

# Memorandum

# Florida Department of Environmental Protection

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TO: Trina L. Vielhauer

THRU: Al Linero

FROM: Syed Arif SA 3/18

DATE: March 18, 2004

SUBJECT: Cargill Fertilizer, Inc., Riverside Facility  
0570008-042-AC (PSD-FL-315C)

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Attached is the Public Notice package for a modification at Cargill's phosphate fertilizer manufacturing facility located in Riverview, Hillsborough County.

In November 2001, we approved an expansion of the Cargill Riverside Facility including the manufacture of sulfuric acid, phosphoric acid, diammonium phosphate (DAP), granulated triple super phosphate, and animal feed ingredients. The expansion was reviewed under the PSD rules and BACT determinations were made for each of the emissions units constructed or modified.

Cargill has requested revisions to the permit based on some changes to the stack configuration and pollution control equipment for No. 5 DAP Plant. The key changes to the No. 5 DAP Plant includes re-designation to No. 5 Granulation Plant, installation of a new ammonia vaporizer, a new stack for the reactor and granulator exhaust gases, and a new venturi scrubber for the cooler exhaust gases. Cargill is also requesting addition of micronutrients and sulfur to the reactor/granulator to allow for production of sulfur and nutrient rich DAP grades, and expansion of the No. 5 Granulation Plant building to allow room for micronutrient unloading and storage.

Overall the controls will be as stringent as the original controls. No increase in allowable production rate is requested. The Department recently issued PSD-FL-336 to the same applicant for #6 Granulation plant. The control equipment configuration is the same as the #5 Granulation plant. The BACT limits established for the #6 Granulation plant for F and PM were 0.035 lb/ton and 0.15 lb/ton of P<sub>2</sub>O<sub>5</sub> input, respectively. The applicant has agreed to the same limits for the #5 Granulation plant.

I recommend your approval and signature.

Attachments

/sa



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

March 18, 2004

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. E. O. Morris  
Vice President of Environmental, Health and Safety  
Cargill Fertilizer, Incorporated  
8813 U.S. Highway 41 South  
Riverview, Florida 33569

Re: DEP File No. 0570008-042-AC; PSD-FL-315C  
Riverview Facility, Hillsborough County  
No. 5 Diammonium Phosphate Plant

Dear Mr. Morris:

Enclosed is one copy of the Draft Air Construction Permit Modification for the Riverview Facility, located at 8813 U.S. Highway 41 South, Riverview, Hillsborough County. The "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION" is also included.

The "PUBLIC NOTICE" must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Program Administrator, Permitting South Section at the above letterhead address. If you have any other questions, please contact Mr. Syed Arif at 850/921-9528.

Sincerely,

Trina L. Vielhauer, Chief,  
Bureau of Air Regulation

TLV/sa

Enclosures

"More Protection, Less Process"

Printed on recycled paper.

In the Matter of an  
Application for Permit by:

Mr. E. O. Morris, Vice President  
Environment, Health & Safety  
Cargill Fertilizer, Inc.  
8813 U.S. Highway 41 South  
Riverview, Florida 33569

DEP File No. 0570008-042-AC  
Draft Permit No. PSD-FL-315 C  
No. 5 Granulation Plant  
Riverview Facility  
Hillsborough County

### **INTENT TO ISSUE PSD PERMIT MODIFICATION**

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD permit modification (copy of DRAFT Permit attached) for the proposed project, detailed in the application specified above and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Cargill Fertilizer, Inc., submitted a complete application on December 3, 2003 to the Department for a modification to the control equipment configuration of the PSD air construction permit PSD-FL-315 issued on November 21, 2001 for the No. 5 Diammonium Phosphate (DAP) Plant at its phosphate fertilizer manufacturing facility. The plant is located at 8813 U.S. Highway 41 South, Riverview, Hillsborough County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined a PSD permit modification is required for the proposed work.

