

# 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

December 19, 2007

ELECTRONIC MAIL – RECEIVED RECEIPT REQUESTED

Mr. Herschel E. Morris, Vice President Phosphate Operations/General Manager  
CF Industries, Inc.  
Post Office Drawer L  
Plant City, Florida 33564

Re: Draft Air Permit No. PSD-FL-339B  
Project No. 0570005-026-AC  
Plant City Phosphate Complex  
Sulfuric Acid Production Increase

Dear Mr. Morris:

On November 9, 2007, you submitted an application for an air construction permit pursuant to the rules for Prevention of Significant Deterioration of Air Quality for the proposed project. The primary purpose of the project is to increase the production rate of the "C" and "D" sulfuric acid plants from 2,750 to 2,962 tons per day of 100% sulfuric acid. This work will be conducted at Plant City Phosphate Complex, which is located in Hillsborough County at 10608 Paul Buchman Highway, Plant City, Florida. Enclosed are the following documents:

- The Technical Evaluation and Preliminary Determination summarizes the Permitting Authority's technical review of the application and provides the rationale for making the preliminary determination to issue 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 the Project Engineer, Syed Arif, at 850/921-9528.

Sincerely,

Trina Vielhauer, Chief  
Bureau of Air Regulation

Enclosures

TLV/sa

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## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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

CF Industries, Inc.  
Post Office Drawer L  
Plant City, Florida 33564

Air Permit No. PSD-FL-339B  
Air Permit No. 0570005-026-AC  
Plant City Phosphate Complex  
Sulfuric Acid Production Increase  
"C" and "D" Sulfuric Acid Plants  
Hillsborough County, Florida

*Authorized Representative:*  
Mr. Herschel E. Morris  
Vice President Phosphate Operations/General Manager

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

**Project:** CF Industries proposes to modify its existing C and D Sulfuric Acid Plants by increasing the production rates of each plant. There will also be a corresponding increase in permitted molten sulfur processing rate for the Molten Sulfur Storage and Handling System. Details of the project are provided in the application and the enclosed Technical Evaluation and 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 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone 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 and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above.

**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 the proposed equipment will not adversely impact air quality and that the project will comply with all applicable 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 the address or phone number listed above. 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 Draft Permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be post-marked by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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location in the Florida Administrative Weekly and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the Draft Permit, the Permitting Authority will issue a revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**Petitions:** A person whose substantial interests are affected by the proposed permitting 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 (Telephone: 850/245-2241; Fax: 850/245-2303). 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 fourteen 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; (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 Vielhauer, Chief  
Bureau of Air Regulation

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT**

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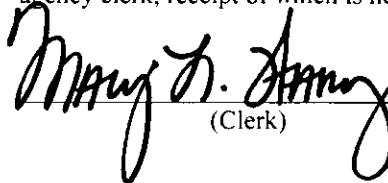
**CERTIFICATE OF SERVICE**

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, the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the Draft Permit) was sent by electronic mail with received receipt requested before the close of business on 12/20/07 to the persons listed below.

Herschel E. Morris, CF Industries, Inc. ([hmorris@cfifl.com](mailto:hmorris@cfifl.com))  
Jim Little, EPA ([little.james@epa.gov](mailto:little.james@epa.gov))  
Kathleen Forney, EPA ([forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov))  
Dee Morse, NPS ([dee\\_morse@nps.gov](mailto:dee_morse@nps.gov))  
Cindy Zhang-Torres, DEP-SWD ([cindy.zhang-torres@dep.state.fl.us](mailto:cindy.zhang-torres@dep.state.fl.us))  
Diana Lee, HCEPC ([lee@epchc.org](mailto:lee@epchc.org))  
David Buff, Golder Associates, Inc. ([dbuff@golder.com](mailto:dbuff@golder.com))

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)

12/20/07  
\_\_\_\_\_  
(Date)

## Memorandum

# Florida Department of Environmental Protection

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TO: Trina Vielhauer, Bureau of Air Regulation /  
THROUGH: Jeff Koerner, Air Permitting North Section JK  
FROM: Syed Arif, Air Permitting North Section  
DATE: December 19, 2007  
SUBJECT: Draft Air Permit No. PSD-FL-339B  
Project No. 0570005-026-AC  
CF Industries, Inc. - Plant City Phosphate Complex  
Production Increase for "C" and "D" Sulfuric Acid Plants

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; and
- P.E. Certification.

In June of 2004, the applicant received Permit No. PSD-FL-339 to increase the production rate of each of the existing "C" and "D" sulfuric acid plants from 2,600 to 2,750 tons per day of 100% sulfuric acid. The project was subject to preconstruction review for the Prevention of Significant deterioration of Air Quality in accordance with Rule 62-212.400, Florida Administrative Code (F.A.C.). It established Best Available Control Technology (BACT) standards for SO<sub>2</sub>, SAM and nitrogen oxides (NO<sub>x</sub>). Both plants utilize double-absorption technology and high-efficiency mist eliminators to control sulfur dioxide (SO<sub>2</sub>) and sulfuric acid mist (SAM) emissions.

Several construction activities remain for the original project. However, based on operating experience to date, the applicant believes that installed actual capacity is much higher than anticipated. The applicant proposes to modify the original permit to increase the maximum permitted production rate of each of the existing "C" and "D" sulfuric acid plants from 2,750 to 2,962 tons per day of 100% sulfuric acid. Based on the capabilities of the installed controls, the applicant also proposes to modify the BACT standards in terms of "lb/ton of 100% sulfuric acid produced" such that there will be no increase in potential hourly or annual emissions. Because the production rate increases require proportionate increases in the sulfur feed rate, there will be a small increase in particulate matter emissions from the molten storage and handling system of approximately 200 pounds per year. Therefore, although considered a modification of the original PSD permit, the project will not result in significant net emissions increases.

I recommend your approval of the attached draft permit.

