

Florida Department of
Environmental Protection

Memorandum

TO: Trina Vielhauer
THRU: Jeff Koerner *JK*
FROM: Syed Arif *SA*
DATE: May 7, 2008
SUBJECT: CF Industries, Inc. – Plant City Phosphate Complex
Project No. 0570005-029-AC
Scrubber Improvements for Phosphoric Acid Plants A and B

Attached for your approval and signature is an exemption determination from air construction permit requirements for the scrubber improvements at CF Industries, Inc., Plant City Phosphate Complex located in Plant City, Hillsborough County. The project entails tasks that will improve the scrubber efficiency and reduce fugitive emissions in the plant.

We recommend your approval and signature.

TLV/jfk/sa

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

May 7, 2008

Electronically sent with received receipt requested.

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

Re: Exemption from the Requirement to Obtain an Air Construction Permit
Project No. 0570005-029-AC
CF Industries, Inc. – Plant City Phosphate Complex
Scrubber Improvements to Phosphoric Acid Plants 'A' and 'B' (Emission Unit Nos. 004 and 009)

Dear Mr. Morris:

On April 24, 2008, CF Industries, Inc. submitted a request for scrubber improvements to existing Phosphoric Acid Plants 'A' and 'B'. The facility is located at 10608 Paul Buchman Highway, Plant City, Hillsborough County, Florida.

The Department considers the following activities to be routine maintenance:

- Replace manual slide gate damper with vane type or similar adjustable damper;
- Manipulate spray header(s) orientation in fume scrubbers to improve knock-down of the carryover and reduce flooding of wet packing areas; and
- Replace spray nozzles as needed to improve free passage.

The Department exempts the following activities from air permitting requirements pursuant to Rule 62-4.040(1)(b), F.A.C.:

- Install pond water nozzles in duct work to knock-down foam carryover (would convert fresh water nozzles to pond water);
- Install new pickup points on the reactor (additional fume ducts);
- Increase fume duct size from the reactor; and
- Possibly engineer system to remove/install Kimre packing as a bank (there are 4 banks).

Determination: The Department's complete review of this project is summarized in the attached Technical Evaluation. For the reasons stated in the Technical Evaluation, the Department approves your request. Pursuant to Rule 62.4.040(1)(b), F.A.C., the Department exempts this project from the requirement to obtain an air construction permit. This determination may be revoked if the proposed activity is substantially modified or the basis for the exemption is determined to be materially incorrect. A copy of this letter shall be maintained at the site of the proposed activity. This permitting decision is made pursuant to Chapter 403, Florida Statutes.

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 Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a determination for this project. The Permitting Authority's physical

CASE-BY-CASE EXEMPTION

address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida 32301. 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.

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 twenty-one (21) days of receipt of this Written Notice of Exemption. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within twenty-one (21) days of publication of a Public Notice or within twenty-one (21) days of receipt of this Written Notice of Exemption, 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 twenty-one (21) 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 action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Exemption. 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.

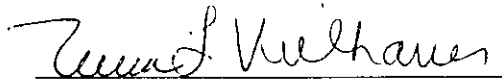
Effective Date: This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this action will not be effective until further order of the Department.

Appeal: Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth

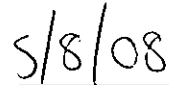
CASE-BY-CASE EXEMPTION

Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty (30) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation



Date

CASE-BY-CASE EXEMPTION

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this order and all copies were sent electronically (with received receipt requested) before the close of business on 5/8/08 to the persons listed:

Herschel E. Morris, CF Industries, Inc. (hmmorris@cfifl.com)
Kathleen Forney, EPA (forney.kathleen@epa.gov)
Dee Morse, NPS (dee_morse@nps.gov)
Cindy Zhang-Torres, DEP-SWD (cindy.zhang-torres@dep.state.fl.us)
Diana Lee, HCEPC (lee@epchc.org)
David Buff, Golder Associates, Inc. (dbuff@golder.com)

Clerk Stamp

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

Mary L. Army
(Clerk)

5/8/08
(Date)

TECHNICAL EVALUATION

Applicant Request

CF Industries, Inc. is currently permitted (0570005-021-AC/PSD-FL-355) to increase production of 'A' and 'B' Phosphoric Acid Plants (Emission Unit Nos. 004 and 009) by 20 percent. The work on this project has begun. On April 24, 2008, CF Industries submitted a request for the following scrubber improvements for their 'A' and 'B' Phosphoric Acid Plants:

1. Replace damper (presently manual slide gate). The new damper would be vane type or similar for adjusting air flows;
2. Manipulate spray header(s) orientation in fume scrubbers to improve knock-down of the carryover and reduce flooding of wet packing area;
3. Replace spray nozzles as needed to improve free passage;
4. Install pond water nozzles in duct work to knock-down foam carryover (would convert fresh water nozzles to pond water);
5. Install new pickup points on the reactor (additional fume ducts);
6. Increase fume duct size from reactor; and
7. Possibly engineer system to remove/install Kimre packing as a bank (there are 4 banks).

Some or all of this work may be done to improve the scrubbers. Upon completion, CF Industries will conduct a stack test to demonstrate compliance, and submit a report on the actual scrubber projects completed along with the rest of the permit projects associated with Construction Permit 0570005-021-AC (PSD-FL-355).

Department Review

The Department believes that the scrubber improvement project will help in mitigating emissions from the two Phosphoric Acid Plants. The scrubber improvement work will not increase the production from the two phosphoric acid plants.

The improvement work planned for the scrubber includes additional fume ducts from the reactor and increasing the fume duct size. This will alleviate fugitive emissions in the plants. Installing pond water nozzles in the fume ducts upstream of the scrubber will help in reducing foam carryover problem to the scrubber, and consequently help in improving the scrubber efficiency. The replacement of fresh water with pond water in the fume ducts should not have much affect on the fluoride removal, as most of the fluoride scrubbing takes place in the scrubber.

The improvement to remove fouled Kimre packing and replace it with clean Kimre packing should improve performance by reducing their downtime due to scrubber packing fouling, as a clean bank of packing will be available all the time to replace the used packing for any one of the 4 banks.

Conclusion

Overall, the project is expected to improve scrubber maintenance, operating practices and performance. Rule 62-4.040(1)(b), F.A.C. states "Any existing or proposed installation which the Department shall determine does not or will not cause the issuance of air or water contaminants in sufficient quantity, with respect to its character, quality or content, and the circumstances surrounding its location, use and operation, as to contribute significantly to the pollution problems within the State, so that the regulation thereof is not reasonably justified. Such a determination is agency action and is subject to Chapter 120, F.S. Such determination shall be made in writing and filed by the Department as a public record. Such determination may be revoked if the installation is substantially modified or the basis for the exemption is determined to be materially incorrect."

Based on the unique circumstances of this project, the Department believes the project will not contribute to the pollution problems within the State. The Department considers Item Nos. 1-3 of the applicant's request to be routine maintenance that does not require a permit. In addition, the Department exempts Item Nos. 4-7 from air permitting requirements pursuant to Rule 62-4.040(1)(b), F.A.C.