The Department intends to issue this PSD Permit Modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION." The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting 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 Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the Final PSD Permit Modification in accordance with the conditions of the attached Draft PSD Permit Modification unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the Draft PSD Permit Modification, the permitting authority shall issue a Revised Draft PSD Permit Modification and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

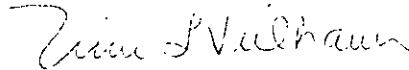
The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would

justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief  
Bureau of Air Regulation

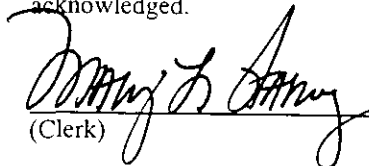
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE PSD PERMIT MODIFICATION (including the PUBLIC NOTICE, and the DRAFT permit modification) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 3/23/04 to the person(s) listed:

E. O. Morris, Cargill Fertilizer, Inc.\*  
Jim Little, EPA  
John Bunyak, NPS  
Gerald Kisse!, DEP-SWD  
Jerry Campbell, HCEPC  
David Buff, Golder Associates, Inc.

Clerk Stamp

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

  
(Clerk) 3/23/04  
(Date)

**PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION**

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DEP File No. 0570008-042-AC (PSD-FL-315C)  
Riverview Facility  
Cargill Fertilizer, Incorporated  
Hillsborough County

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD permit modification to Cargill Fertilizer, Inc., a phosphate fertilizer manufacturing facility located in Riverview, Florida. In November 2001, the Department approved an expansion of the Cargill Riverside Facility including the manufacture of sulfuric acid, phosphoric acid, diammonium phosphate (DAP), granulated triple super phosphate, and animal feed ingredients. The applicant's name and address (also facility address) are Cargill Fertilizer, Inc., 8813 U.S. Highway 41 South, Riverview, Florida 33569.

Cargill has requested revisions to the permit based on some changes to the control equipment configuration for the No. 5 DAP Plant, which was later re-designated to No. 5 Ammoniated Phosphate (AP) Plant. Cargill has now requested renaming of No. 5 AP Plant to No. 5 Granulation Plant. The key changes to the No. 5 Granulation Plant include installation of a new ammonia vaporizer and a new stack for the reactor and granulator exhaust gases, and a new venturi scrubber for the cooler exhaust gases. Cargill is also requesting addition of micronutrients and sulfur to the reactor/granulator to allow for production of sulfur and nutrient rich DAP grades, and expansion of the No. 5 Granulation Plant building to allow room for micronutrient unloading and storage. Cargill is not proposing any changes to the current permitted production rate. The emission rates for fluorides and particulate matter will be lowered by the Department based on a recent BACT determination.

An air quality impact analysis was performed. The analysis showed that emissions from the facility will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the Final PSD Permit Modification in accordance with the conditions of the Draft PSD Permit Modification unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The permitting authority has determined that a PSD Permit Modification is required.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice

**NOTICE TO BE PUBLISHED IN THE NEWSPAPER**

or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

|  |   |   |
|--|---|---|
| Dept. of Environmental Protection<br>Bureau of Air Regulation<br>Suite 4, 111 S. Magnolia Drive<br>Tallahassee, Florida, 32301<br>Telephone: 850/488-0114<br>Fax: 850/922-6979 | Dept. of Environmental Protection<br>Southwest District<br>3804 Coconut Palm Drive<br>Tampa, Florida 33619-8218<br>Telephone: 813/744-6100<br>Fax: 813/744-6084 | Hillsborough County Environmental<br>Protection Commission<br>1900 Ninth Avenue<br>Tampa, Florida 33605<br>Telephone: 813/272-5960<br>Fax: 813/272-5157 |
|--|---|---|

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Program Administrator, Permitting South Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

**NOTICE TO BE PUBLISHED IN THE NEWSPAPER**

TECHNICAL EVALUATION  
AND  
PRELIMINARY DETERMINATION

CARGILL FERTILIZER, INC.

No. 5 Granulation (DAP) Plant  
Riverview Facility  
Hillsborough County, Florida

DEP File Number  
0570008-042-AC  
PSD-FL-315C

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

March 18, 2004



# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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## **I. APPLICATION INFORMATION**

### **A. Applicant**

Cargill Fertilizer, Inc.  
8813 US Highway 41 South  
Riverview, Hillsborough County, Florida 33569

Authorized Representative: Mr. E. O. Morris, Vice President of Environmental, Health and Safety

### **B. Request**

Cargill Fertilizer, Inc. submitted changes to the No. 5 Diammonium Phosphate (DAP) Plant construction permit which was issued by the Department (Permit No. 0570008-036-AC; PSD-FL-315) on November 21, 2001. The plant was re-designated to No. 5 Ammoniated Phosphate (AP) Plant in the PSD permit modification issued by the Department (Permit No. 0570008-039-AC; PSD-FL-315A) on February 6, 2002. Cargill is now proposing to modify the control equipment configuration, as well as several minor revisions to the proposed permit. These include:

- Renaming of the No. 5 AP Plant to the No. 5 Granulation Plant.
- Installation of a new ammonia vaporizer and a new stack for reactor and granulator exhaust gases, and a new venturi scrubber for the cooler exhaust gases.
- Addition of micronutrients and sulfur to the reactor/granulator to allow for production of sulfur and nutrient rich DAP grades; and
- Expansion of the No. 5 Granulation Plant building by 175 feet (ft) to the south and 100 ft to the west, from the southeast corner of the building, to allow room for micronutrient unloading and storage.

### **C. Facility Location**

The applicant's facility is located at 8813 U.S. Highway 41 South, Riverview, Hillsborough County, Florida. Latitude and Longitude are 27/51/28 and 82/23/15 respectively. UTM coordinates of the site are: Zone 17, 362.9 km E and 3082.5 km N. This location is approximately 86 km from the nearest Class I area, the Chassahowitzka National Wilderness Area (CNWA).

Facility Identification Code (SIC): Major Group No. 28, Industry Group No. 2874.

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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## D. Reviewing and Process Schedule

08-15-03: Date of Receipt of Application  
08-29-03: DEP's Completeness Request  
12-03-03: Applicant's response to DEP's Completeness Request. Application complete  
01-30-04: Extension of time given by applicant to issue draft permit.

## II. PROJECT DESCRIPTION/EMISSIONS

### A. No. 5 DAP Plant Revisions

The applicant proposes to modify the control equipment configuration for the No. 5 AP Plant which currently consists of one emission point with a stack. Gases from the reactor, granulator, dryer, cooler, and equipment vents (screens, conveyors, and elevators) all discharge through this stack. The No. 5 AP Plant currently utilizes five scrubbers to control emissions. Exhaust gases from the reactor and granulator (RG) are vented to the RG venturi scrubber. This gas stream is then vented to the RG/cooler/equipment vents (RGCE) packed tailgas scrubber. Exhaust gases from the cooler and equipment vents are vented to the cooler/equipment vents (CE) venturi scrubber, and then through the RGCE tailgas scrubber. Exhaust gases from the dryer are controlled by the dryer venturi scrubber and then the dryer tailgas scrubber.

In the new control equipment and stack configuration, the No. 5 Granulation Plant will utilize seven scrubbers to control emissions. Exhaust gases from the reactor and granulator will be vented through the RG venturi scrubber, and then vented through a new ammonia vaporizer. This gas stream will exit through a new dedicated stack. Gases from the cooler will vent through a new venturi scrubber. Gases from the equipment vents will vent through the existing CE venturi scrubber, and then will combine with the gas stream exiting the cooler scrubber and vent through the existing RGCE (renamed CE) packed-bed tailgas scrubber. Exhaust gases from the dryer will evacuate through the existing dryer venturi scrubber, and then through the existing dryer packed-bed tailgas scrubber. Both the dryer tailgas scrubber and the CE tailgas scrubber will be routed to the existing stack.

The applicant is not proposing any changes to the current permitted production rate. The emission rates for fluorides (F) and particulate matter (PM) will be lowered by the Department based on a recent BACT determination.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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### **B. BACT Analysis**

The best available control technology (BACT) analysis in the construction permit was based on medium-energy venturi scrubbers and packed-bed tailgas scrubbers using process cooling pond water for the No. 5 DAP Plant. The applicant is proposing to continue utilizing medium-energy venturi scrubbers and packed-bed tailgas scrubbers, with the addition of an ammonia vaporizer.

In an ammonia vaporizer, an air stream passes through the tubes of a shell and tube heat exchanger. On the shell side, ammonia is vaporized while moisture condenses from the air stream on the tube side. The condensed moisture on the tube side absorbs the majority of the fluoride present in the gas stream. In order to properly wet all surfaces and promote improved operation, a portion of the condensate is continuously recirculated over the tube sheet and through the tubes.

In addition to the five existing scrubbers, the applicant is adding two new scrubbers (ammonia vaporizer and cooler venturi scrubber) to more efficiently control F and PM emissions. The proposed control technology configuration will represent better control than the configuration proposed in the original construction and will be capable of attaining lower emission rates as compared to the current permitted emission rates.