Attachments



# 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

## PROFESSIONAL ENGINEER CERTIFICATION STATEMENT

**Permittee:**  
CF Industries, Incorporated  
Plant City Phosphate Complex

**DEP File No.** 0570005-026-AC  
**Permit No.** PSD-FL-339B

**Project type:** The proposed project includes an increase in the production rate of the existing "C" and "D" SAPs to 2,962 tons per day (TPD), each. Currently the C and D SAPs are permitted to produce up to 2,750 TPD of 100-percent H<sub>2</sub>SO<sub>4</sub>. The current Best Available Control Technology (BACT) SO<sub>2</sub> emissions limit for both the C and D SAPs is 3.5 lb/ton of 100-percent H<sub>2</sub>SO<sub>4</sub>, which is equivalent to 401 pounds per hour (lb/hr) and 1,757 tons per year (TPY) for each SAP. The hourly limits are based on a 3-hour rolling average. The current BACT sulfuric acid mist (SAM) emission limit is 0.10 lb/ton of 100-percent H<sub>2</sub>SO<sub>4</sub> for each SAP, which is equivalent to 11 lb/hr and 50 TPY. The current hourly BACT NO<sub>x</sub> emissions limit for each SAP is 0.12 lb/ton of 100-percent H<sub>2</sub>SO<sub>4</sub>, which is equivalent to 14 lb/hr and 60 TPY for each SAP. The applicant has accepted to retain the current hourly and annual emissions limits for SO<sub>2</sub>, SAM and NO<sub>x</sub> with the proposed production rate increase to 2,962 TPD. This requires a reduction in the permitted BACT SO<sub>2</sub>, SAM and NO<sub>x</sub> emissions limits in lb/ton of 100-percent H<sub>2</sub>SO<sub>4</sub> to retain the current hourly and annual emissions. The following BACT permit limits are proposed by the applicant; 3.25 lb/ton of 100-percent H<sub>2</sub>SO<sub>4</sub> for SO<sub>2</sub>, 0.093 lb/ton of 100-percent H<sub>2</sub>SO<sub>4</sub> for SAM and 0.11 lb/ton of 100-percent H<sub>2</sub>SO<sub>4</sub> for NO<sub>x</sub>. There will be no increase in the hourly or annual emissions at the reduced permitted limits and higher production rate.

*I HEREBY CERTIFY that the 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. 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, and geological features).*

Syed Arif      12/3/2007  
Syed Arif, P.E.      Date  
Registration Number: 51861

Department of Environmental Protection  
Bureau of Air Regulation  
Permitting North Section  
111 South Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Phone (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  
Project No. 0570005-026-AC / Draft Air Permit No. PSD-FL-339B  
CF Industries, Inc., Plant City Phosphate Complex  
Hillsborough County, Florida

**Applicant:** The applicant for this project is CF Industries, Inc. The applicant's authorized representative and mailing address is: Mr. Herschel E. Morris, Vice President Phosphate Operations/General Manager, CF Industries, Inc., Plant City Phosphate Complex, Post Office Drawer L, Plant City, Florida 33564.

**Facility Location:** CF Industries, Inc. operates the existing Plant City Phosphate Complex, which is located in Hillsborough County at 10608 Paul Buchman Highway in Plant City, Florida 33565.

**Project:** In June of 2004, the applicant received Permit No. PSD-FL-339 to increase the production rate of each of the existing "C" and "D" sulfuric acid plants from 2,600 to 2,750 tons per day of 100% sulfuric acid. The project was subject to preconstruction review for the Prevention of Significant deterioration of Air Quality in accordance with Rule 62-212.400, Florida Administrative Code (F.A.C.). It established Best Available Control Technology (BACT) standards for SO<sub>2</sub>, SAM and nitrogen oxides (NO<sub>x</sub>). Both plants utilize double-absorption technology and high-efficiency mist eliminators to control sulfur dioxide (SO<sub>2</sub>) and sulfuric acid mist (SAM) emissions.

Several construction activities remain for the original project. However, based on operating experience to date, the applicant believes that installed actual capacity is much higher than anticipated. The applicant proposes to modify the original permit to increase the maximum permitted production rate of each of the existing "C" and "D" sulfuric acid plants from 2,750 to 2,962 tons per day of 100% sulfuric acid. Based on the capabilities of the installed controls, the applicant also proposes to modify the BACT standards in terms of "lb/ton of 100% sulfuric acid produced" such that there will be no increase in potential hourly or annual emissions. Because the production rate increases require proportionate increases in the sulfur feed rate, there will be a small increase in particulate matter emissions from the molten storage and handling system of approximately 200 pounds per year. Therefore, although considered a modification of the original PSD permit, the project will not result in significant net emissions increases.

**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 62-4, 62-210, and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone 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 and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may 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/eproducts/apds/default.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 the proposed equipment will not adversely impact air quality and that the project will comply with all applicable 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 Draft Permit for a period of 30 days from the date of publication of the Public Notice. Written comments must be post-marked by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If

(Public Notice to be Published in the Newspaper)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

written comments or comments received at a public meeting result in a significant change to the Draft Permit, the Permitting Authority will issue a revised Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**Petitions:** A person whose substantial interests are affected by the proposed permitting 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 (Telephone: 850/245-2241; Fax: 850/245-2303). 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 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; (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 in this proceeding.



TECHNICAL EVALUATION  
AND  
PRELIMINARY DETERMINATION

CF INDUSTRIES, INC.

Plant City Phosphate Complex  
Plant City, Hillsborough County

“C” and “D” Sulfuric Acid Plants

DEP File No. 0570005-026-AC  
PSD-FL-339B

Florida Department of Environmental Protection  
Division of Air Resources Management  
Bureau of Air Regulation

December 19, 2007

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## 1. APPLICATION INFORMATION

### 1.1 Applicant Name and Address

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

Authorized Representative: Mr. Herschel E. Morris, Vice President/General Manager

### 1.2 Reviewing and Process Schedule

11-21-2007: Date of Receipt of Application  
11-26-2007: Date of Receipt of Revised Application. Application complete.

## 2. FACILITY INFORMATION

### 2.1 Facility Location

The agricultural chemicals manufacturing facility is located at 10608 Paul Buchman Highway, Plant City, Hillsborough County. The project site is located about 69 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.

### 2.2 Standard Industrial Classification Codes (SIC)

Major Group No.	28	Chemicals and Allied Products
Industry Group No.	2874	Phosphate Fertilizers

### 2.3 Facility Description

The applicant, CF Industries, Inc., operates an existing phosphate complex, which consists of: four sulfuric acid plants (SAP), two phosphoric acid plants (PAP), four diammonium phosphate/monoammonium phosphate (DAP/MAP) plants, molten sulfur storage and handling operations, product storage and shipping operations, and ancillary equipment in order to produce phosphate fertilizers. The sulfuric acid ( $H_2SO_4$ ) is produced on-site by burning elemental sulfur, converting the resulting sulfur dioxide to sulfur trioxide, and absorbing it into a recirculating sulfuric acid solution. Phosphoric acid is made by acidulation of phosphate rock with sulfuric acid. Waste gypsum is produced and stacked. The phosphoric acid is reacted with other chemicals to make fertilizers.

The CFI Plant City facility currently operates under Title V Permit No. 0570005-017-AV, most recently issued on October 13, 2005, and two construction permits: 0570005-019-AC, and 0570005-021-AC.

### 2.4 Regulatory Category

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.
- 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.

