios at reduced air pollutant emission levels. The air dispersion modeling at the lower air pollutant levels brings this facility's visibility impact to below the 0.5 deciview (dv) threshold under both scenarios allowing the facility to escape a BART determination pursuant to Rule 62-296.340(5)(c), F.A.C. The facility's modeled visibility impact to the nearest Class I area (Chassahowitzka National Wilderness Area) under the BART exemption for scenario A is 0.499 dv and under scenario B is 0.433 dv.

In scenario A, CFI proposes to reduce production rates of C and D Sulfuric Acid Plants (SAPs) from 2,962 tons per day (TPD) to 2,600 TPD and reduce lower daily average sulfur dioxide (SO_2) emissions rates from the A, B, C and D SAPs. SO_2 emissions from the A and B SAPs will be reduced from the currently permitted 250.0 lb/hr and 233.3 lb/hr to 75.8 lb/hr and 93.3 lb/hr, 24-hour average, respectively. SO_2 emissions from each of the C and D SAPs will be reduced from the currently permitted 401.1 lb/hr to 303.3 lb/hr, 24-hour average. NOx reductions would also occur as a result of the production decrease in the C and D SAPs, each reducing from 13.6 lb/hr to 11.9 lb/hr. Similarly, there would be a reduction in sulfuric acid mist (SAM) as a result of the production decrease in these units from 11.4 lb/hr to 10.1 lb/hr, each. CFI is not proposing any changes to the currently permitted particulate matter (PM) emission limits for the A, Z, X and Y Diammonium Phosphate/Monoammonium Phosphate (DAP/MAP) plants or the A and B Shipping Baghouses.

In scenario B, Mosaic proposes to reduce production rates of C and D SAPs from 2,962 TPD to 2,900 TPD and reduce lower daily average SO_2 emissions rates from the A, B, C and D SAPs. SO_2 emissions from the A and B SAPs will be reduced from the currently permitted 250.0 lb/hr and 233.3 lb/hr to 81.3 lb/hr and 100.0 lb/hr, 24-hour average, respectively. SO_2 emissions from each of the C and D SAPs will be reduced from the currently permitted 401.1 lb/hr to 241.7 lb/hr, 24-hour average. As a result of the production decrease, NOx emissions in the C and D SAPs are reduced from 13.6 to 13.3 lb/hr and SAM emissions are reduced from 11.4 to 11.2 lb/hr,

each. CFI is not proposing any changes to the currently permitted PM emission limits for the A, Z, X and Y DAP/MAP plants or the A and B Shipping Baghouses.

The applicant will make a decision to implement scenario A or B no later than June 1, 2010, at which time, the scenario that is not implemented will become obsolete.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and F.A.C. Chapters 62-4, 62-210 and 62-212. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, 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.

Project File: A complete project file is 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 address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation & Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: http://www.dep.state.fl.us/air/emission/apds/listpermits.asp.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the 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 decision 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 at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a 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 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 (in a proceeding initiated by another party) 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 rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (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 including an explanation of how the alleged facts relate to the specific rules or statutes; 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 Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application 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 for this proceeding.

TECHNICAL EVALUATION

&

PRELIMINARY DETERMINATION

PROJECT

Draft Permit No. 0570005-034-AC
Best Available Retrofit Technology (BART) Exemption

Plant City Phosphate Complex
Hillsborough County, Florida

APPLICANT

CF Industries, Inc.
P.O. Box Drawer L
Plant City, FL 33564

PERMITTING AUTHORITY

New Source Review Section
Bureau of Air Regulation
Division of Air Resource Management
Florida Department of Environmental Protection

September 24, 2009

1. GENERAL PROJECT INFORMATION

Facility Description and Location

The applicant, CF Industries, Inc. (CFI), operates a phosphate fertilizer manufacturing complex in Plant City, Florida. The facility is located at 10608 Paul Buchman Highway, Plant City, Hillsborough County. The Standard Industrial Classification (SIC) code for this type of facility is SIC No. 2874. The project site is located about 70 kilometers from the Chassahowitzka National Wildlife Refuge, a Class I Area. The UTM coordinates of this facility are Zone 17; 388.0 km E; 3116.0 km N.

The following figures show the location of Plant City, near Lakeland, Florida as well as aerial photographs of the facility including the plant equipment, phosphogypsum stacks, and process/cooling ponds.

Figure 1. Plant City

Figure 2. Aerial and Satellite Views of the CF Industries Plant City Fertilizer Complex

CFI converts liquid sulfur, imported by ship and rail from out-of-state gas and oil processing plants, and water into sulfuric acid (H_2SO_4). Locally mined phosphate rock (fluorapatite) and (H_2SO_4) are mixed, forming phosphoric acid (H_3PO_4) and gypsum ($CaSO_4$). (H_3PO_4) is reacted with anhydrous ammonia in a two-step process to produce granules of Diammonium Phosphate (DAP) or Monoammonium Phosphate (MAP), the most-used phosphate fertilizer products. DAP and MAP is shipped from the Plant City facility by rail and truck.

The facility includes: four sulfuric acid plants (SAPs); two phosphoric acid plants (PAPs), four MAP/DAP plants; molten sulfur storage and handling operations; product storage and shipping operations; and ancillary equipment.

Regulatory Categories

This project is subject to the applicable environmental laws in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection (Department) to establish rules regarding air quality in the Florida Administrative Code (F.A.C.). The facility is classified according to the following major regulatory categories.

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

Project Description

CF Industries, Inc. submitted an application to escape the BART determination requirements of Rule 62-296.340(5)(c) (escape BART), F.A.C., which addresses the following BART-eligible emissions units (EU):

TABLE 1-1

EU No.	Emissions Unit Description
002	A Sulfuric Acid Plant
003	B Sulfuric Acid Plant
007	C Sulfuric Acid Plant
008	D Sulfuric Acid Plant
010	A Diammonium Phosphate/Monoammonium Phosphate (DAP/MAP) Plant
011	Z DAP/MAP Plant
012	X DAP/MAP Plant
013	Y DAP/MAP Plant
015	A Shipping Baghouse
018	B Shipping Baghouse

This Technical Evaluation & Preliminary Determination (TEPD) details the project, describes the required air pollutant emission reductions and reasonable assurances to escape and remain exempt from a BART determination pursuant to Rule 62-296.340(5)(c) (escape BART), F.A.C.

Processing Schedule

The processing events shown below for the BART determination are relevant to the escape BART project as they are cited within this TE&PD document and the draft permit.

BART Determination

February 2, 2007	Department received the BART application (hard copy) for an air pollution construction permit.
March 1, 2007	Department issued 1st request for additional information (RAI).
July 12, 2007	Department received response to 1st RAI.
August 10, 2007	Department issued 2nd RAI.
Sept. 10, 2007	Department received response to 2nd RAI; application complete.
December 5, 2007	CFI waived processing clock until December 24, 2007.
December 24, 2007	Department issued (clerked) Draft permit with Technical Evaluation & Preliminary Determination (Project No. 0570005-023-AC).
January 4, 2008	Applicant published the Public Notice in the Tampa Tribune.
January 7, 2008	Applicant filed an extension of time to file a Petition for an Administrative Hearing.
January 10, 2008	Department denied the request for extension of time to file petition for hearing.
January 25, 2008	Applicant filed a Petition for formal Administrative Hearing.
January 28, 2008	Department received comments from U.S. EPA Region 4 dated January 22, 2008.
January 30, 2008	Department received comments from Applicant dated January 25, 2008.

BART Exemption Determination

July 23, 2009	Department received the BART exemption application for an air pollution construction permit.
August 17, 2009	Department issued 1st RAI via e-mail.
August 20, 2009	Department received response to 1st RAI.
August 20, 2009	Department issued 2nd RAI via e-mail.
September 8, 2009	Department received response to 2nd RAI via e-mail; application complete.

2. APPLICABLE BART EXEMPTION REGULATIONS

Regulatory Authority

This project is subject to the applicable regulatory requirements in the following Chapters of the F.A.C.: 62-4 (Permitting Requirements); 62-204 (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference); 62-210 (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms); 62-212 (Preconstruction Review, PSD Review and BACT, and Non-attainment Area Review and LAER); 62-296 (Emission Limiting Standards); and 62-297 (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures). It is also subject to the applicable provisions in Title 40 of the Code of Federal Regulations (CFR) as adopted in Chapter 62-204 and 62-296, F.A.C.

Specifically, this project is subject to Rule 62-296.340(5)(c) (escape BART), F.A.C., by reducing the visibility impact from this facility to below the 0.5 deciview (dv) threshold in the air dispersion modeling for exemption from a BART determination. CFI originally submitted a BART application in February 2007. The BART application was submitted prior to CFI's decision to reduce sulfur dioxide (SO_2), sulfuric acid mist (SAM), particulate matter/particulate matter less than 10 microns (PM/PM_{10}) and nitrogen oxides (NOx) emissions and, therefore, did not demonstrate a basis for BART exemption. At the reduced emission levels, CFI could exempt out of BART review and upon the Department's concurrence, the BART application may be considered superseded by this exemption application. CFI is proposing three emission reduction scenarios (Scenarios A, B and C) for the BART-eligible emissions units at the Plant City facility with this application. The Department has indicated to the applicant that only emission reduction scenarios A and B will be approved. Scenario C cannot be approved as it undermines the Best Available Control Technology (BACT) determination for the 'C' and 'D' sulfuric acid plants done in project PSD-FL-339. For each of the acceptable emission reduction scenarios, the Plant City facility is exempt from BART because its contribution to visibility impairment does not exceed 0.5 dv above natural conditions in any Class I area. The visibility impact from this facility is reduced by taking federally enforceable reductions through a minor source air construction permit.

The Department previously identified all BART-eligible sources through a series of notifications, workshops, and rule making efforts. The state rule implements the federal provisions of Appendix Y in 40 CFR Part 51, "Guidelines for BART Determinations Under the Regional Haze Rule."

Affected Pollutants

In accordance with Appendix Y in 40 CFR 51, the affected visibility-impairing pollutants include the following: NO_X, PM_{10} and SO_2. Although ammoniated nitrates and sulfates are among the key species contributing to regional haze, BART does not directly address or require a review of ammonia (NH_3) as a visibility-impairing pollutant.

With respect to particulate emissions, Rule 62-210.200, F.A.C. defines PM as, "... all finely divided solid or liquid material, other than uncombined water, emitted to the atmosphere as measured by applicable reference methods, or an equivalent or alternative method ..." PM with an aerodynamic diameter less than or equal to a nominal 10 micrometers is defined as PM_{10} and PM with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers is defined as $PM_{2.5}$. Emissions of PM, PM_{10} and $PM_{2.5}$ are all regulated pollutants. For the existing emissions units and air pollution control equipment, the control strategy specified in the BART determinations directly reduces PM emissions, which serves as a surrogate to also reduce PM_{10} and $PM_{2.5}$ emissions.

SO_2 emissions were lowered in the air dispersion modeling used to escape BART. For all three scenarios, CFI is proposing to lower the permitted daily maximum production rate for two SAPs and SO_2 emission limits for all four SAPs, in order to meet the BART exemption criteria. CFI is not proposing any reduction in NOx or SAM emission rates, however, since the production rate of the two SAPs are decreasing, the allowable emissions will also be reduced.

CFI will notify the Department no later than June 1, 2010 which scenario (A or B) will be implemented. The proposed work under this project is scheduled to take place during the full turnaround of each sulfuric acid plant

(SAP) and is projected to end in late 2012. An expiration date of June 30, 2013 for this construction permit was established to allow sufficient time for testing and submitting the test results. This expiration date is six (6) months prior to the BART compliance deadline of December 31, 2013 (Rule 62-296.340(3)(b)2., F.A.C.).

3. SUMMARY OF APPLICANT'S BART EXEMPTION MODELING ANALYSIS

CF Industries proposed federally enforceable changes to reduce emissions of visibility-impairing pollutants in order to meet the exemption criterion for the Best Available Retrofit Technology (BART) rule (62-296.340(5), F.A.C.). Specifically, they have provided for two options (scenarios A and B) that reduce emissions somewhat differently among the BART-eligible source, but both result in visibility improvement. Taking into consideration these emission reductions, CF Industries completed air quality modeling consistent with an approved modeling protocol submitted to the department. The EPA-approved CALPUFF dispersion model was used to determine visibility impacts on all federal Class I areas within 300 kilometers of the facility using three years of meteorological data derived from the MM5 meteorological model. This modeling was thoroughly reviewed by the department and determined to be appropriate for the purpose of meeting the exemption criteria of the BART rule.

Visibility impacts were completed for four federal Class I areas: Chassahowitzka National Wilderness Area (NWA), located 70 kilometers (km) from the facility, Everglades National Park (261 km), Okefenokee NWA (263 km), and Saint Marks NWA (273 km). The controlling area, that is the area with the greatest visibility impact from CF Industries, is Chassahowitzka. BART exemption modeling considered only the impacts from the BART-eligible sources within the facility. In this case, the A, B, C, and D sulfuric acid plants (SAP), the A, X, Y, and Z DAP/MAP plants, and the A and B shipping baghouses.

In scenario A (the reduced production scenario), CF Industries proposes that the A SAP SO_2 emissions are reduced from 250.0 lb/hr to 75.8 lb/hr, 24-hour average, the B SAP SO_2 emissions are reduced from 233.3 lb/hr to 93.3 lb/hr, 24-hour average, and the C and D SAPs SO_2 emissions are each reduced from 401.1 lb/hr to 303.3 lb/hr, 24-hour average. In addition, there would be reduced production capacities for the C and D SAPs from 2962 to 2600 tons per day (TPD) each of sulfuric acid (H_2SO_4). NOx reductions would also occur as a result of the production decrease in the C and D SAPs, each reducing from 13.6 lb/hr to 11.9 lb/hr. Similarly, there would be a reduction in sulfuric acid mist (SAM) as a result of the production decrease in these units from 11.4 lb/hr to 10.1 lb/hr, each.