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## 3. PROCESS DESCRIPTION - SULFURIC ACID PRODUCTION

The plants are sulfur-burning double absorption sulfuric acid plants. This is 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 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 sulfur dioxide (SO<sub>2</sub>). 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<sub>2</sub> and excess oxygen from the combustion air are progressively converted to sulfur trioxide (SO<sub>3</sub>). The gases containing SO<sub>3</sub>, some unconverted SO<sub>2</sub>, oxygen, and atmospheric nitrogen are conveyed to an "interpass tower" where the SO<sub>3</sub> is absorbed into a stream of concentrated sulfuric acid and reacted with excess water to further strengthen the acid. By removing most SO<sub>3</sub> in the interpass absorber, the equilibrium favors further conversion of the remaining SO<sub>2</sub> to SO<sub>3</sub>. The remaining SO<sub>2</sub>, not previously oxidized, is passed over a final converter bed of catalyst and the SO<sub>3</sub> produced is then absorbed in H<sub>2</sub>SO<sub>4</sub>. 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<sub>3</sub> 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.

## 4. PROJECT DESCRIPTION

This permit addresses the following emissions units.

EU No.	Emission Unit Description
007	"C" SAP
008	"D" SAP

The proposed project includes an increase in the production rate of the existing "C" and "D" SAPs to 2,962 tons per day (TPD), each. Currently the "C" and "D" SAPs are permitted to produce up to 2,750 TPD of 100-percent H<sub>2</sub>SO<sub>4</sub>. The project involves upgrades and/or replacements to plant equipment to accomplish the production increases, as described in the current air construction permit no. 0570005-019-AC. Of the originally approved projects permitted under air construction permit no. 0570005-019-AC, the following remain "in progress" and will be utilized to further increase the production capacity of each plant to 2,962 TPD.

- Increase the sulfur throughput,
- Install low pressure drop packing in final and drying absorption tower, and interpass absorption tower,
- Install a new main blower on D SAP,

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- Install the new cooling tower cell,
- Changes to the main blower turbine by increasing the turbine horsepower by 9% and modifying silencer to reduce pressure drop, and
- Alterations will be made to the boilers, boiler water feed pumps, de-aerator feed pumps, and acid cooling systems in both the "C" and "D" SAPs to accommodate the increased heat load and steam production.

A primary improvement already made to the SAPs under Permit No. 0570005-019-AC is the incorporation of cesium promoted vanadium catalyst into the 4<sup>th</sup> pass of each converter (Beds 4a and 4b). Cesium promoted vanadium catalyst is similar to the traditional vanadium catalyst except that cesium salts are added to lower the activation temperature and increase SO<sub>2</sub> conversion efficiency. Modern formulations of cesium promoted catalyst also include greater vanadium concentration and special shaping to further improve reaction kinetics and to minimize pressure drop across the plant. Higher conversion efficiency allows the plants to increase production rates by increasing SO<sub>2</sub> concentrations from the furnace to the conversion/absorption steps while at the same time lowering stack SO<sub>2</sub> emissions.

There will be no physical modifications to the Molten Sulfur Storage and Handling System as part of this project; however, there will be an increase in molten sulfur usage to accommodate the increased potential sulfuric acid production. The following table summarizes total molten sulfur usage at the plant.

**CF Plant City - Sulfuric Acid Production and Molten Sulfur Handling System Rates**

Process and Production Rates	Previous Title V Permit	C&D SAP Increase 2004 Permit -019-AC	B SAP Increase 2007 Permit -019-AC	Current Request
<b>H<sub>2</sub>SO<sub>4</sub> Production (tons/day)</b>				
"A" SAP	1,300	1,300	1,300	1,300
"B" SAP	1,300	1,300	1,600	1,600
"C" SAP	2,600	2,750	2,750	2,962
"D" SAP	2,600	2,750	2,750	2,962
Total Permitted	7,800	8,100	8,400	8,824
Molten Sulfur System, tons/year <sup>a</sup>	930,750	965,388	965,388 <sup>b</sup>	1,051,677

<sup>a</sup> Based 365 days/year and the ratios of the MW of sulfur to MW of H<sub>2</sub>SO<sub>4</sub> ( $32/98 = 0.3268$  tons S/ton H<sub>2</sub>SO<sub>4</sub>).

<sup>b</sup> This permit did not address any changes to the Molten Sulfur System throughput.

Therefore, the applicant is requesting an increase in the total maximum annual molten sulfur throughput from 8,400 to 8,824 tons per day and 965,388 to 1,051,677 tons per year.

### 4.1 Effects on Other Emission Units

Sulfuric acid is used as a raw material in the A and B Phosphoric Acid Plants (PAP). Although the potential sulfuric acid production may increase, CF claims it will not produce any additional phosphoric acid beyond the permit limits as a result of this project. The PAPs were recently (July 2007) permitted for increased production rates up to 4,229 TPD P<sub>2</sub>O<sub>5</sub> input. Debottlenecking of downstream emissions units (i.e., the DAP/MAP Plants) was addressed during that permitting effort. CF has historically purchased significant amounts of sulfuric acid to meet the demands of the PAPs. Since the late 1980's, the

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

production rate of phosphoric acid has exceeded the availability of sulfuric acid manufactured on-site. Based on the data submitted by the applicant, during the years 2002-2006, an average of 106,298 tons of sulfuric acid was imported annually to meet the requirements of phosphoric acid production. With the increased production rates of up to 4,229 TPD of  $P_2O_5$  input from the two PAPs, considering the  $P_2O_5$  recovery and the historical operating factor of the plants, the expected Phosphoric acid production from the two PAPs will be 1,219,985 tons per year. The conversion factor for tons  $H_2SO_4$  required to tons of  $P_2O_5$  produced is 2.64. This number was derived by the applicant based on stoichiometric values and historical data. Using the conversion factor of 2.64 tons of  $H_2SO_4$  required per ton of  $P_2O_5$  produced gives 3,220,760 tons of  $H_2SO_4$  required per year. Converting the  $H_2SO_4$  requirement to tons per year requirement for sulfur (based on  $98/32 = 0.3268$  ton S/ton  $H_2SO_4$ ) would give 1,056,200 tons of S per year. Attachment A provides this information in the form of a table. There still might be occasions when CF will import sulfuric acid from outside if:

- Sulfuric acid is cheaper to buy off-site than to produce on-site.
- Sulfuric acid plant's operating factor drops off due to turnaround and maintenance problems.
- Phosphoric acid production increases due to improved recovery and improved operating factor.

Trucks are used to import molten sulfur and purchased sulfuric acid. Since the potential sulfuric acid production will be increased as part of the proposed project, CF will purchase less sulfuric acid. Therefore, fewer trucks will be driven onsite to import the purchased sulfuric acid. Although the potential amount of molten sulfur may increase, and therefore the number of molten sulfur trucks driven onsite may increase, this increase will be offset by the reduced number of sulfuric acid trucks driven onsite. And since the number of sulfuric acid trucks driven onsite will be decreasing by a factor of three, the total truck traffic onsite will be reduced by the proposed project.

### 4.2 Ambient Air Quality Impact

The Molten Sulfur System will increase emissions of PM/ $PM_{10}$  by 0.10 tons per year. This increase is below the PSD Significant Emission Rate and therefore is not subject to PSD review. Further, the 0.1 TPY increase in Particulate Matter will not have a significant impact on total facility impacts. Particulate Matter modeled impacts from the most recent PSD project (057005-021-AC: PSD-FL-355) showed maximum concentrations on the property fence-line or boundary at the road entrance indicating that the maximum concentrations were due to truck traffic fugitive dust. Concentrations of particulate matter decrease significantly as distance increases from the property fence-line. This 0.10 TPY emission rate increase will not result in additional truck traffic, therefore the Department concludes that the emissions increase will be insignificant.

### 4.3 Best Available Control Technology (BACT) Emissions Limit

The current BACT  $SO_2$  emissions limit for both the "C" and "D" SAPs is 3.5 lb/ton of 100-percent  $H_2SO_4$ , which is equivalent to 401 pounds per hour (lb/hr) and 1,757 tons per year (TPY) for each SAP. The hourly limits are based on a 3-hour rolling average. The current BACT sulfuric acid mist (SAM) emission limit is 0.10 lb/ton of 100-percent  $H_2SO_4$  for each SAP, which is equivalent to 11 lb/hr and 50 TPY. The current BACT  $NO_x$  emissions limit for each SAP is 0.12 lb/ton of 100-percent  $H_2SO_4$ , which is equivalent to 14 lb/hr and 60 TPY for each SAP. The applicant will retain the current hourly and annual emissions limits for  $SO_2$ , SAM and  $NO_x$  with the proposed production rate increase to 2,962 TPD. This requires a reduction in the permitted BACT  $SO_2$ , SAM and  $NO_x$  emissions limits in lb/ton of 100-percent  $H_2SO_4$  to retain the current hourly and annual emissions. The following BACT permit limits are proposed by the applicant; 3.25 lb/ton of 100-percent  $H_2SO_4$  for  $SO_2$ , 0.093 lb/ton of 100-percent  $H_2SO_4$  for SAM and 0.11 lb/ton of 100-percent  $H_2SO_4$  for  $NO_x$ . There will be no increase in the hourly or annual emissions at the reduced permitted limits and higher production rate.

### 4.3 Project Emissions

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The applicant proposed no increases in the permitted BACT emissions limits for the "C" and "D" SAP. The applicant indicates only a small increase in particulate matter emissions (200 lb/year) from the Molten Sulfur Storage and Handling System:

## 5. RULE APPLICABILITY

The project is subject to the federal new source performance standards (NSPS) for sulfuric acid plants (40 CFR 60, Subpart H), incorporated by reference in Rule 62-204.800, F.A.C. The proposed project is also subject to permitting, preconstruction review, emissions limits and compliance requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).

This facility is located in Hillsborough County, an area designated as attainment for all criteria pollutants in accordance with Rule 62-204.360, F.A.C. The proposed project is not subject to review under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), because the potential emission increases for sulfur dioxide, sulfuric acid mist and nitrogen oxides do not exceed the significant emission rates given in Rule 62-210 (Significant Emissions Rate), F.A.C.

The emission units affected by this permit modification shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein) and, specifically, the following Chapters and Rules:

Chapter 62-4	Permits.
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.260	Prevention of Significant Deterioration Increments
Rule 62-204.360	Designation of Prevention of Significant Deterioration Areas
Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-212.400	Prevention of Significant Deterioration
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-297.310	General Test Requirements
Rule 62-297.401	Compliance Test Methods
Rule 62-297.520	EPA Continuous Monitor Performance Specifications

## 6. CONCLUSION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations 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, and the conditions specified in the draft permit. Syed Arif is the project engineer responsible for reviewing the application and drafting the permit.

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## ATTACHMENT A

**Note #1**

1,543,585 TPY P2O5 is a calculated from taking the maximum P2O5 input for A & B PAP and assuming no down time throughout the year.  
 A-PAP 1,700 TPD + B-PAP 2,529 TPD ) X 365 Days per year = 1,543,585  
 Realistically we have down time and we don't always run 100% of permit rate all the time we are running. Our goal is about 1.22 MM TPY P2O5 and could be characterized many ways and here is just one example:  
 (1,400 + 2,200) average TPD P2O5 rates in A&B PAP X 365 days/yr X 92.9% O F.= 1,220,706 TPY P2O5.

**Note #2**

The sulfuric acid input to P2O5 output ratio of 2.64 is based on the historic actual average tons of sulfuric acid used to produce a ton of P2O5.  
 Examining the stoichiometry of phosphate rock digestion with sulfuric acid would yield a similar ratio; every mole of calcium and magnesium in the rock requires a mole of sulfuric acid to dissolve the rock.

**Note #3**

3,220,760 TPY Sulfuric Acid would sustain the goal P2O5 production of 1.22 MM TPY P2O5  
 (1,220,000 TPY P2O5 X 2.64 TH2SO4/TP2O5 = 3,220,760 TPY H2SO4  
 Because of down time and not always being able to maintain maximum production rates they will be time when purchased sulfuric acid is need.

	Avg. 2002-2006	Current Title V/ AC Permits	Actual Limits Based on Sulfur and No Purchased H2SO4	New Application	Actual Limits Based on Sulfur and No Purchased H2SO4
Sulfur Purchased (TPY) <sup>a</sup>	798,990	965,388	965,388	1,056,200	1,056,200
	2,446,907				
H2SO4 Production (TPY)	2,444,890	3,066,000	3,066,000	3,220,760	3,220,760
H2SO4 Purchased (TPY)	106,298	no limit	no limit	no limit	no limit
Total H2SO4 (TPY)	2,551,189	3,066,000	3,066,000	3,220,760	3,220,760
Phos Acid Permitted Production - (TPY Input P2O5)	1,285,895	1,543,585 #1	1,161,364	1,543,585	
Actual / Forecast Production - (TPY P2O5)	964,704				1,219,985
Total Dry Products (TPY) <sup>b</sup>	1,932,050	2,511,464	2,322,727	2,511,464	2,439,970
tons H2SO4/ton P2O5	2.64 #2		2.64		2.64
tons Dry Products/ton P2O5	2.00		2.00		2.00

<sup>a</sup> Based on 98/32 = 0.3268 tons S/ton H2SO4.

<sup>b</sup> Excluding "A" DAP/MAP, which is on cold standby.