In scenario B (the converter replacement scenario), the A SAP SO_2 emissions are reduced from 250.0 to 81.3 lbs/hr, the B SAP SO_2 emissions from 233.3 to 100.0 lb/hr, the C and D SAPs SO_2 emissions from 401.1 to 241.7 lb/hr each, all over a 24-hour average. Production in the C and D SAPs would also be slightly reduced from 2962 to 2900 TPD each. Again, the result of the production decrease will reduce NOx and SAM emissions. NOx emissions in the C and D SAPs are reduced from 13.6 to 13.3 lb/hr, and SAM emissions are reduced from 11.4 to 11.2 lb/hr, each.

The results of the modeling, considering both scenarios A and B for the controlling Chassahowitzka area, are shown below as taken from the complete modeling report submitted by CF Industries.

TABLE 3-3
SUMMARY OF BART EXEMPTION MODELING RESULTS - NEW IMPROVE ALGORITHM
EXEMPTION SCENARIO A - REDUCED PRODUCTION
CFI PLANT CITY FACILITY

Class I Area	Distance from Source to Nearest Class I Area Boundary (km)	Number of Days and Receptors with Visibility Impacts >0.5 dv									22nd Highest Impact (dv) Over 3-Yr Period
		2001			2002			2003			
		No. of Days	No. of Receptors	8th Highest Impact (dv)	No. of Days	No. of Receptors	8th Highest Impact (dv)	No. of Days	No. of Receptors	8th Highest Impact (dv)	
Chassahowitzka NWA	70	5	NA	0.445	1	NA	0.356	5	NA	0.499	0.424

TABLE 3-5
SUMMARY OF BART EXEMPTION MODELING RESULTS - NEW IMPROVE ALGORITHM
EXEMPTION SCENARIO B - CONVERTER REPLACEMENT
CFI PLANT CITY FACILITY

Class I Area	Distance from Source to Nearest Class I Area Boundary (km)	Number of Days and Receptors with Visibility Impacts >0.5 dv									22nd Highest Impact (dv) Over 3-Yr Period
		2001			2002			2003			
		No. of Days	No. of Receptors	8th Highest Impact (dv)	No. of Days	No. of Receptors	8th Highest Impact (dv)	No. of Days	No. of Receptors	8th Highest Impact (dv)	
Chassahowitzka NWA	70	4	NA	0.403	1	NA	0.353	5	NA	0.433	0.396

The maximum visibility impact at the Chassahowitzka National Wilderness area under the scenario A plan is 0.499 deciviews (dv). Under the scenario B plan, the maximum visibility impact is 0.433 dv. Both of these values are less than the criterion for exemption from the BART rule of 0.5 dv. Based on the emission changes made in this permit, following either scenario A or scenario B, and the modeling performed by the applicant, the department concludes that the BART-eligible source at CF Industries is exempt from the BART rule requirements.

4. APPLICANT'S BART EXEMPTION ANALYSIS

The BART-eligible emissions units that emit visibility-impairing pollutants (SO_2, NOx or PM_{10}) at the Plant City facility are identified in Table 1-1. As indicated in Section 2, CFI is proposing three emission reduction scenarios for the BART-eligible emissions units of which two scenarios are acceptable to the Department. The acceptable emission reduction scenarios are as follows:

Scenario A

Emission reductions proposed in Scenario A are summarized below:

1. A SAP (EU-002), B SAP(EU-003), C SAP(EU-007) and D SAP(EU-008): SO_2 emissions from the A and B SAPs will be reduced from the currently permitted 250.0 lb/hr and 233.3 lb/hr to 75.8 lb/hr and 93.3 lb/hr, 24-hour average, respectively. SO_2 emissions from the single absorption A and B SAPs are currently controlled by a two-stage ammonia scrubber. CFI will increase the scrubbing rate to reduce the SO_2 emissions further. The equivalent lb/ton emission rate at full production will be 1.4 lb/ton 100 percent H_2SO_4. The maximum daily production rates of the A and B SAPs will remain unchanged at 1,300 and 1,600 TPD, respectively.

SO_2 emissions from the C and D SAPs will be reduced from the currently permitted 401.1 lb/hr to 303.3 lb/hr, 24-hour average. C and D SAPs utilize a double absorption system for the control of SO_2 emissions. The maximum daily production capacity of the C and D SAPs will be reduced from the currently permitted 2,962 TPD to 2,600 TPD. The reduction in maximum production rate will allow the proposed lower SO_2 limit of 2.8 lb/ton 100 percent H_2SO_4 to be achieved without further modification to the C and D SAPs.

The total proposed reduction in allowable SO_2 emissions from the four sulfuric acid plants will be 510 lb/hr or 2233.8 TPY. CFI will demonstrate compliance with the new proposed SO_2 emissions limits by using the existing continuous emission monitoring system (CEMS) along with monitoring of daily H_2SO_4 production for each plant.

CFI is not proposing any reduction in SAM and NOx emissions rates from the sulfuric acid plants in terms of lb/ton; however, since the production rate of the C and D SAPs are decreasing, the allowable emissions in pounds per hour for SAM and NOx will decrease accordingly. NOx emissions from each of the C and D SAPs will reduce from 13.6 lb/hr to 11.9 lb/hr. SAM emissions from each of the C and D SAPs will reduce from 11.4 lb/hr to 10.1 lb/hr. This is reflected in Table 4-1.

The SAM emission limit of 0.027 lb/ton 100% H_2SO_4 for A SAP was based on a consent order [Environmental Protection Commission (EPC) Case #: 00-0126CCG005] between EPC and CFI. CFI agreed to comply with the same SAM emission limit for the B SAP in Air Construction Permit application 0570005-020-AC. The Department inadvertently assigned a higher SAM emission limit of 0.075 lb/ton 100% H_2SO_4 for B SAP in Project No. 0570005-021-AC (PSD-FL-355). The PSD emission limit will be reduced (from 5.0 lb/hr to 1.8 lb/hr) to comply with the consent order requirement of 0.027 lb/ton 100% H_2SO_4 when the applicant submits the Title V permit revision and air construction modification application for the incorporation of PSD-FL-355 project into the Title V Operating Permit. Additionally, the applicant used a SAM emission rate of 1.8 lb/hr (0.027 lb/ton 100% H_2SO_4) for B SAP in the modeling submitted for the BART exemption project.

Currently, NOx emission limit is not established for the A SAP. The Department will impose 0.12 lb/ton 100% H_2SO_4 emission limit for the A SAP which is the same emission limit as imposed on B SAP. The 0.12 lb/ton 100% H_2SO_4 emission limit has been established for most of the sulfuric acid plants in the state. The NOx emission limit for the A SAP will be 6.5 lb/hr.

The applicant proposed the following emission limitation for SO_2, SAM and NOx (B, C and D SAPs). Compliance with SO_2 emission limit will be demonstrated by certified Continuous Emissions Monitoring System (CEMS) data while stack testing shall be done to show compliance with SAM and NOx emission limits. The Department proposed the NOx emission limit for the A SAP which will be demonstrated by stack testing annually.

TABLE 4-1

PLANTS	SO_2	SAM	NOx
A SAP	75.8 lb/hr (1.4 lb/ton)	1.43 lb/hr (0.027 lb/ton)	6.5 lb/hr (0.12 lb/ton)
B SAP	93.3 lb/hr (1.4 lb/ton)	1.8 lb/hr (0.027 lb/ton)	8.0 lb/hr (0.12 lb/ton)
C SAP	303.3 lb/hr (2.8 lb/ton)	10.1 lb/hr (0.093 lb/ton)	11.9 lb/hr (0.11 lb/ton)
D SAP	303.3 lb/hr (2.8 lb/ton)	10.1 lb/hr (0.093 lb/ton)	11.9 lb/hr (0.11 lb/ton)

2. A, Z, X and Y DAP/MAP Plants: CFI is not proposing any changes to the currently permitted PM emission limits for the A(EU-010), Z(EU-011), X(EU-012) and Y(EU-013) MAP/DAP Plants.

3. A and B Shipping Baghouses: CFI is not proposing any changes to the currently permitted PM emission rates for the A(EU-015) and B(EU-018) shipping baghouses.

Scenario B

Emission reductions proposed in Scenario B are summarized below:

1. A SAP (EU-002), B SAP(EU-003), C SAP(EU-007) and D SAP(EU-008): CFI is proposing to lower the permitted daily maximum production capacity for C and D SAPs from 2,962 TPD to 2,900 TPD of H_2SO_4 and the 24-hour daily average SO_2 emission limits for all four SAPs, in order to meet the BART exemption criteria. The BACT for C and D SAPs was established in June 2004 when production was increased from 2,600 TPD to 2,750 TPD (see PSD-FL-339, Permit Number 0570005-019-AC). CFI went through a modification (see PSD-FL-339B, Permit Number 0570005-026-AC) in February 2008, when the production capacity of the C and D SAPs was increased from 2,750 TPD to 2,962 TPD and the SO_2 emission limit was reduced from 3.5 lb/ton to 3.25 lb/ton of 100% H_2SO_4. The BACT for the two SAPs specified the use of the existing double absorption system for the control of SO_2 emissions and the use of mist eliminators for the control of SAM emissions.

SO_2 emissions from the C and D SAPs will be reduced from the currently permitted 401.1 lb/hr to 241.7 lb/hr, 24-hour average. The equivalent lb/ton emission rate at full production will be 2.0 lb/ton 100 percent H_2SO_4. SO_2 emissions from the A and B SAPs will be reduced from the currently permitted 250.0 lb/hr and 233.3 lb/hr to 81.3 lb/hr and 100.0 lb/hr, 24-hour average, respectively. SO_2 emissions from the single absorption A and B SAPs are currently controlled by a two-stage ammonia scrubber. CFI will increase the scrubbing rate to reduce the SO_2 emissions further. The equivalent lb/ton emission rate at full production will be 1.5 lb/ton 100 percent H_2SO_4. The maximum daily production rates of the A and B SAPs will remain unchanged at 1,300 and 1,600 TPD, respectively.

The total proposed reduction in allowable SO_2 emissions from the four sulfuric acid plants will be 621 lb/hr or 2719 TPY. CFI will demonstrate compliance with the new proposed SO_2 emissions limits by using the existing continuous emission monitoring system (CEMS) along with monitoring of daily H_2SO_4 production for each plant.

CFI is not proposing any reduction in SAM and NOx emissions rates from the sulfuric acid plants in terms of lb/ton; however, since the production rate of the C and D SAPs are decreasing, the allowable emissions in pounds per hour for SAM and NOx will decrease accordingly. The SAM emission limit of 0.093 lb/ton 100% H_2SO_4 (11.4 lb/hr) for the C and D SAPs at 2,962 TPD was based on permit modification (PSD-FL-339B, Permit Number 0570005-026-AC). NOx emissions from each of the C and D SAPs will reduce from 13.6 lb/hr to 13.3 lb/hr. SAM emissions from each of the C and D SAPs will reduce from 11.4 lb/hr to 11.2 lb/hr. This is reflected in Table 4-2.

The SAM emission limit of 0.027 lb/ton 100% H_2SO_4 for A SAP was based on a consent order (EPC Case #: 00-0126CCG005) between EPC and CFI. CFI agreed to comply with the same SAM emission limit for the B SAP in Air Construction Permit application 0570005-020-AC.

Currently, the NOx emission limit is not established for the A SAP. The Department will impose 0.12 lb/ton 100% H_2SO_4 emission limit for the A SAP which is the same emission limit as imposed on B SAP. The 0.12 lb/ton 100%

H_2SO_4 emission limit has been established for most of the sulfuric acid plants in the state. The NOx emission limit for the A SAP will be 6.5 lb/hr.

The applicant proposed reduced SO_2 emission limitations for each SAP in order to escape BART. The applicant proposed the following emissions reduction of SO_2 as demonstrated by certified CEMS data. CFI is not proposing emissions reduction of SAM and NOx which will be demonstrated by annual stack testing:

TABLE 4-2

PLANTS	SO_2	SAM	NOx
A SAP	81.3 lb/hr (1.5 lb/ton)	1.43 lb/hr (0.027 lb/ton)	6.5 lb/hr (0.12 lb/ton)
B SAP	100.0 lb/hr (1.5 lb/ton)	1.8 lb/hr (0.027 lb/ton)	8.0 lb/hr (0.12 lb/ton)
C SAP	241.7 lb/hr (2.0 lb/ton)	11.2 lb/hr (0.093 lb/ton)	13.3 lb/hr (0.11 lb/ton)
D SAP	241.7 lb/hr (2.0 lb/ton)	11.2 lb/hr (0.093 lb/ton)	13.3 lb/hr (0.11 lb/ton)

SO_2 emissions reduction

The applicant proposed a 24-hour (daily) block average for SO_2 emissions based on the emission rate averaging period of 24-hour (daily) used in the air dispersion modeling.

The proposed new equivalent of lb SO_2/ton 100% H_2SO_4 values for the A and B SAPs at design capacity will be 1.5 lb SO_2/ton 100% H_2SO_4 while for the C and D SAPs at design capacity will be 2.0 lb SO_2/ton 100% H_2SO_4 . The new equivalent lb/ton values corresponding to the lb/hour limits are less than the current existing standards.

The applicant proposed to meet the lower emission standards and limitations for the A and B SAPs by increasing the scrubbing rate reducing the SO_2 emissions from the two-stage ammonia scrubber. CFI is proposing to replace the converters of the C and D SAPs and increase the catalyst loading to reduce the SO_2 emissions. Additionally, the maximum daily production capacity of the C and D SAPs will be reduced from the currently permitted 2,962 TPD to 2,900 TPD.