Current Permit Limits

Prod Limits	Sulfur		Sulfuric		P2O5		DAP		
	Annual	Daily	Annual	Daily	Annual	Daily	Annual		
A-train		1,300	474,500	1,699	620,135	1,439	525,126	A-train	
B-train		1,600	584,000	2,530	923,450	2,373	779,420	X-train	
C-train		2,750	1,003,750			2,373	866,022	Y-train	
D-train		2,750	1,003,750			2,373	866,022	Z-train	
Total Permitted	965,388		3,066,000		1,543,585		3,036,591		
limit by Sulfur			2,954,064		1,118,964		2,237,927		

**DRAFT PERMIT**

**PERMITTEE**

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

Project No. 0570005-026-AC Permit No. PSD-FL-339B SIC No. 2874 Sulfuric Acid Increase Expires: December 31, 2008
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*Authorized Representative:*

Herschel E. Morris  
V.P. Phosphate Operations & General Manager

**PROJECT AND LOCATION**

CF Industries, Inc. operates the existing Plant City Phosphate Complex, which is located in Hillsborough County at 10608 Paul Buchman Highway in Plant City, Florida 33565. The UTM coordinates are Zone 17; 388 km E; 3116 km N. This permit authorizes modification of the Plant City Phosphate Complex to increase the production rate of the existing "C" and "D" sulfuric acid plants from 2,750 to 2,962 tons per day of 100% of sulfuric and to increase the permitted process rate of the molten sulfur storage and handling system.

**STATEMENT OF BASIS**

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

**ATTACHED APPENDICES ARE MADE A PART OF THIS PERMIT**

- Appendix A. Best Operational Start-up Procedures for Sulfuric Acid Plants
- Appendix B. Summary of BACT Determinations
- Appendix GC. General Conditions

Executed in Tallahassee, Florida

(DRAFT)

\_\_\_\_\_  
Joseph Kahn, Director  
Division of Air Resource Management

\_\_\_\_\_  
(Date)



## SECTION I. FACILITY INFORMATION

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### FACILITY DESCRIPTION

The Plant City Phosphate Complex is an agricultural chemicals manufacturing facility. Phosphate rock is reacted with sulfuric acid to make phosphoric acid. The phosphoric acid is further processed into monoammonium phosphate (MAP) and diammonium phosphate (DAP).

### PROJECT DESCRIPTION

CF Industries, Inc. proposes to increase the permitted production rate of each existing "C" and "D" sulfuric acid plant from 2,750 to 2,962 tons per day of 100% sulfuric acid with a corresponding increase in the permitted throughput of molten sulfur processing. These plants are currently undergoing construction activities authorized by original Permit No. PSD-FL-339, which authorizes a production increase from 2,600 to 2,750 tons per day of 100% sulfuric acid. However, based on operating experience to date, these activities will actually allow the plants to achieve up to 2,962 tons per day of 100% sulfuric acid without any increase in allowable emissions. Both plants use double-absorption technology and high-efficiency mist eliminators to control sulfur dioxide (SO<sub>2</sub>) and sulfuric acid mist (SAM) emissions. The project reduces the BACT standards in terms of "lb/ton of 100% sulfuric acid produced" for SO<sub>2</sub>, SAM and nitrogen oxides (NO<sub>x</sub>) emissions.

### REGULATORY CLASSIFICATION

- The existing facility is a major source of hazardous air pollutants (HAP).
- The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The existing facility is a major stationary source of air pollution subject to the Prevention of Significant Deterioration (PSD) of Air Quality in accordance with Rule 62-212.400, F.A.C.

## SECTION II. ADMINISTRATIVE REQUIREMENTS

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1. **Regulating Agencies:** All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Department's Southwest District Office, 13051 N. Telecom Parkway, Temple Terrace, Florida 33637-0926. Copies of all such documents shall also be sent to Environmental Protection Commission of Hillsborough County (EPCHC), 3629 Queen Palm Drive, Tampa, Florida 33619-1309. All applications for permits to construct or modify emissions units subject to the PSD review requirements should be submitted to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, MS 5505, Tallahassee, Florida 32399-2400.
2. **General Conditions:** The owner and operator are subject to, and shall operate under, the attached general conditions in Appendix GC of this permit. General conditions are binding and enforceable pursuant to Chapter 403 of the F.S. [Rule 62-4.160, F.A.C.]
3. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and F.A.C. Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, 62-297 and Code of Federal Regulations (CFR) Title 40, Parts 60 and 63, adopted by reference in the F.A.C. regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
4. **Expiration:** The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Department prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the Department's Southwest District Office of any delays in completion of the project which would affect the startup day by more than 90 days. [Rule 62-4.090, F.A.C.]
5. **Application for Title V Permit:** This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration, but no later than 180 days after 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 appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213.420, F.A.C.]
6. **Source Obligation:** Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit. [Rule 62-212.400(12)(a), F.A.C.]
7. **BACT Determination:** For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source. [40 CFR 52.21(j)(4)]
8. **Annual Reports:** Pursuant to Rule 62-210.370(3), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports using DEP Form 62-210.900(5) shall be sent to the DEP's Southwest District office and EPCHC by March 1st of each year.

## SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

### Subsection A. Modified Units

The conditions of this subsection apply to the following modified emission units (EU).

EU No.	Emission Unit Description
007	"C" Sulfuric Acid Plant
008	"D" Sulfuric Acid Plant
022, 023, 024 and 033	Molten Sulfur Storage and Handling System

### PREVIOUS APPLICABLE REQUIREMENTS

1. Previous Permits: This permit supplements all previously issued air construction and operation permits for these emission units. Except for changes specified in the conditions below, the emission units remain subject to the conditions of all other valid air construction and operation permits. [Rule 62-4.070(3), F.A.C.]

### AUTHORIZED WORK

2. Construction Activities: Pursuant to original Permit No. PSD-FL-339, the permittee has installed approximately 165,000 liters of cesium-promoted vanadium catalyst in the 4<sup>th</sup> converter pass of each "C" and "D" sulfuric acid plant. The permittee is authorized to make the following modifications to the "C" and "D" sulfuric acid plants: install low pressure drop packing in final, drying and interpass absorption towers; install new boiler feedwater pumps and motors; modify the existing de-aerator feed tank pumps; modify the acid cooling system; upgrade the main blower turbine (increase horsepower); install a new cooling tower cell; and increase sulfur throughput. [Design and Application No. 0570005-026-AC]

### PERMITTED CAPACITIES

3. Sulfuric Acid Production: Sulfuric acid production in each "C" and "D" plant shall not exceed 2,962 tons per day of 100% H<sub>2</sub>SO<sub>4</sub> produced. [Rules 62-210.200(PTE) and 62-212.400(12), F.A.C.]
4. Molten Sulfur Process Rate: The maximum molten sulfur process rate for the molten sulfur storage and handling system shall not exceed 8,824 tons per day and 1,051,677 tons during any consecutive 12 months. [Rules 62-210.200(PTE) and 62-212.400(12), F.A.C.]
5. Hours of Operation: The emission units may operate continuously (8,760 hours per year). [Rule 62-210.200(PTE), F.A.C.]