In addition to the converter replacement for the C and D SAPs, the applicant is proposing to add additional catalyst to escape BART. Currently, the first three beds of the converter uses the conventional [Monsanto Enviro-Chem System (MECS) XLP 220/110] vanadium pentoxide (V_2O_5) catalyst, while the fourth bed has the cesium promoted (MECS SCX-2000) V_2O_5 catalyst. The current catalyst loading (volumes) for the four beds in C SAP is approximately 406,600 liters or a catalyst loading ratio of 137.3 liters per ton per day (L/TPD) of 100% H_2SO_4. The applicant has indicated that the catalyst loading ratio will be increased to 200 L/TPD after the modification, but the specific bed loadings has not yet been determined. The current catalyst loading for the four beds in D SAP is approximately 416,200 liters or a catalyst loading ratio of 140.5 L/TPD. This ratio will be increased to 200 L/TPD after the modification, but the specific bed loadings has not yet been determined.

The proposed increased catalyst loading ratios in the C and D SAP are as follows:

SAP	Work Activities
C	• Increase the catalyst loading ratio from approximately 137.3 liters per ton H_2SO_4 per day (L/TPD) at 2,962 TPD production rate to approximately 200 L/TPD at 2,900 TPD production rate. • Replace the four-stage catalytic converter.
D	• Increase the catalyst loading ratio from approximately 140.5 L/TPD at 2,962 TPD production rate to approximately 200 L/TPD at 2,900 TPD production rate. • Replace the four-stage catalytic converter.

The percentage increases in the catalyst loading ratios for the SAPs are as follows:

	Catalyst Loading Ratio liters per ton H_2SO_4 per day (L/TPD)	% Increase in Catalyst Loading
C SAP	from 137.3 to 200	45%
D SAP	from 140.5 to 200	42%

2. A, Z, X and Y DAP/MAP Plants: CFI is not proposing any changes to the currently permitted PM emission limits for the A(EU-010), Z(EU-011), X(EU-012) and Y(EU-013) MAP/DAP Plants.

3. A and B Shipping Baghouses: CFI is not proposing any changes to the currently permitted PM emission rates for the A(EU-015) and B(EU-018) shipping baghouses.

5. DEPARTMENT'S PRELIMINARY BART EXEMPTION DETERMINATION

5.1 A, B, C and D Sulfuric Acid Plants (EU-002, EU-003, EU-007 and EU-008)

According to the applicant, except for A SAP these emissions units have established SO_2 (and SAM) emissions limits set according to the best available control technology (BACT) conducted in 2004 and 2007. These BACT permits were issued within the last 3 years. The relevant permits are:

a. Permit PSD-FL-355 was issued on July 23, 2007, to CFI for B SAP which is a single stage absorption plant. SO_2 emissions are limited to 3.5 lb SO_2/ton of 100% H_2SO_4 produced (lb/ton of acid), 3-hour rolling average, as demonstrated by a continuous emissions monitoring system (CEMS). Cesium promoted catalyst in the final (fourth) bed in conjunction with NH_3 scrubbing of the tail gas constitutes the control technology to achieve the limit. For reference the BACT SAM limit was determined to be 0.075 lb SAM/ton of acid. The same permit reduced the SO_2 limit for A SAP to 250 pounds per hour (lb/hr) on a 24-hour basis.

b. Permit PSD-FL-339 issued on June 1, 2004, to CFI for C and D SAPs which are double staged absorption plants. SO_2 emissions are limited to 3.5 lb/ton of acid, 3-hour rolling average, as demonstrated by CEMS. Cesium promoted vanadium catalyst in the final (fourth) bed in conjunction with the double staged absorption process constitutes the control technology to achieve the limit. For reference the BACT SAM limit was determined to be 0.10 lb/ton of acid.

c. Draft permit PSD-FL-339B was distributed on December 3, 2007 for a production increase from C and D SAPs. The permit further reduced the SO_2 emission limit to 3.25 lb/ton of acid, 3-hour rolling average, as demonstrated by CEMS. The SAM limit was reduced to 0.093 lb/ton of acid.

Double absorption units are the most common process for producing sulfuric acid in the U.S. phosphate fertilizer industry and it continues to be improved and employed at both existing and new installations in the U.S. and throughout the world. The double absorption process controls SO_2 emissions and a high efficiency mist eliminator controls sulfuric acid mist emissions. NOx emissions due to the burning of sulfur are controlled through good combustion practices.

The process is comprised of three distinct steps. These are sulfur combustion and gas preparation; catalytic conversion of sulfur dioxide to sulfur trioxide; and absorption of sulfur trioxide into sulfuric acid.

A great deal of heat is evolved throughout the process. Its management is an important consideration in optimizing the conversion and absorption steps as well as providing useful energy to the plant. Reaction kinetics and thermodynamics are also important factors. Following is a description of the process.

Atmospheric air is drawn through a filter by the main compressor and then contacted with a recirculating stream of sulfuric acid in the drying tower. The dried air is blown by a steam-driven compressor into a refractory-lined burner where molten sulfur is combusted to produce SO_2. The hot combustion gases are cooled in a waste heat boiler to recover excess heat as steam.

The gas stream is then introduced into a converter packed with catalyst. In a series of steps, the SO_2 and excess oxygen from the combustion air are progressively converted to sulfur trioxide (SO_3). The gases containing SO_3, some unconverted SO_2, oxygen, and atmospheric nitrogen are conveyed to an "interpass tower" where the SO_3 is absorbed into a stream of concentrated sulfuric acid and reacted with excess water to further strengthen the acid. By removing most SO_3 in the interpass absorber, the equilibrium favors further conversion of the remaining SO_2 to SO_3. The remaining SO_2, not previously oxidized, is passed over a final converter bed of catalyst and the SO_3 produced is then absorbed in sulfuric acid. This is accomplished in the final pass of the converter. The resulting gas stream is conveyed to the high-efficiency "final tower" where most of the remaining SO_3 reacts with water in a 98-99 percent sulfuric acid stream.

Throughout the conversion, the temperatures are moderated by an intricate arrangement of heat exchangers so that the excess heat is removed. Mist eliminators are used to ensure that sulfuric acid sprays and fine mists are contained, thereby protecting plant equipment and minimizing emissions to the atmosphere.

The following diagram is useful for the discussion of SO_2 emissions control. At CFI molten elemental sulfur is combusted to produce the source of the gaseous SO_2 used to manufacture sulfuric acid. Thus, SO_2 is a valuable important intermediate raw material for the process.

Conversion of SO_2 to sulfur trioxide (SO_3) takes place in several vanadium catalyst beds within a converter tower. The specific type of catalyst greatly affects the reactions and the emissions. The progressively more concentrated SO_3 is absorbed into a recirculating stream of sulfuric acid in one or two absorbers (single or double staged absorption processes). The following figure from a European Commission document shows the keys steps (with the exception of the sulfur combustion part) involved in the contact sulfuric acid process used at CFI.

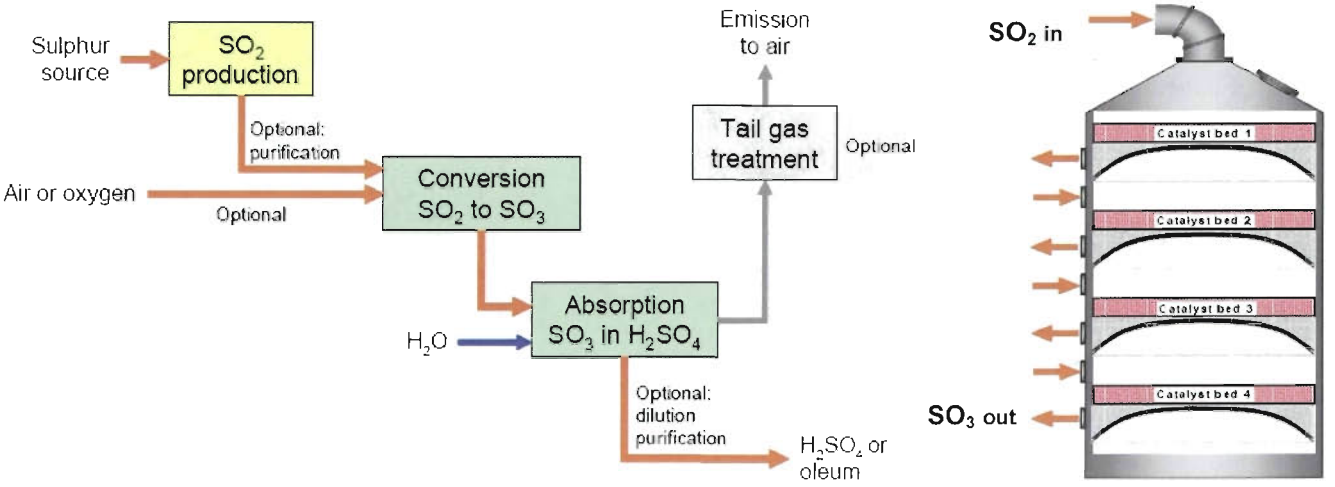


Figure 3. Diagram of the Contact Sulfuric Acid Manufacturing Process and Conversion of SO_2 to SO_3

The following figure from the same European Commission document shows the two main variations of the contact processes including single stage absorption and double staged absorption. The double staged version shown on the left also shows the sulfur burner. CFI employs double staged absorption on C and D SAPs. It features two absorbers and typical conversion efficiencies greater than 99.7% are achieved.

The single stage version has only one absorber and achieves only 97-98% absorption, thus leaving a significant amount of SO_2 that is not converted to product and which requires further tail gas scrubbing to control emissions. CFI employs single staged absorption on A and B SAPs.

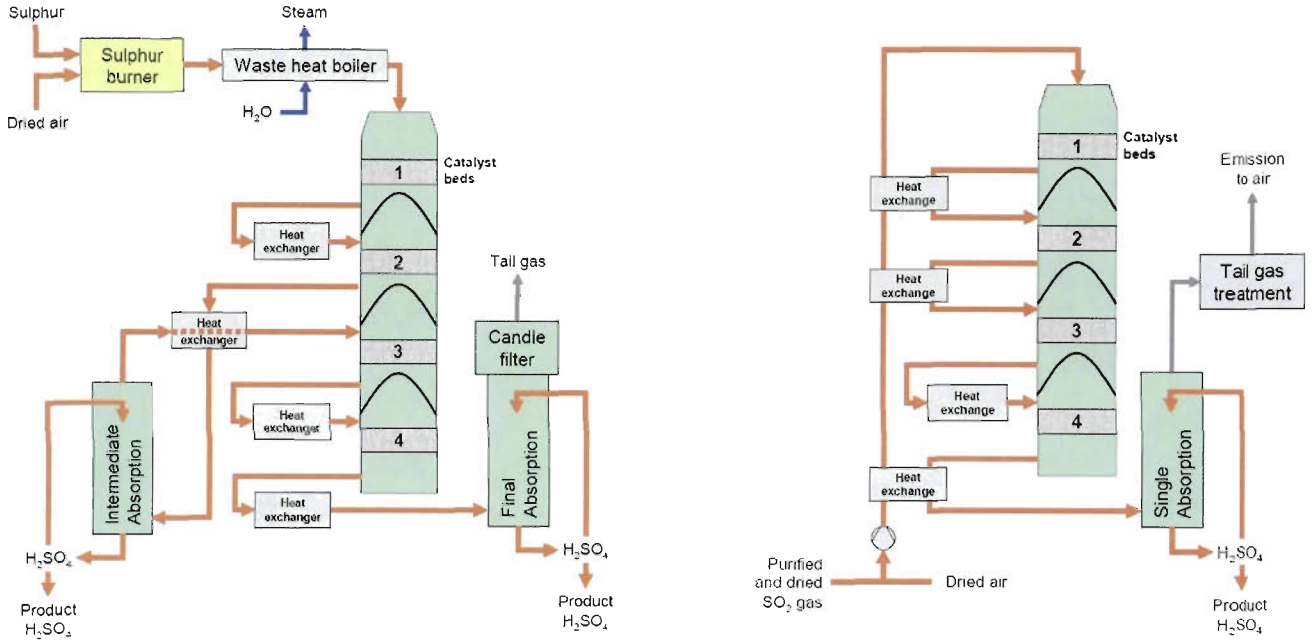


Figure 4. Sulfur Burning and Double Staged Absorption. Single Stage Absorption and Tail Gas Treatment

The key emissions from the double staged version are SO_2, sulfur trioxide (SO_3) and sulfuric acid mist (SAM or H_2SO_4). All are key intermediate raw materials or products as well as pollutants. NO_X and minor amounts of PM from the sulfur source (typically combustion of molten sulfur) will also exit through the SAP stack.

In the single stage process, the tail gas is scrubbed. At CFI scrubbing is accomplished using ammonia (NH_3) to control and recover SO_2, SO_3 and SAM. Such scrubbing results in the production of a usable by-product that is useful elsewhere in fertilizer production. However, the ammoniated sulfate species constitute direct filterable PM emissions from A and B SAPs. These species are similar to fine PM ($PM_{2.5}$) formed in the environment from precursors such as NH_3 and SO_4. They differ from SAM in that they will be captured on an EPA Method 5 filter, whereas SAM may or may not be captured or react on the filter media and filtered dust.

SO_2 Emission Standards and Limitation

The applicant provided in the BART exemption application actual SO_2 stack test results from 2002 through 2009 for the four SAPs. These test results can be summarized as follows:

SO_2 Stack Test Data Review

Plant	Averages of Stack Tests lb SO_2/ton, 3-hour average	Test Ranges
A SAP	3.21	2.63 - 3.58
B SAP	3.64	3.18 - 4.15
C SAP	3.24	1.97 - 3.87
D SAP	3.32	2.67 - 3.98

Plant	**Design Production Capacity,** TPD of 100% H_2SO_4 (sulfuric acid)	**Permitted Production** (Maximum achieved during Stack Test), TPD of 100% H_2SO_4 (sulfuric acid)	**Stack Test Date**
A SAP	1,300	1,260	01/22/2004
B SAP	1,600	1,207	02/28/2008
C SAP	2,962	2,849	03/05/2009
D SAP	2,962	2,807	04/02/2008

After reviewing the stack test data for SO_2, it is apparent the applicant can not currently achieve the proposed emission reductions for SO_2 for any of the four SAPs under scenarios A or B.