### EMISSION AND PERFORMANCE REQUIREMENTS

6. SO<sub>2</sub> Standards: As determined by data collected from the required continuous emissions monitoring systems (CEMS), sulfur dioxide emissions from each "C" and "D" sulfuric acid plant shall not exceed:
  - a. 3.25 lb/ton of 100% of H<sub>2</sub>SO<sub>4</sub> and 401.1 lb/hour based on a 3-hour rolling average, and
  - b. 1,756.8 tons based on a 12-month rolling total.[Rule 62-212.400(BACT), F.A.C.]
7. SAM Standards: As determined by EPA Method 8, sulfuric acid mist emissions from each "C" and "D" sulfuric acid plant shall not exceed 0.093 lb/ton of 100% of H<sub>2</sub>SO<sub>4</sub> and 11.4 lb/hour based on annual compliance tests. [Rule 62-212.400(BACT), F.A.C.]
8. NO<sub>x</sub> Standards: As determined by EPA Method 7E, nitrogen oxides emissions from each "C" and "D" sulfuric acid plant shall not exceed 0.11 lb/ton 100% of H<sub>2</sub>SO<sub>4</sub> and 13.6 lb/hour. [Rule 62-212.400(BACT), F.A.C.]

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

#### Subsection A. Modified Units

9. Opacity Standard: As determined by EPA Method 9, visible emissions from each sulfuric acid plant shall not exceed 10% opacity. [Rule 62-212.400, F.A.C.]
10. Excess Emissions:
- Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
  - Unless otherwise specified, excess emissions resulting from startup, shutdown or malfunction shall be permitted providing, (1) best operational practices to minimize emissions are adhered to, and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
  - The sulfuric acid plants are authorized excess emissions resulting from startup for a period of three consecutive hours provided the operator follows the "Best Operational Startup Practices for Sulfuric Acid Plants" in Appendix A of this permit.
  - In case of excess emissions resulting from malfunctions, each source shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700, F.A.C.]
- [Rules 62-212.400 and 62-210.700, F.A.C.]
11. Fugitive Emissions: Best operational practices to minimize leaks of sulfur dioxide, sulfur trioxide or other fugitive gaseous process emissions shall be adhered to and shall include regular inspections and prompt repair or correction of any leaks or other fugitive emissions. As necessary, the permittee shall take necessary steps (watering, street sweeping, etc.) to prevent and minimize fugitive dust emissions from paved areas and roads at the plant. [Rules 62-212.400 and 62-296.320, F.A.C.]
12. Objectionable Odor: No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. "Objectionable odor" is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-210.200 and 62-296.320, F.A.C.]
13. Circumvention: No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

#### MONITORING AND TESTING REQUIREMENTS

14. CEMS: Continuous emissions monitoring systems (CEMS) shall be calibrated, maintained and operated on the "C" and "D" sulfuric acid plants to demonstrate compliance with the SO<sub>2</sub> emissions standards of this permit. The CEMS shall comply with Performance Specification 2 in Appendix B of 40 CFR 60, the quality assurance procedures in Appendix F of 40 CFR 60 and other Department-approved QA/QC plans.
- The CEMS shall calculate and record SO<sub>2</sub> emission rates in units of "lb/ton of 100% sulfuric acid produced". Emissions shall be calculated using one of the methods specified in 40 CFR 60.84. A one-hour average shall be determined for each hour in which sulfur is burned and consist of at least two emissions measurements recorded at least 15 minutes apart. Three-hour rolling averages shall be calculated as the arithmetic mean of three monitored operating hours in which sulfur is burned. The 3-hour rolling averages shall be calculated and recorded for each operating day. Data taken during periods of startup or when the CEMS is out of control as defined in Section 5.2, Appendix F, 40 CFR 60, shall be excluded from the 3-hour rolling averages. Data recorded during periods of shutdown, malfunction, load change, and continuous

## SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

### Subsection A. Modified Units

operating periods shall be included in the calculation of the 3-hour rolling averages. When demonstrating compliance with the 12-month rolling total, all valid CEMS emissions data shall be used.

To the extent the monitoring system is available to record emissions data, the CEMS shall record data at all operating hours when sulfur is burned in the unit, including periods of startup, shutdown, load change, continuous operation and malfunction. Monitor downtimes and excess emissions based on 3-hour averages, which include startup emissions, shall be reported on a quarterly basis using the summary report in 40 CFR 60.7. A detailed report of the cause, duration, magnitude, and corrective action taken or preventative measures adopted for each excess emission occurrence, and a listing of monitor downtime occurrences shall accompany the summary report when the total duration of excess emissions is 1% or greater or if the monitoring system downtime is 5% greater of the total monitored operating hours.

The monitoring device shall meet the applicable requirements of: Rule 62-297.520, F.A.C.; 40 CFR 60.7(a)(5); 40 CFR 60.13; and Appendix B and Appendix F in 40 CFR 60. Data on monitoring equipment specifications, manufacturer, type calibration and maintenance requirement, and the proposed location of each stack probe shall be provided to the Department for review at least 30 days prior to installation of a new CEMS.

[Rules 62-4.070(3), F.A.C. and 62-204.800, F.A.C.]

15. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
16. Compliance Tests: Within 60 days after achieving permitted capacity, but not later than 180 days after completing the proposed work, the permittee shall conduct stack tests on the "C" and "D" sulfuric acid plants to determine compliance with the emission limits for NO<sub>x</sub>, SAM and opacity. Compliance with the SO<sub>2</sub> standards shall be demonstrated by data collected from the required CEMS. Tests shall be conducted in accordance with the procedures specified in EPA Methods 1, 2, 3, 4, 6C, 7E, 8 and 9, as appropriate. These methods are published in Appendix A of 40 CFR 60. [Rules 62-212.400, 62-4.070(3), 62-204.800 and 62-297.310(7), F.A.C.]
17. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90% to 100% of the maximum sulfuric acid production rate allowed by permit. 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% 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. [Rule 62-297.310(2), F.A.C.]
18. Test Notification: The permittee shall notify the Department's Southwest District office and EPCHC at least 15 days prior to the compliance tests. Notifications can be made by letter, facsimile or e-mail. Written reports of the test results shall be submitted to those offices within 45 days of test completion. [Rule 62-297.310, F.A.C.]