The applicant proposed to meet the lower emission standards and limitations for the A and B SAPs by increasing the scrubbing rate to reduce the SO_2 emissions from the two-stage ammonia scrubber. CFI is proposing to replace the converters of the C and D SAPs and increase the catalyst loading to reduce the SO_2 emissions. Additionally, the maximum daily production capacity of the C and D SAPs will be reduced from the currently permitted 2,962 TPD to 2,900 TPD.

The Department has been provided reasonable assurance of compliance with the reduced SO_2 emission limits with the increase in the scrubbing rate to the A and B SAPs and with a new converter and additional catalyst loadings and types of catalysts to be used for the C and D SAPs.

The Department calculated corresponding SO_2 reductions for the two different scenarios as shown in the shaded columns below:

Plant Scenario	SO_2 Emission Reduction	% Reduction	TPY Reduction
A SAP (Scenario A)	from 250 lb/hour to 75.8 lb/hour	69%	763
A SAP (Scenario B)	from 250 lb/hour to 81.3 lb/hour	67%	739
B SAP (Scenario A)	from 233.3 lb/hour to 93.3 lb/hour	60%	613
B SAP (Scenario B)	from 233.3 lb/hour to 100.0 lb/hour	57%	584
C SAP (Scenario A)	from 401.1 lb/hour to 303.3 lb/hour	24%	428
C SAP (Scenario B)	from 401.1 lb/hour to 241.7 lb/hour	40%	698
D SAP (Scenario A)	from 401.1 lb/hour to 303.3 lb/hour	24%	428
D SAP (Scenario B)	from 401.1 lb/hour to 241.7 lb/hour	40%	698

SO_2 Control Technology

The Department accepts the applicant's proposed SO_2 control technology to reduce emissions by increasing the scrubbing rate to the two-stage ammonia scrubber for the A and B SAPs under the two different scenarios. Additionally, the applicant has proposed to use the currently employed double absorption system with increased catalyst (vanadium and/or cesium) loadings and the replacement of the converter in the C and D SAPs under scenario B. For scenario A, the applicant is not proposing any physical modification to the C and D SAPs as the decrease in the daily production rate will allow the applicant to achieve the proposed lower SO_2 emission limits.

The Department proposes the escape BART SO_2 emission limitations for the SAPs to be the following for the two different scenarios:

Plant	lb/hour (Scenario A)	lb/hour (Scenario B)
A SAP	75.8	81.3
B SAP	93.3	100.0
C SAP	303.3	241.7
D SAP	303.3	241.7

This BART exemption determination requires the applicant to demonstrate compliance with the SO_2 emission standards and limitations on a 24-hour daily average using the CEMS data. A 24-hour (daily) block average is aligned with the 24-hour averaging period used in the air quality modeling analysis for visibility.

SAM Emission Standards and Limitations

The applicant is not proposing any reduction in SAM emission limits from the four SAPs in terms of lb/ton; however, since the production rate of the C and D SAPs are decreasing from 2,962 TPD to 2,600 TPD under Scenario A, the allowable emissions based on 0.093 lb/ton of H_2SO_4 will reduce the SAM emission rates from 11.4 to 10.1 lb/hr. Under Scenario B, the production rates for the C and D SAPs are decreasing from 2,962 TPD to 2,900 TPD, the allowable emissions based on 0.093 lb/ton of H_2SO_4 will reduce SAM emission rates from 11.4 to 11.2 lb/hr.

The production rates for the A and B SAPs remains unchanged, therefore the SAM emission limits will stay at 1.43 and 1.8 lb/hr, respectively. The SAM emission limit of 0.027 lb/ton 100% H_2SO_4 (1.43 lb/hr) for A SAP was based on a consent order [Environmental Protection Commission (EPC) Case #: 00-0126CCG005] between EPC and CFI. CFI agreed to comply with the same SAM emission limit for the B SAP in Air Construction Permit application 0570005-020-AC. The Department inadvertently assigned a higher SAM emission limit of 0.075 lb/ton 100% H_2SO_4 for B SAP in Project No. 0570005-021-AC (PSD-FL-355). This emission limit will be reduced (from 5.0 lb/hr to 1.8 lb/hr) to comply with the consent order requirement of 0.027 lb/ton 100% H_2SO_4 through a modification currently in-house for the PSD-FL-355 project. Additionally, the applicant used a SAM emission rate of 1.8 lb/hr (0.027 lb/ton 100% H_2SO_4) for B SAP in the modeling submitted for the BART exemption project.

The applicant proposed stack test data to be used to demonstrate compliance.

The applicant provided in the BART exemption application actual SAM stack test results from 2002 through 2009 for the four SAPs. The test results can be summarized as follows:

SAM Stack Test Data Review

Plant	Averages of Stack Tests lb SAM/ton, 3-hour average	Test Ranges lb SAM/ton, 3-hour average
A SAP	0.00975	0.006 – 0.012
B SAP	0.0115	0.008 – 0.022
C SAP	0.0317	0.019 – 0.046
D SAP	0.0395	0.023 – 0.071

As shown by the test ranges in the stack test data above, the applicant can comply with the proposed SAM emission limits. The Department proposes the escape BART SAM emission limitations for the SAPs to be the following for the two different scenarios:

Plant	lb/hour (Scenario A)	lb/hour (Scenario B)
A SAP	1.43	1.43
B SAP	1.8	1.8
C SAP	10.1	11.2
D SAP	10.1	11.2

Emissions of SAM shall not exceed the above listed limitations for A, B, C and D SAPs for the two different scenarios based on a 3-hour average as demonstrated by stack test data.

NOx Emission Standards and Limitations

The applicant is not proposing any reduction in NOx emission limits from the four SAPs in terms of lb/ton; however, since the production rate of the C and D SAPs are decreasing from 2,962 TPD to 2,600 TPD under Scenario A, the allowable emissions based on 0.11 lb/ton of H_2SO_4 will reduce the NOx emission rates from 13.6 to 11.9 lb/hr. Under Scenario B, the production rates for the C and D SAPs are decreasing from 2,962 TPD to 2,900 TPD, the allowable emissions based on 0.11 lb/ton of H_2SO_4 will reduce NOx emission rates from 13.6 to 13.3 lb/hr.

The production rates for the A and B SAPs remains unchanged, therefore the NOx emission limits will stay at 6.5 and 8.0 lb/hr, respectively.

The Department proposes the escape BART NOx emission limitations for the SAPs to be the following for the two different scenarios:

Plant	lb/hour (Scenario A)	lb/hour (Scenario B)
A SAP	6.5	6.5
B SAP	8.0	8.0
C SAP	11.9	13.3
D SAP	11.9	13.3

Emissions of NOx shall not exceed the above listed limitations for A, B, C and D SAPs for the two different scenarios based on a 3-hour average as demonstrated by stack test data.

5.2 A, Z, X and Y DAP/MAP Plants

CFI is not proposing any changes to the currently permitted PM emission limits for the A(EU-010), Z(EU-011), X(EU-012) and Y(EU-013) DAP/MAP Plants. However, existing limits were relied upon for modeled exemption and will also be set as BART avoidance limits.

The operations of the A-Train phosphate manufacturing plant to produce DAP or MAP consists of a reactor/granulator (R/G), dryer, product cooler, mills and screen. Particulate matter, fluoride (F) and SO_2 emissions are generated from the reactor/granulator (R/G), dryer, cooler and associated equipment.

The schematic of the control equipments for the A DAP/MAP Plant are as follows:

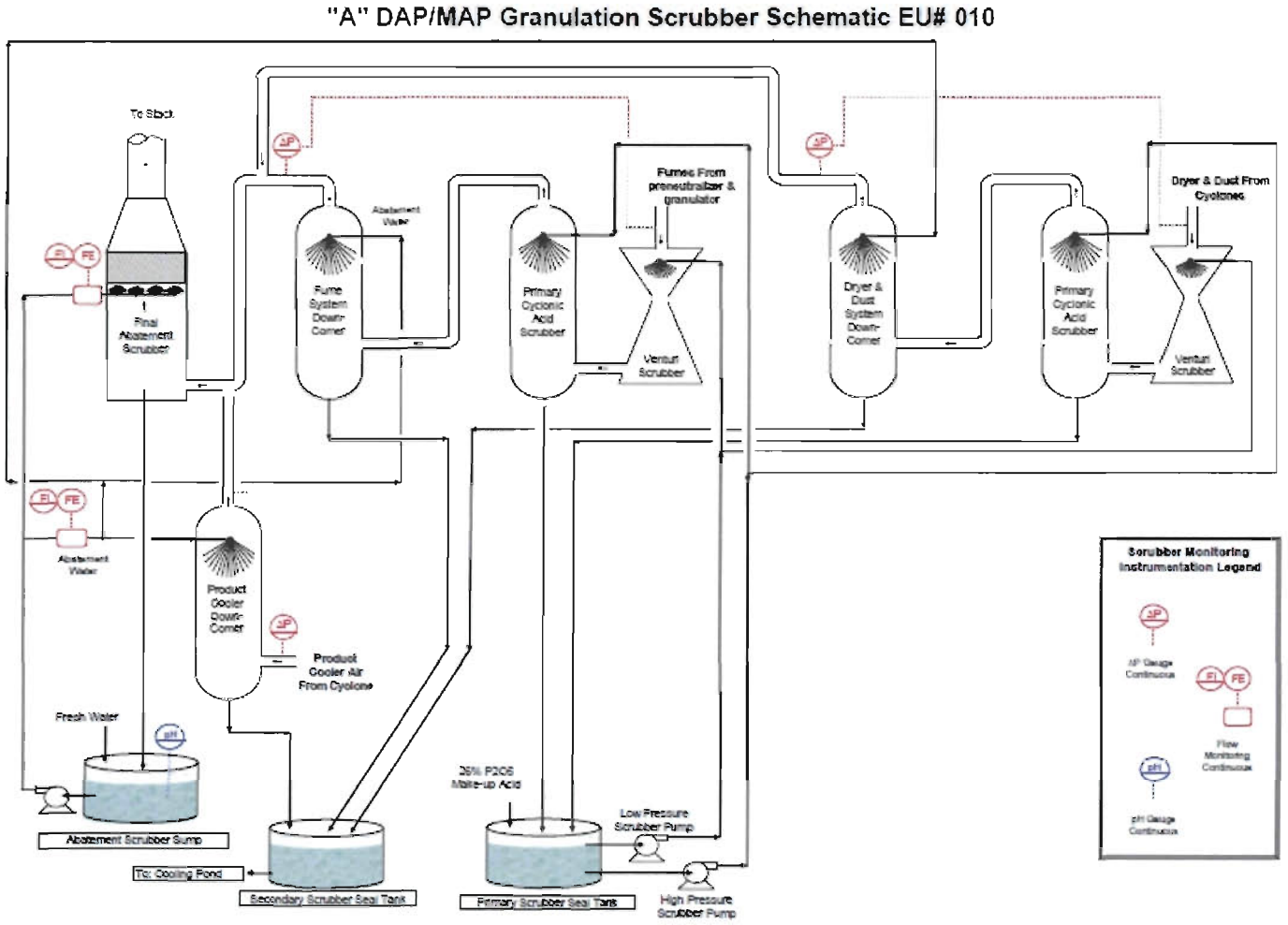


Figure 5

The XYZ – DAP/MAP granulation trains each consist of a reactor, granulator, aging belt, dryer, product cooler, mills and product screens. Particulate matter, fluoride (F) and SO_2 emissions are generated from the reactor/granulator (R/G), dryer, cooler and associated equipment.

The schematic of the control equipments for the XYZ – DAP/MAP Plant are as follows:

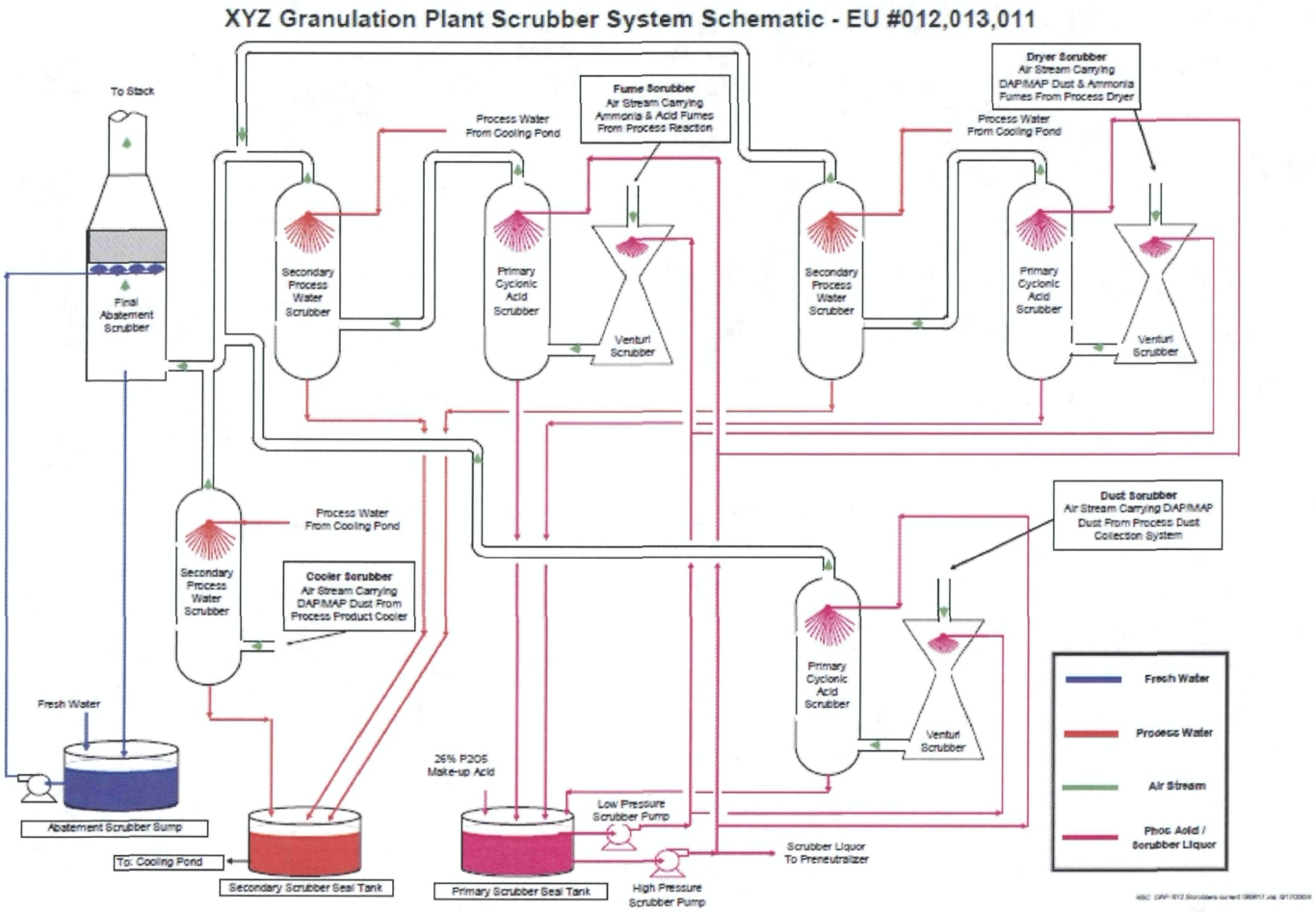


Figure 6

5.3 A and B Shipping Baghouses

CFI is not proposing any changes to the currently permitted PM emission rates for the A(EU-015) and B(EU-018) Shipping baghouses. The operations of the A and B shipping units consist of sizing, screening and conveying systems for transferring DAP/MAP from storage buildings A and B to the truck and railcar loading operations associated with these buildings. PM emissions from the transfer points and emissions from the sizing and screening are controlled by two baghouse dust collectors, one on each unit. Emissions from the truck and railcar loading operations are minimized by the use of the dust suppressant. Each baghouse control system will be designed and maintained to achieve an outlet grain loading of no more than 0.02 grains per actual cubic feet (gr/acf) for a nominal flow rate of approximately 10,000 actual cubic feet per minute (acfm). Visible emissions from the A and B shipping baghouse exhausts shall not exceed 5 percent opacity. The permittee shall maintain records of the design specifications for the bags. No PM emission tests are required.

6. SUMMARY

CFI will be employing two emission reduction scenarios. Under both scenarios (A and B), CFI is proposing to lower the permitted daily maximum production capacity of C and D SAPs and the 24-hour daily average SO_2 emission limits for A, B, C and D SAPs. CFI has developed intended strategies for achieving the lower SO_2 emission rates on the SAPs. For Scenario A, CFI will increase the scrubbing rate to the ammonia scrubber for the A and B SAPs, and the reduction in production rate for the C and D SAP will allow compliance with the proposed lower SO_2 limit. For Scenario B, increasing the scrubbing rate to the ammonia scrubber for the A and B SAPs and installation of a new converter with increased catalyst loading for the C and D SAPs will reduce SO_2 emissions. CFI will notify the Department no later than June 1, 2010 which scenario will be implemented. In summary, the proposed emission limitations for this facility to escape BART are as follows:

SCENARIO A:

A SAP (EU-002)

Production Rate
The maximum daily production rate will be 1,300 TPD of H_2SO_4.

SO_2
75.8 lb/hr 24-hour (daily) block average as demonstrated by certified CEMS data.
Equivalent to 1.4 lb SO_2/ton 100% H_2SO_4 produced and 332 TPY.

SAM
1.43 lb/hr as demonstrated by stack test data (3-hour average).
Equivalent to 0.027 lb/ton 100% H_2SO_4 produced, (3-hour average).

NOx
6.5 lb/hr demonstrated by stack test data (3-hour average).
Equivalent to 0.12 lb/ton 100% H_2SO_4 produced, (3-hour average) and 28 TPY.

B SAP (EU-003)

Production Rate
The maximum daily production rate will be 1,600 TPD of H_2SO_4.

SO_2
93.3 lb/hr 24-hour (daily) block average as demonstrated by certified CEMS data.
Equivalent to 1.4 lb SO_2/ton 100% H_2SO_4 produced and 409 TPY.

SAM
1.8 lb/hr as demonstrated by stack test data (3-hour average).
Equivalent to 0.027 lb/ton 100% H_2SO_4 produced, (3-hour average).

NOx
8.0 lb/hr demonstrated by stack test data (3-hour average).
Equivalent to 0.12 lb/ton 100% H_2SO_4 produced, (3-hour average) and 35 TPY.

C SAP (EU-007)

Production Rate
The maximum daily production rate will be 2,600 TPD of H_2SO_4.

SO_2
303.3 lb/hr 24-hour (daily) block average as demonstrated by certified CEMS data.
Equivalent to 2.8 lb SO_2/ton 100% H_2SO_4 produced and 1328 TPY.

SAM
10.1 lb/hr as demonstrated by stack test data (3-hour average).

Equivalent to 0.093 lb/ton 100% H_2SO_4 produced, (3-hour average) and 44 TPY.

NOx
11.9 lb/hr demonstrated by stack test data (3-hour average).
Equivalent to 0.11 lb/ton 100% H_2SO_4 produced, (3-hour average) and 52 TPY.

D SAP (EU-008)

Production Rate
The maximum daily production rate will be 2,600 TPD of H_2SO_4.

SO_2
303.3 lb/hr 24-hour (daily) block average as demonstrated by certified CEMS data.
Equivalent to 2.8 lb SO_2/ton 100% H_2SO_4 produced and 1,328 TPY.

SAM
10.1 lb/hr as demonstrated by stack test data (3-hour average).
Equivalent to 0.093 lb/ton 100% H_2SO_4 produced, (3-hour average implied) and 44 TPY.

NOx
11.9 lb/hr demonstrated by stack test data (3-hour average).
Equivalent to 0.11 lb/ton 100% H_2SO_4 produced, (3-hour average implied) and 52 TPY.

SCENARIO B:

A SAP (EU-002)

Production Rate
The maximum daily production rate will be 1,300 TPD of H_2SO_4.

SO_2
81.3 lb/hr 24-hour (daily) block average as demonstrated by certified CEMS data.
Equivalent to 1.5 lb SO_2/ton 100% H_2SO_4 produced and 356 TPY.

SAM
1.43 lb/hr as demonstrated by stack test data (3-hour average).
Equivalent to 0.027 lb/ton 100% H_2SO_4 produced, (3-hour average).

NOx
6.5 lb/hr demonstrated by stack test data (3-hour average).
Equivalent to 0.12 lb/ton 100% H_2SO_4 produced, (3-hour average) and 28 TPY.

B SAP (EU-003)

Production Rate
The maximum daily production rate will be 1,600 TPD of H_2SO_4.

SO_2
100.0 lb/hr 24-hour (daily) block average as demonstrated by certified CEMS data.
Equivalent to 1.5 lb SO_2/ton 100% H_2SO_4 produced and 438 TPY.

SAM
1.8 lb/hr as demonstrated by stack test data (3-hour average).
Equivalent to 0.027 lb/ton 100% H_2SO_4 produced, (3-hour average).

NOx
8.0 lb/hr demonstrated by stack test data (3-hour average).
Equivalent to 0.12 lb/ton 100% H_2SO_4 produced, (3-hour average) and 35 TPY.

C SAP (EU-007)

Production Rate
The maximum daily production rate will be 2,900 TPD of H_2SO_4.

SO_2
241.7 lb/hr 24-hour (daily) block average as demonstrated by certified CEMS data.
Equivalent to 2.0 lb SO_2/ton 100% H_2SO_4 produced and 1059 TPY.

SAM
11.2 lb/hr as demonstrated by stack test data (3-hour average).
Equivalent to 0.093 lb/ton 100% H_2SO_4 produced, (3-hour average) and 49 TPY.

NOx
13.3 lb/hr demonstrated by stack test data (3-hour average).
Equivalent to 0.11 lb/ton 100% H_2SO_4 produced, (3-hour average) and 58 TPY.

D SAP (EU-008)

Production Rate
The maximum daily production rate will be 2,900 TPD of H_2SO_4.

SO_2
241.7 lb/hr 24-hour (daily) block average as demonstrated by certified CEMS data.
Equivalent to 2.0 lb SO_2/ton 100% H_2SO_4 produced and 1,059 TPY.

SAM
11.2 lb/hr as demonstrated by stack test data (3-hour average).
Equivalent to 0.093 lb/ton 100% H_2SO_4 produced, (3-hour average) and 49 TPY..

NOx
13.3 lb/hr demonstrated by stack test data (3-hour average).
Equivalent to 0.11 lb/ton 100% H_2SO_4 produced, (3-hour average) and 58 TPY.

SCENARIOS A AND B COMMON CONDITIONS:

A DAP/MAP Plant (EU-010)

Production Rate
The maximum permitted P_2O_5 input rates are 29.53 TPH for DAP and 33.30 TPH for MAP production.

PM
13.0 lb/hr and 56.9 TPY for both MAP and DAP production as demonstrated by stack test data (3-hour average).

The maximum heat input rate to the A DAP/MAP Plant dryer is 28.5 million British thermal units per hour (MMBtu/hr). The primary fuel for the dryer shall be natural gas with No. 5 fuel oil (or a better grade, i.e., No. 2, 3 or 4) permitted as a back-up fuel.

Z DAP/MAP Plant (EU-011)

Production Rate
The maximum permitted P_2O_5 input rates are 48.7 TPH of DAP and 55.0 TPH of MAP.

PM
15.0 lb/hr and 65.7 TPY for both MAP and DAP production as demonstrated by stack test data (3-hour average).

The maximum heat input rate to the Z DAP/MAP Plant dryer is 42.75 MMBtu/hr. The primary fuel for the dryer shall be natural gas with No. 5 fuel oil (or a better grade, i.e., No. 2, 3 or 4) permitted as a back-up fuel.

X DAP/MAP Plant (EU-012)

Production Rate

The maximum permitted P_2O_5 input rates are 48.7 TPH of DAP and 55.0 TPH of MAP.

Hours of Operation
X DAP/MAP plant can operate 7,884 hours per year (hr/yr) for DAP production and 6,091 hr/yr for MAP production.

PM
10.62 lb/hr and 41.88 TPY for DAP production and 13.75 lb/hr and 41.88 TPY for MAP production as demonstrated by stack test data (3-hour average).

The maximum heat input rate to the X DAP/MAP Plant dryer is 49.7 MMBtu/hr. The primary fuel for the dryer shall be natural gas with No. 5 fuel oil (or a better grade, i.e., No. 2, 3 or 4) permitted as a back-up fuel.

Y DAP/MAP Plant (EU-013)

Production Rate
The maximum permitted P_2O_5 input rates are 48.7 TPH of DAP and 55.0 TPH of MAP.

PM
15.3 lb/hr and 67 TPY for both MAP and DAP production as demonstrated by stack test data (3-hour average).

The maximum heat input rate to the Y DAP/MAP Plant dryer is 49.5 MMBtu/hr. The primary fuel for the dryer shall be natural gas with No. 5 fuel oil (or a better grade, i.e., No. 2, 3 or 4) permitted as a back-up fuel.

A Shipping Baghouse (EU-015) and B Shipping Baghouse (EU-018)

PM
Visible emissions from the A and B shipping baghouse exhausts shall not exceed 5% opacity.

Loading Rate
The maximum loading rate from A and B shipping units shall not exceed 250 and 500 tons per hour, respectively.

7. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations regarding a BART exemption as conditioned by the Draft permit. This determination is based on a technical review of the complete application, all available information, reasonable assurances provided by the applicant, review of the visibility impact analysis and the conditions specified in the Draft permit. The Draft permit contains specific conditions to provided reasonable assurances of compliance with the applicant's proposed work to escape and remain exempt from a BART determination.

Mr. Syed Arif, P.E. is the project engineer responsible for reviewing the application, writing this TEPD and drafting the permit. He may be contacted at syed.arif@dep.state.fl.us and 850/921-9528. Mr. Tom Rogers is the project meteorologist responsible for reviewing the air dispersion modeling analysis for visibility. He may be contacted at tom.rogers@dep.state.fl.us and 850/921-9554.

DRAFT

PERMITTEE

CF Industries, Inc. (CFI)
Post Office Box Drawer L
Plant City, FL 33564

Air Permit No. 0570005-034-AC
Expiration Date: December 31, 2013
Plant City Phosphate Complex
BART Exemption Project

Authorized Representative:
Mr. Ronald L. Brunk, Superintendent Environmental Affairs

PLANT AND LOCATION

CFI operates the Plant City Phosphate Complex, which is located at 10608 Paul Buchman Highway, Plant City in Hillsborough County, Florida. The facility is an existing phosphate fertilizer manufacturer, which is identified by Standard Industrial Classification (SIC) code No. 2874.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). Pursuant to Rule 62-296.340(5)(c) (escape BART), F.A.C., the permittee shall install the air pollution control equipment and/or implement the air pollution control measures that are specified by this permit to be exempt from a Best Available Retrofit Technology (BART) determination.

EFFECTIVE DATE

Unless otherwise specified by this permit, the affected emissions units shall comply with the conditions of this permit as expeditiously as practicable. [Rule 62-296.340(3)(b)2., F.A.C.]

Executed in Tallahassee, Florida

Joseph Kahn, Director
Division of Air Resource Management

Effective Date

JK/tlv/sa

FACILITY DESCRIPTION

The applicant, CFI, operates an existing phosphate fertilizer manufacturer. The fertilizer complex processes phosphate rock into several different fertilizer products. This is accomplished by reacting the phosphate rock with sulfuric acid to produce phosphoric acid and then converting the phosphoric acid to fertilizer. The facility consists of four sulfuric acid plants (SAPs); two phosphoric acid plants (PAPs); four diammonium/monoammonium phosphate (DAP/MAP) plants; molten sulfur storage and handling operations; product storage and shipping operations; and ancillary equipment.