### RECORDKEEPING AND REPORTING REQUIREMENTS

19. Records Retention: All measurements, records, and other data required to be maintained by this facility shall be retained for at least five years following the date on which such measurements, records, or data are recorded. These data shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C.]
20. Quarterly Reports: In accordance with 40 CFR 60.7(a)(7)(c), quarterly excess emissions reports shall be submitted to the Department's Southwest District office and EPCHC. [40 CFR 60.7(a)(7)(c)]

## SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

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### Subsection A. Modified Units

#### OTHER REQUIREMENTS

21. NSPS Provisions: The "C" and "D" sulfuric acid plants (EU 007 and EU 008) are subject to the applicable New Source Performance Standards (NSPS) in Subpart A (General Provisions) and Subpart H (Sulfuric Acid Plants) of 40 CFR 60. [NSPS Subparts A and H of 40 CFR 60; and Rule 62-204.800, F.A.C.]
22. Molten Sulfur Storage and Handling System: These emissions units remain subject to the applicable requirements of Rule 62-296.411, F.A.C. and the specific condition of the current Title V air operation permit. [Rule 62-296.411, F.A.C.]

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**SECTION IV. APPENDICES**

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Appendix A. Best Operational Start-up Procedures for Sulfuric Acid Plants

Appendix B. Summary of BACT Determinations

Appendix GC. General Conditions

## SECTION IV. APPENDIX A.

### Best Operational Startup 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 startup mode at the same time, provided the following condition is met. It is not acceptable to initiate sulfur burning at one sulfuric acid plant when another plant at the same facility is emitting SO<sub>2</sub> at a rate in excess of the emission limits imposed by the permit or rule, as determined by the CEMs emission rates for the immediately preceding 20 minutes.
2. A plant startup must be at the lowest practicable operating rate, not to exceed 70 percent of the designated operating rate, until the SO<sub>2</sub> monitor indicates compliance. Because production rate is difficult to measure during startup, 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 startup at the reduced rate is the responsibility of the owner or operator.
3. Sulfuric acid plants are authorized to emit excess emissions from startup 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 Startup Procedures.
  - a. Converter.
    - (1) The inlet and outlet temperature at the first two masses of catalyst shall be sufficiently high to provide immediate ignition when SO<sub>2</sub> enters the masses. In no event shall the inlet temperature to the first mass be less than 800°F or the outlet temperature to the first two masses be less than 700°F. These temperatures are the desired temperatures at the time the use of auxiliary fuel is terminated.
    - (2) The gas stream entering the converter shall contain SO<sub>2</sub> at a level less than normal and sufficiently low to promote catalytic conversion to SO<sub>3</sub>.
  - b. Absorbing Towers. The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent H<sub>2</sub>SO<sub>4</sub>.
5. Warm Restart.
  - a. Converter

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

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



**SECTION IV. APPENDIX A.**

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**Best Operational Startup Practices for Sulfuric Acid Plants**

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

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

**SECTION IV. APPENDIX B.**  
**Summary of BACT Determinations**

**Permit No. PSD-FL-339**

For original Permit No. PSD-FL-339, the Department made the following BACT determinations for the "C" and "D" sulfuric acid plants.

- **SO<sub>2</sub> Emissions:** BACT is the current double-absorption system with the addition of 165,000 liters of Haldor Topsoe cesium catalyst in the 4<sup>th</sup> pass of the "C" SAP converter and equivalent cesium catalyst that guarantees equal or better performance than Topsoe's product for the "D" SAP. The SO<sub>2</sub> BACT limit for "C" and "D" SAP is 3.5 lb of SO<sub>2</sub> per ton of 100% H<sub>2</sub>SO<sub>4</sub>, 3-hour rolling CEMS average. This determination is applicable only to the present project and does not represent a BACT determination for a greenfield site or a new unit at a brownfield site. Such a new project would have to consider all process options and a thorough cost-effectiveness evaluation on the basis of cost per ton of SO<sub>2</sub> removed.
- **SAM Emissions:** BACT is the use of high-efficiency mist eliminators. The SAM BACT emission limit for the "C" and "D" SAP is 0.10 lb of SAM per ton of 100% H<sub>2</sub>SO<sub>4</sub>.
- **NO<sub>x</sub> Emissions:** BACT is the continued use of good combustion practices. The NO<sub>x</sub> BACT emission limit is 0.12 lbs of NO<sub>x</sub> per ton of 100% H<sub>2</sub>SO<sub>4</sub>.

**Permit No. PSD-FL-339B**

After installing catalyst and completing a portion of the construction authorized in Permit No. PSD-FL-339, the permittee realized that the changes resulted in the capability to produce more sulfuric acid than anticipated. Permit No. PSD-FL-339B authorized a sulfuric acid production increase from 2750 to 2962 tons per day. Based on the installed capabilities of the control systems, the original BACT determinations were revised in this project for the production increase as summarized in the following table.

<b>Pollutant</b>	<b>BACT Standards</b>		<b>Control Technology</b>
SO <sub>2</sub>	401 lb/hour	3.25 lb/ton of 100% H <sub>2</sub> SO <sub>4</sub> , 3-hour rolling CEMS average	double absorption process with cesium-promoted vanadium catalyst in the entire 4 <sup>th</sup> bed.
SAM	11 lb/hour	0.093 lb/ton of 100% H <sub>2</sub> SO <sub>4</sub>	fiber mist eliminators
NO <sub>x</sub>	14 lb/hour	0.11 lb/ton of 100% H <sub>2</sub> SO <sub>4</sub>	good combustion practices

**Compliance Methods**

Compliance with the SO<sub>2</sub> emission limit (3.25 lb/ton, 3-hour rolling CEMS average) shall be demonstrated with a certified continuous emission monitor. Startup excess emissions shall be permitted for three hours for the sulfuric acid plants as endorsed in an agreement titled "Best Operational Startup Practices for Sulfuric Acid Plants", which is attached as Appendix A of the permit. In accordance with the following methods, annual testing is required to demonstrate compliance with the emissions limits for the sulfur dioxide, sulfuric acid mist and nitrogen oxides: EPA Methods 1, 2, 3, 4, 6C, 7E, and 8 contained in Appendix A of 40 CFR 60.

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## SECTION IV. APPENDIX GC.

### General Permit 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, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
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), F.S., 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 F.S. and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - a. Have access to and copy and records that must be kept under the conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

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

## SECTION IV. APPENDIX GC.

### General Permit Conditions

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 F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S.. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
11. This permit is transferable only upon Department approval in accordance with 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;
  - b. Determination of Prevention of Significant Deterioration; and
  - c. Compliance with New Source Performance Standards.
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.

**Harvey, Mary**

---

**From:** Harvey, Mary  
**Sent:** Thursday, December 20, 2007 3:40 PM  
**To:** 'Herschel E. Morris, CF Industries, Inc.'; 'Jim Little, EPA'; 'Kathleen Forney, EPA'; 'Dee Morse, NPS'; Zhang-Torres; 'Diana Lee, HCEPC'; 'David Buff, Golder Associates, Inc.'  
**Cc:** Arif, Syed; Koerner, Jeff; Adams, Patty; Gibson, Victoria  
**Subject:** CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B  
**Attachments:** 0570005.026.AC.D\_pdf.zip

Tracking:	Recipient	Read
✓	Herschel E. Morris, CF Industries, Inc.'	
✓	'Jim Little, EPA'	
✓	'Kathleen Forney, EPA'	
✓	'Dee Morse, NPS'	
✓	Zhang-Torres	Read: 12/20/2007 3:57 PM
	'Diana Lee, HCEPC'	
✓	'David Buff, Golder Associates, Inc.'	
✓	Arif, Syed	Read: 12/22/2007 1:23 AM
	Koerner, Jeff	
✓	Adams, Patty	Read: 12/20/2007 5:26 PM
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Thank you,

DEP, Bureau of Air Regulation

✓ **Harvey, Mary**

---

**From:** Morris, Herschel [hmmorris@cfifl.com]  
**Sent:** Tuesday, January 08, 2008 5:00 PM  
**To:** Harvey, Mary  
**Cc:** Brunk, Ron  
**Subject:** RE: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

Thank you. I have received your E-mail.  
Herschel Morris

-----Original Message-----

**From:** Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]  
**Sent:** Tuesday, January 08, 2008 4:04 PM  
**To:** Morris, Herschel  
**Subject:** FW: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

Mr. Morris – this Draft Permit was sent to you on December 20<sup>th</sup>. I have not received a read receipt from you to complete the files. Please email me if you have received these files.  
Thanks,  
Mary Harvey

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**From:** Harvey, Mary  
**Sent:** Thursday, December 20, 2007 3:40 PM  
**To:** 'Herschel E. Morris, CF Industries, Inc.'; 'Jim Little, EPA'; 'Kathleen Forney, EPA'; 'Dee Morse, NPS'; Zhang-Torres; 'Diana Lee, HCEPC'; 'David Buff, Golder Associates, Inc.'  
**Cc:** Arif, Syed; Koerner, Jeff; Adams, Patty; Gibson, Victoria  
**Subject:** CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

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## Harvey, Mary

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**From:** Dee\_Morse@nps.gov  
**Sent:** Thursday, January 03, 2008 10:30 AM  
**To:** Harvey, Mary  
**Subject:** CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

### Return Receipt

Your document: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

was received by: Dee Morse/DENVER/NPS

at: 01/03/2008 08:29:46 AM

## Harvey, Mary

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**From:** Gibson, Victoria  
**To:** Harvey, Mary  
**Sent:** Thursday, December 20, 2007 3:47 PM  
**Subject:** Read: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

Your message

**To:** 'Herschel E. Morris, CF Industries, Inc.'; 'Jim Little, EPA'; 'Kathleen Forney, EPA'; 'Dee Morse, NPS'; Zhang-Torres; 'Diana Lee, HCEPC'; 'David Buff, Golder Associates, Inc.'  
**Cc:** Arif, Syed; Koerner, Jeff; Adams, Patty; Gibson, Victoria  
**Subject:** CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B  
**Sent:** 12/20/2007 3:40 PM

was read on 12/20/2007 3:47 PM.



## Harvey, Mary

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**From:** Buff, Dave [DBuff@GOLDER.com]  
**To:** undisclosed-recipients  
**Sent:** Thursday, December 20, 2007 3:42 PM  
**Subject:** Read: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

Your message

**To:** DBuff@GOLDER.com  
**Subject:**

was read on 12/20/2007 3:42 PM.

## Harvey, Mary

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**From:** Adams, Patty  
**To:** Harvey, Mary  
**Sent:** Thursday, December 20, 2007 5:26 PM  
**Subject:** Read: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

### Your message

**To:** 'Herschel E. Morris, CF Industries, Inc.'; 'Jim Little, EPA'; 'Kathleen Forney, EPA'; 'Dee Morse, NPS'; Zhang-Torres; 'Diana Lee, HCEPC'; 'David Buff, Golder Associates, Inc.'  
**Cc:** Arif, Syed; Koerner, Jeff; Adams, Patty; Gibson, Victoria  
**Subject:** CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B  
**Sent:** 12/20/2007 3:40 PM

was read on 12/20/2007 5:26 PM.

## Harvey, Mary

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**From:** Arif, Syed  
**To:** Harvey, Mary  
**Sent:** Saturday, December 22, 2007 1:23 AM  
**Subject:** Read: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

### Your message

**To:** 'Herschel E. Morris, CF Industries, Inc.'; 'Jim Little, EPA'; 'Kathleen Forney, EPA'; 'Dee Morse, NPS'; Zhang-Torres; 'Diana Lee, HCEPC'; 'David Buff, Golder Associates, Inc.'  
**Cc:** Arif, Syed; Koerner, Jeff; Adams, Patty; Gibson, Victoria  
**Subject:** CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B  
**Sent:** 12/20/2007 3:40 PM

was read on 12/22/2007 1:23 AM.

**Harvey, Mary**

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**From:** Forney.Kathleen@epamail.epa.gov  
**Sent:** Wednesday, December 26, 2007 3:13 PM  
**To:** Harvey, Mary  
**Subject:** Re: FW: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

thanks

-----  
Katy R. Forney  
Air Permits Section  
EPA - Region 4  
61 Forsyth St., SW  
Atlanta, GA 30024

Phone: 404-562-9130  
Fax: 404-562-9019

"Harvey, Mary"  
<Mary.Harvey@dep  
.state.fl.us>

12/20/2007 03:42  
PM

To  
Kathleen Forney/R4/USEPA/US@EPA  
cc  
Subject  
FW: CF Industries, Inc. - Draft  
Permit #0570005-026-AC-DRAFT -  
PSD-FL-339B

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From: Harvey, Mary  
Sent: Thursday, December 20, 2007 3:40 PM  
To: 'Herschel E. Morris, CF Industries, Inc.'; 'Jim Little, EPA'; 'Kathleen Forney, EPA'; 'Dee Morse, NPS'; Zhang-Torres; 'Diana Lee, HCEPC'; 'David Buff, Golder Associates, Inc.'  
Cc: Arif, Syed; Koerner, Jeff; Adams, Patty; Gibson, Victoria  
Subject: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT-- PSD-FL-339B

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## Harvey, Mary

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**From:** Zhang-Torres  
**To:** Harvey, Mary  
**Sent:** Thursday, December 20, 2007 3:57 PM  
**Subject:** Read: CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B

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**To:** 'Herschel E. Morris, CF Industries, Inc.'; 'Jim Little, EPA'; 'Kathleen Forney, EPA'; 'Dee Morse, NPS'; Zhang-Torres; 'Diana Lee, HCEPC'; 'David Buff, Golder Associates, Inc.'  
**Cc:** Arif, Syed; Koerner, Jeff; Adams, Patty; Gibson, Victoria  
**Subject:** CF Industries, Inc. - Draft Permit #0570005-026-AC-DRAFT - PSD-FL-339B  
**Sent:** 12/20/2007 3:40 PM

was read on 12/20/2007 3:57 PM.