FACILITY REGULATORY CLASSIFICATIONS

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

AFFECTED EMISSIONS UNITS

CFI submitted an application to escape the BART determination requirements of Rule 62-296.340(5)(c) (escape BART), F.A.C., which addresses the following emissions units with the potential to emit at least 50 tons per year (TPY) or more of a visibility-impairing pollutant:

EU No.	Emissions Unit Description
002	A Sulfuric Acid Plant
003	B Sulfuric Acid Plant
007	C Sulfuric Acid Plant
008	D Sulfuric Acid Plant
010	A DAP/MAP Plant
011	Z DAP/MAP Plant
012	X DAP/MAP Plant
013	Y DAP/MAP Plant
015	A Shipping Baghouse
018	B Shipping Baghouse

CONTENTS

1. Permitting Authority: The **Permitting Authority for this project is the Bureau of Air Regulation** in the Division of Air Resource Management of the Florida Department of Environmental Protection. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the **Compliance Authority, Environmental Protection Commission of Hillsborough County (EPCHC) Office.** The Compliance Authority's mailing address is:

   Environmental Protection Commission of Hillsborough County
   3629 Queen Palm Drive
   Tampa, Florida 33619-1309
   Telephone: 813/627-2600, Fax: 813/627-2660

3. Appendices: The following Appendices are attached as part of this permit: Appendix A (Citation Formats); Appendix B (General Conditions); Appendix C (Standard Testing Requirements); and, Appendix D (Memorandum of Understanding Regarding Best Operational Start-up Practices for Sulfuric Acid Plants).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to the applicable provisions of: Chapter 403, F.S.; Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.; and the applicable parts and subparts of Title 40, Code of Federal Regulations (CFR). Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. Title V Air Operation Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the **Permitting Authority, the Florida Department of Environmental Protection, Southwest District (SWD) Office**. The SWD's mailing address is:

   Florida Department of Environmental Protection Southwest District
   13051 N. Telecom Parkway
   Temple Terrace, Florida 33637-0926
   Telephone: 813/632-7600, Fax: 813/632-7665

   [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

6. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 (five) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2., F.A.C.]

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

NEW AND PREVIOUS PERMIT SPECIFIC CONDITIONS

8. Pursuant to Rule 62-296.340(5)(c) (escape BART), F.A.C., the specific terms and conditions of this permit are required in order to escape a Best Available Retrofit Technology Determination. These specific terms and conditions apply to each emissions unit and are in addition to any other applicable standards. [Rule 62-296.340(5)(c) (escape BART), F.A.C.; Proposed by the Applicant in the Application; and, Rules 62-4.070(1)&(3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.]

9. A relaxation of the specific terms and conditions of this permit may subject the facility to a BART and/or a Best Available Control Technology (BACT) determination. Any request to change the specific terms and conditions of this permit must be submitted to the Bureau of Air Regulation in the Division of Air Resource Management of the Florida Department of Environmental Protection. [Rule 62-296.340(5)(c) (escape BART), F.A.C.; and, Rules 62-4.070(1)&(3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.]

10. The applicant has proposed two emission reduction scenarios A and B for the BART-eligible emissions units at the Plant City Phosphate Complex. For each of the emissions reduction scenarios, the facility is exempt from BART because its contribution to visibility impairment does not exceed 0.5 deciview (dv) above natural conditions in any Class I area. Emissions Unit Specific Conditions in Section 3 of the permit will address both the emission reduction scenarios under different subsections. The applicant will make a decision to implement scenario A or B no later than June 1, 2010, at which time the scenario that was not selected will become obsolete. [Rule 62-296.340(5)(c) (escape BART), F.A.C.; and, Rules 62-4.070(1)&(3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.]

11. No emissions unit or facility subject to this permit shall be constructed or modified without obtaining the appropriate air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

12. Source Obligation:

    (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12)(b), F.A.C.]

Subsection A (Scenario A). A, B, C and D SAPs; A, Z, X and Y DAP/MAP Plants; A and B Shipping Baghouses

This subsection addresses the following affected emissions units:

EU ID No.	Brief Description
-002	A SAP
-003	B SAP
-007	C SAP
-008	D SAP
-010	A DAP/MAP Plant
-011	Z DAP/MAP Plant
-012	X DAP/MAP Plant
-013	Y DAP/MAP Plant
-015	A Shipping Baghouse
-018	B Shipping Baghouse

ADMINISTRATIVE REQUIREMENTS

1. Emission Reductions under Scenario A: This subsection deals with emission reductions for the above affected emissions units under Scenario A. The permittee shall notify the Department's Bureau of Air Regulation, EPCHC and the SWD Office through a letter from the responsible official by June 1, 2010 whether Scenario A will be implemented. If Scenario A is implemented, Scenario B becomes obsolete. Under Scenario A, the permittee shall reduce production rates of C and D SAPs from 2,962 TPD to 2,600 TPD and lower daily average SO_2 emissions rates from the four SAPs. The permittee is required to comply with the BART exemption limits under Scenario A as soon as possible but not later than September 1, 2010.

   [Rule 62-296.340(5)(c) (escape BART), F.A.C. and Applicant's approval received via e-mail on September 8, 2009]

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

2. Production Capacity: The existing production capacity of A and B SAPs, A, Z, X and Y DAP/MAP Plants, A and B Shipping Baghouses shall not be changed as a result of the proposed work under this project, Permit No. 0570005-034-AC. The production capacity of C and D SAPs shall be reduced from the existing production capacity. The production capacity of each of these emissions units shall not exceed the following:

EU ID No.	Plant Description	Production Capacity
-002	A SAP	1,300 TPD (tons per day) of 100% H_2SO_4 (sulfuric acid)
-003	B SAP	1,600 TPD of 100% H_2SO_4
-007	C SAP	2,600 TPD of 100% H_2SO_4
-008	D SAP	2,600 TPD of 100% H_2SO_4
-010	A DAP/MAP Plant	29.53 TPH (tons per hour) of DAP; 33.30 TPH of MAP
-011	Z DAP/MAP Plant	48.7 TPH of DAP; 55.0 TPH of MAP
-012	X DAP/MAP Plant	48.7 TPH of DAP; 55.0 TPH of MAP
-013	Y DAP/MAP Plant	48.7 TPH of DAP; 55.0 TPH of MAP
-015	A Shipping Baghouse	250 TPH

EU ID No.	Plant Description	Production Capacity
-018	B Shipping Baghouse	500 TPH

[Rules 62-296.340(5)(c) (escape BART), 62-4.160(2) and 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.]

3. Methods of Operation - Fuels: The A, Z, X and Y DAP/MAP Plant dryers shall be primarily fired by natural gas. The dryers can be fired with No. 5 fuel oil or better grade fuel oil (i.e., No. 2, 3 or 4) as a back-up fuel. The maximum heat input rate to the four DAP/MAP Plant dryers shall be as follows:

   A DAP/MAP Plant dryer – 28.5 million British thermal units per hour (MMBtu/hr)
   Z DAP/MAP Plant dryer – 42.75 MMBtu/hr
   X DAP/MAP Plant dryer – 49.7 MMBtu/hr
   Y DAP/MAP Plant dryer – 49.5 MMBtu/hr

   [Rules 62-4.070(1)&(3) (Reasonable Assurance) and 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.]

AIR POLLUTION CONTROL TECHNOLOGIES AND MEASURES

4. SAP SO_2 Controls: This BART exemption determination does not require new, modified or additional air pollution control systems for sulfur dioxide (SO_2). To control emissions of SO_2 from A and B SAPs, the permittee shall continue the use of the single stage absorption system technology followed by the two-stage ammonia scrubber. The permittee shall increase the scrubbing rate to the two-stage ammonia scrubber compared to the existing scrubbing rate in order to reduce the SO_2 emissions from A and B SAPs. To control emissions of SO_2 from C and D SAPs, the permittee shall continue the use of the existing double absorption system technology with vanadium and/or cesium catalyst in the converters and the use of good combustion practices and best operational practices to minimize excess emissions during startup and shutdown.

   [Rule 62-296.340(5)(c) (escape BART), F.A.C.; Rule 62-210.700(1), F.A.C.; and, Proposed by the Applicant in the Application]

5. SAP Acid Mist Controls: This BART exemption determination does not require new, modified or additional air pollution control systems for sulfuric acid mist (SAM). By controlling SAM emissions, particulate matter/particulate matter less than 10 microns (PM/PM_{10}) and visible emissions are minimized.

   [Rule 62-296.340(5)(c) (escape BART), F.A.C.; Rule 62-210.700(1), F.A.C.; and, Proposed by the Applicant in the Application]

6. Circumvention: The permittee shall not circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

   [Rule 62-210.650, F.A.C.]

EMISSION STANDARDS AND LIMITATIONS

7. PM, NOx and SO_2 Standards: Particulate matter (PM), nitrogen oxides (NOx) and sulfur dioxide (SO_2) emissions shall not exceed the following emissions standards.

EU ID No.	Emissions Unit Description	Emissions Standards			
		PM	NOx	SAM	SO_2
-002	A Sulfuric Acid Plant	---	6.5 lb/hr[a]	1.43 lb/hr[b]	75.8 lb/hr[c]
-003	B Sulfuric Acid Plant	---	8.0 lb/hr[a]	1.8 lb/hr[b]	93.3 lb/hr[c]
-007	C Sulfuric Acid Plant	---	11.9 lb/hr[a]	10.1 lb/hr[b]	303.3 lb/hr[c]

Subsection A (Scenario A). A, B, C and D SAPs; A, Z, X and Y DAP/MAP Plants; A and B Shipping Baghouses

EU ID No.	Emissions Unit Description	Emissions Standards			
		PM	NOx	SAM	SO_2
-008	D Sulfuric Acid Plant	---	11.9 lb/hr[a]	10.1 lb/hr[b]	303.3 lb/hr[c]
-010	A DAP/MAP Plant	13.0 lb/hr (DAP/MAP) & 56.9 TPY (tons per year)	---	---	See Footnote "d"
-011	Z DAP/MAP Plant	15.0 lb/hr(DAP/MAP) & 65.7 TPY	---	---	---
-012	X DAP/MAP Plant	10.62 lb/hr(DAP) 13.75 lb/hr(MAP) & 41.88 TPY(DAP/MAP)	---	---	See Footnote "d"
-013	Y DAP/MAP Plant	15.3 lb/hr(DAP/MAP) & 67 TPY	---	---	See Footnote "d"

a. Nitrogen oxides (NOx) emissions from A and B Sulfuric Acid Plants (EU-002 and EU-003) shall not exceed 6.5 and 8.0 lb/hr, respectively {Permitting Note (for information purposes only): equivalent to 0.12 lb/ton of 100% sulfuric acid at design capacity} based on a 3-hour average as determined by stack test data. NOx emissions from C and D Sulfuric Acid Plants (EU-007 and EU-008) shall not exceed 11.9 lb/hr {Permitting Note (for information purposes only): equivalent to 0.11 lb/ton of 100% sulfuric acid at design capacity} based on a 3-hour average as determined by stack test data.

b. Emissions of SAM for the four SAPs are based on a 3-hour average as determined by stack test data. Permitting note (for information purposes only): The equivalent lb SAM/ton 100% H_2SO_4 values for A and B SAP at design capacity is 0.027 lb SAM/ton 100% H_2SO_4. The equivalent lb SAM/ton 100% H_2SO_4 values for C and D SAP at design capacity is 0.093 lb SAM/ton 100% H_2SO_4. This permit requires stack test data to be used to demonstrate compliance.

c. Sulfur dioxide emissions from A and B Sulfuric Acid Plants (EU-002 and EU-003) shall not exceed 75.8 and 93.3 lb/hr based on a 24-hour (daily) block CEMS average. Sulfur dioxide emissions from C and D Sulfuric Acid Plants (EU-007 and EU-008) shall not exceed 303.3 lb/hr based on a 24-hour (daily) block CEMS average

Permitting note (for information purposes only): SO_2 emissions in lb/hour are equivalent to 1.4 lb/ton of 100% sulfuric acid for A and B SAPs at design capacity. SO_2 emissions in lb/hour are equivalent to 2.8 lb/ton of 100% sulfuric acid for C and D SAPs at design capacity. A 24-hour (daily) block average was established based on the emission rate averaging period of 24-hour (daily) used in the air dispersion modeling. No stack testing is required.

d. To control sulfur dioxide emissions from the dryers, natural gas shall be fired as a primary fuel. No. 5 fuel oil or better grade fuel oil (i.e., No. 2, 3 or 4) may be fired as a back-up fuel.

[Rules 62-4.070(3) and 62-296.340(5)(c) (escape BART), F.A.C.]

8. Opacity Standards: Visible emissions from the A and B Shipping Baghouse exhausts (EU-015 and EU-018) shall not exceed 5% opacity as determined by EPA Method 9. Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present.

[Rule 62-296.340(5)(c) (escape BART), F.A.C.; and 40 CFR 60.83(a)2 and 40 CFR 60, Appendix A, Method 9]

9. SO_2 Continuous Emissions Monitoring System (CEMS): This BART exemption determination requires an SO_2 CEMS to be used to demonstrate continuous compliance with the SO_2 emission standards and limitations specified in this section.

a. In accordance with the New Source Performance Standards (NSPS) (40 CFR 60, Subpart H) requirements for sulfuric acid plants, the permittee shall continue to properly calibrate, maintain, and operate a CEMS to measure and record emissions of SO_2.

b. A CEMS shall be properly calibrated, maintained, and operated to comply with: 40 CFR 60 Subpart A, General Provisions; 40 CFR 60 Appendix B, Performance Specification 2; and, 40 CFR 60, Appendix F, Quality Assurance Procedures for Gas CEMS Used for Compliance Determination.

c. The emissions data collected with the certified CEMS shall be used to demonstrate continuous compliance with the standards and limitations specified in this section.

[Rules 62-296.340(5)(c) (escape BART), 62-4.070(1)&(3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.; and, Proposed by the Applicant in the Application]

EMISSIONS TESTING

10. Test Methods: The following reference methods (or more recent versions) shall be used to conduct any required emissions tests.

Method	Description of Method and Comments
1 - 4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of PM Emissions from Stationary Sources
6 or 6C	Determination of SO_2 Emissions from Stationary Sources
7E	Determination of NOx Emissions from Stationary Sources (Instrumental Analyzer Procedure)
8	Determination of SAM and SO_2 Emissions from Stationary Sources
9	Visual Determination of Opacity from Stationary Sources

EPA Methods 1, 2, 3 and 4 shall be used as necessary to support the other test methods. The above methods are described in 40 CFR 60, Appendix A, which is adopted by reference in Rule 62-204.800, F.A.C. No other methods shall be used without prior written approval from the Permitting Authority.

[Rules 62-204.800 and 62-297.100, F.A.C.; and 40 CFR 60, Appendix A]

11. Standard Testing Requirements: All required emissions tests shall be conducted in accordance with the requirements specified in Appendix C (Standard Testing Requirements) of this permit.

[Rules 62-204.800 and 62-297.100, F.A.C.; and 40 CFR 60, Appendix A]

12. Compliance Test Schedule: In accordance with the following schedule, the permittee shall have stack tests conducted to demonstrate compliance with the emissions standards specified in this permit.

a. *Initial and Annual Tests*: On or before September 1, 2010, an initial test shall be conducted for NOx, visible emissions (VE) and SAM emissions from each SAP; PM emissions from A, Z, X and Y DAP/MAP Plants and VE test for A and B Shipping Baghouses. The initial compliance test report for NOx, VE, SAM and PM shall be submitted within 45 days of completion of testing. Thereafter, annual compliance test shall be done for the above pollutants during each federal fiscal year (October 1 – September 30).

[Rules 62-296.340(5)(c) (escape BART) and 62-297.310(7)(a)1, F.A.C.]

b. *Initial and Special Test*: A visible emissions (VE) test shall be conducted concurrently with one run of the SAM stack test to demonstrate initial compliance with the existing VE standards for each SAP. The VE test results shall be submitted with the SAM stack test report.

[Rules 62-4.070(1)&(3) and 62-297.310(7)(b), F.A.C.]

c. *Tests Prior to Renewal:* Within the 12-month period prior to renewing the Title V air operation permit, tests shall be conducted for SAM and NOx emissions from each SAP.

[Rules 62-296.340(5)(c) (escape BART), and 62-297.310(7)(a)3, F.A.C.]

{Note: Under this permit SO_2 CEMS are required to demonstrate compliance on a continuous basis, therefore, no initial or annual compliance test for SO_2 is necessary on the four SAPs.}

RECORDS AND REPORTS

13. Quarterly Reporting Requirements: The owners or operators of facilities for which monitoring is required shall submit to the Department a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.402, F.A.C., for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of 5 (five) years. {The permittee is required to use SO_2 continuous emissions monitoring systems for continuous compliance demonstrations.}

[Rules 62-296.402(5) and 62-213.440(1)(b)2., F.A.C.]

Subsection B (Scenario B). A, B, C and D SAPs; A, Z, X and Y DAP/MAP Plants; A and B Shipping Baghouses

This subsection addresses the following affected emissions units:

EU ID No.	Brief Description
-002	A SAP
-003	B SAP
-007	C SAP
-008	D SAP
-010	A DAP/MAP Plant
-011	Z DAP/MAP Plant
-012	X DAP/MAP Plant
-013	Y DAP/MAP Plant
-015	A Shipping Baghouse
-018	B Shipping Baghouse

ADMINISTRATIVE REQUIREMENTS

1. Emission Reductions under Scenario B: This subsection deals with emission reductions for the above affected emissions units under Scenario B. The permittee shall notify the Department's Bureau of Air Regulation, EPCHC and the SWD Office through a letter from the responsible official by June 1, 2010 whether Scenario B will be implemented. If Scenario B is implemented, Scenario A becomes obsolete. Under Scenario B, the permittee shall reduce production rates of C and D SAPs from 2,962 TPD to 2,900 TPD and reduce lower daily average SO_2 emissions rates from the four SAPs. A and B SAPs shall comply with the new BART exemption limit for SO_2 by September 1, 2010. D SAP shall comply with the new BART exemption limit for SO_2 by January 1, 2012. C SAP shall comply with the new BART exemption limit for SO_2 by September 30, 2013.

   [Rule 62-296.340(5)(c) (escape BART), F.A.C. and Applicant's approval received via e-mail on September 8, 2009]

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

2. Production Capacity: The existing production capacity of A and B SAPs, A, Z, X and Y DAP/MAP Plants, A and B Shipping Baghouses shall not be changed as a result of the proposed work under this project, Permit No. 0570005-034-AC. The production capacity of C and D SAPs shall be reduced from the existing production capacity. The production capacity of each of these emissions units shall not exceed the following:

EU ID No.	Plant Description	Production Capacity
-002	A SAP	1,300 TPD of 100% H_2SO_4
-003	B SAP	1,600 TPD of 100% H_2SO_4
-007	C SAP	2,900 TPD of 100% H_2SO_4
-008	D SAP	2,900 TPD of 100% H_2SO_4
-010	A DAP/MAP Plant	29.53 TPH of DAP; 33.30 TPH of MAP
-011	Z DAP/MAP Plant	48.7 TPH of DAP; 55.0 TPH of MAP
-012	X DAP/MAP Plant	48.7 TPH of DAP; 55.0 TPH of MAP
-013	Y DAP/MAP Plant	48.7 TPH of DAP; 55.0 TPH of MAP
-015	A Shipping Baghouse	250 TPH

Subsection B (Scenario B). A, B, C and D SAPs; A, Z, X and Y DAP/MAP Plants; A and B Shipping Baghouses

EU ID No.	Plant Description	Production Capacity
-018	B Shipping Baghouse	500 TPH

[Rules 62-296.340(5)(c) (escape BART), 62-4.160(2) and 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.]

3. Methods of Operation - Fuels: The A, Z, X and Y DAP/MAP Plant dryers shall be primarily fired by natural gas. The dryers can be fired with No. 5 fuel oil or better grade fuel oil (i.e., No. 2, 3 or 4) as a back-up fuel. The maximum heat input rate to the four DAP/MAP Plant dryers shall be as follows:

   A DAP/MAP Plant dryer – 28.5 million British thermal units per hour (MMBtu/hr)
   Z DAP/MAP Plant dryer – 42.75 MMBtu/hr
   X DAP/MAP Plant dryer – 49.7 MMBtu/hr
   Y DAP/MAP Plant dryer – 49.5 MMBtu/hr

   [Rules 62-4.070(1)&(3) (Reasonable Assurance) and Rule 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.]

4. Design Capacity and Permitted Production: The permittee shall submit a statement from the responsible official to the Department's Bureau of Air Regulation, EPCHC and the SWD Office within 30 days after the completion of all of the proposed work under this project.

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

AIR POLLUTION CONTROL TECHNOLOGIES AND MEASURES

5. SAP SO_2 Controls: This BART exemption determination does require new, modified or additional air pollution control systems for SO_2. To control emissions of SO_2 from A and B SAPs, the permittee shall continue the use of the single absorption system technology followed by the two-stage ammonia scrubber. The permittee shall increase the scrubbing rate to the two-stage ammonia scrubber compared to the existing scrubbing rate in order to reduce the SO_2 emissions from A and B SAPs. To control emissions of SO_2 from C and D SAPs, the permittee shall replace the four-stage catalytic converters and continue the use of the existing double absorption system technology with vanadium and/or cesium catalyst in the converters and the use of good combustion practices and best operational practices to minimize excess emissions during startup and shutdown.

   [Rule 62-296.340(5)(c) (escape BART), F.A.C.; Rule 62-210.700(1), F.A.C.; and, Proposed by the Applicant in the Application]

6. Proposed Work: The applicant is required to perform the following specific work activities under this project in order to escape BART:

EU ID No.	Work Activities
-007 (C SAP)	• Increase the catalyst loading ratio from approximately 137.3 liters per ton H_2SO_4 per day (L/TPD) at 2,962 TPD production rate to approximately 200 L/TPD at 2,900 TPD production rate; • Replace the four-stage catalytic converter.
-008 (D SAP)	• Increase the catalyst loading ratio from approximately 140.5 L/TPD at 2,962 TPD production rate to approximately 200 L/TPD at 2,900 TPD production rate; • Replace the four-stage catalytic converter.

Higher catalyst loadings are allowed by this permit in order to meet the BART exemption SO_2 emission limits.

[Rule 62-296.340(5)(c) (escape BART), F.A.C.; Rules 62-4.160(2) and 62-4.070(1)&(3) (Reasonable Assurance), and, Proposed by the Applicant in the Application]

7. SO_2 Controls: The permittee shall submit a written request for other specific catalyst loadings and types to the Bureau of Air Regulation with a copy to the Compliance Authority for review and approval prior to use.

   [Rule 62-296.340(5)(c) (escape BART), F.A.C.; Rules 62-4.160(2) and 62-4.070(1)&(3) (Reasonable Assurance), F.A.C.; and, Proposed by the Applicant in the Application]

8. SAP Acid Mist Controls: This BART exemption determination does not require new, modified or additional air pollution control systems for sulfuric acid mist (SAM). By controlling SAM emissions, PM/PM_{10} and visible emissions are minimized.

   [Rule 62-296.340(5)(c) (escape BART), F.A.C.; Rule 62-210.700(1), F.A.C.; and, Proposed by the Applicant in the Application]

9. Circumvention: The permittee shall not circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

   [Rule 62-210.650, F.A.C.]

EMISSION STANDARDS AND LIMITATIONS

10. PM, NOx and SO_2 Standards: Particulate matter, nitrogen oxides and sulfur dioxide emissions shall not exceed the following emissions standards.

EU ID No.	Emissions Unit Description	Emissions Standards			
		PM	NOx	SAM	SO_2
-002	A Sulfuric Acid Plant	---	6.5 lb/hr[a]	1.43 lb/hr[b]	81.3 lb/hr[c]
-003	B Sulfuric Acid Plant	---	8.0 lb/hr[a]	1.8 lb/hr[b]	100.0 lb/hr[c]
-007	C Sulfuric Acid Plant	---	13.3 lb/hr[a]	11.2 lb/hr[b]	241.7 lb/hr[c]
-008	D Sulfuric Acid Plant	---	13.3 lb/hr[a]	11.2 lb/hr[b]	241.7 lb/hr[c]
-010	A DAP/MAP Plant	13.0 lb/hr (DAP/MAP) & 56.9 TPY (tons per year)	---	---	See Footnote "d"
-011	Z DAP/MAP Plant	15.0 lb/hr(DAP/MAP) & 65.7 TPY	---	---	---
-012	X DAP/MAP Plant	10.62 lb/hr(DAP) 13.75 lb/hr(MAP) & 41.88 TPY(DAP/MAP)	---	---	See Footnote "d"
-013	Y DAP/MAP Plant	15.3 lb/hr(DAP/MAP) & 67 TPY	---	---	See Footnote "d"

a. Nitrogen oxides (NOx) emissions from A and B Sulfuric Acid Plants (EU-002 and EU-003) shall not exceed 6.5 and 8.0 lb/hr, respectively {Permitting Note (for information purposes only): equivalent to 0.12 lb/ton of 100% sulfuric acid at design capacity} based on a 3-hour average as determined by stack test data. NOx emissions from C and D Sulfuric Acid Plants (EU-007 and EU-008) shall not exceed 13.3 lb/hr {Permitting Note (for information purposes only): equivalent to 0.11 lb/ton of 100% sulfuric acid at design capacity} based on a 3-hour average as determined

by stack test data.

b. Emissions of SAM for the four SAPs are based on a 3-hour average as determined by stack test data. Permitting note (for information purposes only): The equivalent lb SAM/ton 100% H_2SO_4 values for A and B SAP at design capacity is 0.027 lb SAM/ton 100% H_2SO_4. The equivalent lb SAM/ton 100% H_2SO_4 values for C and D SAP at design capacity is 0.093 lb SAM/ton 100% H_2SO_4. This permit requires stack test data to be used to demonstrate compliance.

c. Sulfur dioxide emissions from A and B Sulfuric Acid Plants (EU-002 and EU-003) shall not exceed 81.3 and 100.0 lb/hr based on a 24-hour (daily) block CEMS average. Sulfur dioxide emissions from C and D Sulfuric Acid Plants (EU-007 and EU-008) shall not exceed 241.7 lb/hr based on a 24-hour (daily) block CEMS average

Permitting note (for information purposes only): SO_2 emissions in lb/hour are equivalent to 1.5 lb/ton of 100% sulfuric acid for A and B SAPs at design capacity. SO_2 emissions in lb/hour are equivalent to 2.0 lb/ton of 100% sulfuric acid for C and D SAPs at design capacity. A 24-hour (daily) block average was established based on the emission rate averaging period of 24-hour (daily) used in the air dispersion modeling. No stack testing is required.

d. To control sulfur dioxide emissions from the dryers, natural gas shall be fired as a primary fuel. No. 5 fuel oil or better grade fuel oil (i.e., No. 2, 3 or 4) may be fired as a back-up fuel.

[Rules 62-4.070(3) and 62-296.340(5)(c) (escape BART), F.A.C.]

11. Opacity Standards: Visible emissions from the A and B Shipping Baghouse exhausts (EU-015 and EU-018) shall not exceed 5% opacity as determined by EPA Method 9. Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present.

[Rule 62-296.340(5)(c) (escape BART), F.A.C.; and 40 CFR 60.83(a)2 and 40 CFR 60, Appendix A, Method 9]

12. SO_2 Continuous Emissions Monitoring System (CEMS): This BART exemption determination requires an SO_2 CEMS to be used to demonstrate continuous compliance with the SO_2 emission standards and limitations specified in this section.

a. In accordance with the NSPS (40 CFR 60, Subpart H) requirements for sulfuric acid plants, the permittee shall continue to properly calibrate, maintain, and operate a CEMS to measure and record emissions of SO_2.

b. A CEMS shall be properly calibrated, maintained, and operated to comply with: 40 CFR 60 Subpart A, General Provisions; 40 CFR 60 Appendix B, Performance Specification 2; and, 40 CFR 60, Appendix F, Quality Assurance Procedures for Gas CEMS Used for Compliance Determination.

c. The emissions data collected with the certified CEMS shall be used to demonstrate continuous compliance with the standards and limitations specified in this section.

[Rules 62-296.340(5)(c) (escape BART), 62-4.070(1)&(3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.; and, Proposed by the Applicant in the Application]

EMISSIONS TESTING

13. Test Methods: The following reference methods (or more recent versions) shall be used to conduct any required emissions tests.

Method	Description of Method and Comments
1 - 4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of PM Emissions from Stationary Sources
6 or 6C	Determination of SO_2 Emissions from Stationary Sources

Method	Description of Method and Comments
7E	Determination of NOx Emissions from Stationary Sources (Instrumental Analyzer Procedure)
8	Determination of SAM and SO_2 Emissions from Stationary Sources
9	Visual Determination of Opacity from Stationary Sources

EPA Methods 1, 2, 3 and 4 shall be used as necessary to support the other test methods. The above methods are described in 40 CFR 60, Appendix A, which is adopted by reference in Rule 62-204.800, F.A.C. No other methods shall be used without prior written approval from the Permitting Authority.

[Rules 62-204.800 and 62-297.100, F.A.C.; and 40 CFR 60, Appendix A]

14. Standard Testing Requirements: All required emissions tests shall be conducted in accordance with the requirements specified in Appendix C (Standard Testing Requirements) of this permit.

    [Rules 62-204.800 and 62-297.100, F.A.C.; and 40 CFR 60, Appendix A]

15. Compliance Test Schedule: In accordance with the following schedule, the permittee shall have stack tests conducted to demonstrate compliance with the emissions standards specified in this permit.

    a. *Initial and Annual Tests*: On or before September 1, 2010, an initial test shall be conducted for NOx, VE and SAM emissions from A and B SAPs; PM emissions from A, Z, X and Y DAP/MAP Plants and VE test for A and B Shipping Baghouses. On or before January 1, 2012, an initial test shall be conducted for NOx, VE and SAM emissions from the D SAP. On or before December 31, 2013, an initial test shall be conducted for NOx, VE and SAM emissions from the C SAP. The initial compliance test report for NOx, VE, SAM and PM shall be submitted within 45 days of completion of testing. Thereafter, annual compliance test shall be done for the above pollutants during each federal fiscal year (October 1 – September 30). [Rules 62-296.340(5)(c) (escape BART) and 62-297.310(7)(a)1, F.A.C.]

    b. *Initial and Special Test*: A visible emissions (VE) test shall be conducted concurrently with one run of the SAM stack test to demonstrate initial compliance with the existing VE standards after the proposed work has been completed for each SAP. The VE test results shall be submitted with the SAM stack test report. [Rules 62-4.070(1)&(3) and 62-297.310(7)(b), F.A.C.]

    c. *Tests Prior to Renewal:* Within the 12-month period prior to renewing the Title V air operation permit, tests shall be conducted for SAM and NOx emissions from each SAP.

    [Rules 62-296.340(5)(c) (escape BART), and 62-297.310(7)(a)3, F.A.C.]

    {Note: Under this permit SO_2 CEMS are required to demonstrate compliance on a continuous basis, therefore, no initial or annual compliance test for SO_2 is necessary on the SAPs.}

RECORDS AND REPORTS

16. Quarterly Reporting Requirements: The owners or operators of facilities for which monitoring is required shall submit to the Department a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.402, F.A.C., for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of 5 (five) years. {The permittee is required to use SO_2 continuous emissions monitoring systems for continuous compliance demonstrations.} [Rules 62-296.402(5) and 62-213.440(1)(b)2., F.A.C.]

17. Construction Plan and Progress Reports: The permittee shall submit a Construction Plan within sixty (60) days of June 1, 2010 for C and D SAPs which shall contain the necessary milestones to comply with this permit. The Plan

shall include at a minimum the necessary actions and corresponding scheduled due dates to complete those actions to comply with this permit.

a. The permittee shall submit progress reports based on the anniversary date (one year from the effective date) of this permit regarding the status of the milestones in the Construction Plan to the Department and to the Compliance Authority, no less than annually in 2010 - 2013.

b. The permittee shall complete all required construction and modifications for D SAP no later than September 30, 2011.

c. The permittee shall complete all required construction and modifications for C SAP no later than June 30, 2013.

[Rules 62-296.340(5)(c) (escape BART), 62-4.070(1)&(3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.]

CONTENTS

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

REFERENCES TO PREVIOUS PERMITTING ACTIONS

Old Permit Numbers

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

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

New Permit Numbers

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

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

PSD Permit Numbers

Example: Permit No. PSD-FL-317

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

RULE CITATION FORMATS

Florida Administrative Code (F.A.C.)

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

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

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

µg: microgram

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

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

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

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

EU: emissions unit

F: fluoride

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

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

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

GENERAL CONDITIONS

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

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

   Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
   a. A description of and cause of non-compliance; and
   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:
    a. Determination of Best Available Control Technology (Not Applicable);
    b. Determination of Prevention of Significant Deterioration (Not Applicable); and
    c. Compliance with New Source Performance Standards (Not Applicable).

14. The permittee shall comply with the following:
    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
    c. Records of monitoring information shall include:
        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C
STANDARD TESTING REQUIREMENTS

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

1. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

2. Operating Rate During Testing: Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity as defined below. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

   a. *Combustion Turbines.* (Reserved)

   b. *All Other Sources.* Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.

   [Rule 62-297.310(2), F.A.C.]

3. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

4. Applicable Test Procedures:

   a. *Required Sampling Time.*

      1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

      2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

         a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation

shall be equal to the duration of the batch cycle or operation completion time.

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

c) The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

b. *Minimum Sample Volume.* Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

c. *Required Flow Rate Range.* For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

d. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

e. *Allowed Modification to EPA Method 5.* When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

TABLE 297.310-1 CALIBRATION SCHEDULE

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

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

5. Determination of Process Variables:

   a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

   b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

6. Required Stack Sampling Facilities: Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

   a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

   b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

   c. *Sampling Ports.*

      1) All sampling ports shall have a minimum inside diameter of 3 inches.

      2) The ports shall be capable of being sealed when not in use.

      3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

      4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

      5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

d. *Work Platforms.*

1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

e. *Access to Work Platform.*

1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2) Walkways over free-fall areas shall be equipped with safety rails and toeboards.

f. *Electrical Power.*

1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

g. *Sampling Equipment Support.*

1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2) A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

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

   a. General Compliance Testing.

      1) The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

      2) For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

      3) The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

         a) Did not operate; or

         b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,

      4) During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

         a) Visible emissions, if there is an applicable standard;

         b) Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

         c) Each NESHAP pollutant, if there is an applicable emission standard.

      5) An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

      6) For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.

      7) For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to paragraph 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.

      8) Any combustion turbine that does not operate for more than 400 hours per year shall conduct a

visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9) The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

10) An annual compliance test conducted for visible emissions shall not be required for units exempted from air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.

b. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

8. Test Reports:

a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

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

2) The facility at which the emissions unit is located.

3) The owner or operator of the emissions unit.

4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.

5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.

7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.

8) The date, starting time and duration of each sampling run.

9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.

10) The number of points sampled and configuration and location of the sampling plane.

11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.

12) The type, manufacturer and configuration of the sampling equipment used.

13) Data related to the required calibration of the test equipment.

14) Data on the identification, processing and weights of all filters used.

15) Data on the types and amounts of any chemical solutions used.

16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

18) All measured and calculated data required to be determined by each applicable test procedure for each run.

19) The detailed calculations for one run that relate the collected data to the calculated emission rate.

20) The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.

21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

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

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

SECTION 4. APPENDIX D

BEST OPERATIONAL START-UP PRACTICES FOR SULFURIC ACID PLANTS

1. Only one sulfuric acid plant at a facility should be started up and burning sulfur at a time. There are times when it will be acceptable for more than one sulfuric acid plant to be in the start-up mode at the same time, provided the following condition is met. It is not acceptable to initiate sulfur burning at one sulfuric acid plant when another plant at the same facility is emitting SO_2 at a rate in excess of the emission limits imposed by the permit or rule, as determined by the CEMs emission rates for the immediately preceding 20 minutes.

2. A plant start-up must be at the lowest practicable operating rate, not to exceed 70 percent of the designated operating rate, until the SO_2 monitor indicates compliance. Because production rate is difficult to measure during start-up, if a more appropriate indicator (such as blower pressure, furnace temperature, gas strength, blower speed, number of sulfur guns operating, etc.) can be documented, tested and validated, the Department will accept this in lieu of directly documenting of the suitable list of surrogate parameters to demonstrate and document the reduced operating rate on a plant-by-plant basis. Documentation that the plant is conducting start-up at the reduced rate is the responsibility of the owner or operator.

3. Sulfuric acid plants are authorized to emit excess emissions from start-up for a period of three consecutive hours provided best operational practices, in accordance with this agreement, to minimize emissions are followed. No plant shall be operated (with sulfur as fuel) out of compliance for more than three consecutive hours. Thereafter, the plant shall be shut down (cease burning sulfur) if, as indicated by the continuous emission monitoring system, the plant is not in compliance within three hours of startup. Restart may occur as soon as practicable following any needed repairs or adjustments, provided the corrective action is taken and properly documented.

4. Cold Start-Up Procedures.

   a. Converter.

      (1) The inlet and outlet temperature at the first two masses of catalyst shall be sufficiently high to provide immediate ignition when SO_2 enters the masses. In no event shall the inlet temperature to the first mass be less than 800°F or the outlet temperature to the first two masses be less than 700°F. These temperatures are the desired temperatures at the time the use of auxiliary fuel is terminated.

      (2) The gas stream entering the converter shall contain SO_2 at a level less than normal and sufficiently low to promote catalytic conversion to SO_3.

   b. Absorbing Towers.

      The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent H_2SO_4.

5. Warm Restart.

   a. Converter

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

      (1) The first two catalyst masses inlet and outlet temperatures must be at a minimum of 700°F; or

      (2) Two of the four inlet and outlet temperatures must be greater than or equal to 800°F; or

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

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

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

b. Absorbing Towers.

The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent H_2SO_4.

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Friday, September 25, 2009 11:04 AM
To: 'rbrunk@cfifl.com'
Cc: 'dbuff@golder.com'; 'smohammad@golder.com'; 'forney.kathleen@epa.gov'; 'catherine_collins@fws.gov'; 'zhang-torres@dep.state.fl.us'; 'lee@epchc.org'; Rogers, Tom; Moore, Ronni; Gibson, Victoria; Arif, Syed; Walker, Elizabeth (AIR)
Subject: CF INDUSTRIES, INC - PLANT CITY PHOSP COMPLEX; 0570005-034-AC
Attachments: 0570005-034-AC_Intent Signatures.pdf

Dear Sir/ Madam:

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

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

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

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570005.034.AC.D_pdf.zip

Owner/Company Name: CF INDUSTRIES, INC., PLANT CITY PHOS
Facility Name: CF INDUSTRIES-PLANT CITY PHOSP COMPLEX
Project Number: 0570005-034-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION/ BART EXEMPTION
Facility County: HILLSBOROUGH
Processor: Syed Arif

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at http://www.dep.state.fl.us/air/eproducts/apds/default.asp .

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

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

Livingston, Sylvia

From: Brunk, Ron [rbrunk@cfifl.com]
Sent: Monday, September 28, 2009 8:18 AM
To: Livingston, Sylvia
Subject: RE: CF INDUSTRIES, INC - PLANT CITY PHOSP COMPLEX; 0570005-034-AC

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Friday, September 25, 2009 11:04 AM
To: Brunk, Ron
Cc: dbuff@golder.com; smohammad@golder.com; forney.kathleen@epa.gov; catherine_collins@fws.gov; zhang-torres@dep.state.fl.us; lee@epchc.org; Rogers, Tom; Moore, Ronni; Gibson, Victoria; Arif, Syed; Walker, Elizabeth (AIR)
Subject: CF INDUSTRIES, INC - PLANT CITY PHOSP COMPLEX; 0570005-034-AC

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Owner/Company Name: CF INDUSTRIES, INC., PLANT CITY PHOS
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Sylvia Livingston
Bureau of Air Regulation

Livingston, Sylvia

From: Moore, Ronni
Sent: Monday, September 28, 2009 9:14 AM
To: Livingston, Sylvia; Arif, Syed
Subject: RE: CF INDUSTRIES, INC - PLANT CITY PHOSP COMPLEX; 0570005-034-AC

Thanks for keeping me in the loop. I'll get the order closing around.

Ronda L. Moore
Assistant General Counsel

From: Livingston, Sylvia
Sent: Friday, September 25, 2009 11:04 AM
To: 'rbrunk@cfifl.com'
Cc: 'dbuff@golder.com'; 'smohammad@golder.com'; 'forney.kathleen@epa.gov'; 'catherine_collins@fws.gov'; 'zhang-torres@dep.state.fl.us'; 'lee@epchc.org'; Rogers, Tom; Moore, Ronni; Gibson, Victoria; Arif, Syed; Walker, Elizabeth (AIR)
Subject: CF INDUSTRIES, INC - PLANT CITY PHOSP COMPLEX; 0570005-034-AC

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