The Department recently issued PSD-FL-336 to the same applicant for #6 Granulation plant. The control equipment configuration is the same as the #5 Granulation plant. The BACT limits established for the #6 Granulation plant for F and PM were 0.035 lb/ton and 0.15 lb/ton of P<sub>2</sub>O<sub>5</sub> input, respectively. The applicant has agreed to the same limits for the #5 Granulation plant.

### **III. RULE APPLICABILITY**

#### **A. Prevention of Significant Deterioration**

Since the modification is not proposing any changes to the current permitted emission rates and since the plant is still under construction mode, New Source Review under PSD regulations is not applicable to the proposed project.

#### **B. Federal and State Emission Standards**

The proposed facility modification is subject to the applicable provisions of Chapter 403, Florida Statutes, Chapters 62-4, 62-212 and 62-296, Florida Administrative Code (F.A.C.). The facility is located in an area designated attainment or maintenance for all criteria pollutants in accordance with F.A.C. Rule 62-275.400.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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The No. 5 Granulation plant is subject to federal NSPS under 40 CFR 60, Subpart V. Subpart V regulates F emissions from DAP plants.

The No. 5 Granulation plant is also subject to the emission limitations of Rule 62-296.403(1)(f) F.A.C. pertaining to fluoride emissions from phosphate processing plants. The standard is for fluorides, and is 0.06 lb/ton of equivalent P<sub>2</sub>O<sub>5</sub> feed. The No. 5 Granulation Plant is meeting this requirement.

Rule 62-296.403, F. A. C., Phosphate Processing, requires that existing DAP plants meet BACT or a fluoride limit for the entire plant complex of 0.4 lb/ton P<sub>2</sub>O<sub>5</sub>. The Riverview facility meets this latter requirement.

The maximum achievable control technology (MACT) standards promulgated by EPA for Phosphate Fertilizers Production Plants (40 CFR 63, Subpart BB) apply to the No. 5 Granulation Fertilizer Plant. The standard is for fluorides, and is 0.06 lb/ton of equivalent P<sub>2</sub>O<sub>5</sub> feed.

### **IV. AIR QUALITY ANALYSIS**

According to the application, the proposed project will not increase emissions of any pollutants in excess of PSD significant amounts; therefore, no air quality analysis was required by PSD rules. However, the applicant did submit an analysis of projected PM<sub>10</sub> and SO<sub>2</sub> impacts. The modeling results submitted with this analysis showed that the project would not result in significant contributions to or cause violations of any AAQS or PSD increments.

### **V. CONCLUSION**

Based on the foregoing technical evaluation of the application and information submitted by Cargill Fertilizer, Inc., the Department has made a preliminary determination that the proposed project will comply with all applicable state air pollution regulations.

April xx, 2004

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Mr. E. O. Morris, Vice President  
Environmental, Health & Safety  
Cargill Fertilizer, Inc.  
8813 Highway 41 South  
Riverview, Florida 33569

Re: DEP File No. 0570008-042-AC; PSD-FL-315C  
No. 5 Granulation (DAP) Plant

Dear Mr. Morris:

The Department received the request submitted by Golder Associates to modify the current construction permit to reflect revisions to the original stack and air pollution control equipment configurations at No. 5 Granulation (DAP) Plant at the Riverview Facility. The ongoing DAP projects were approved under permit PSD-FL-315 (DEP File 0570008-036-AC) and modified under permit PSD-FL-315A (DEP File 0570008-039-AC). The No. 5 DAP Plant was re-designated to No. 5 Ammoniated Phosphate Plant under PSD-FL-315A.

Based on the above, the Department will modify PSD-FL-315 and PSD-FL-315A, previously issued on November 21, 2001 and February 6, 2002 respectively, as follows:

**SUBSECTION A. COMMON CONDITIONS**

The Specific Conditions listed in this section apply to the following emission units:

| EMISSION UNIT NO. | EMISSION UNIT DESCRIPTION                    |
|-------------------|--|
| 063-068, 074, 107 | Molten Sulfur Handling System                |
| 005               | No. 8 Sulfuric Acid Plant                    |
| 006               | No. 9 Sulfuric Acid Plant                    |
| 073               | Phosphoric Acid Plant                        |
| 007               | EPP Plant                                    |
| 078-081, 103      | AFI Plants No. 1 and 2                       |
| 055               | No. 5 Ammoniated Phosphate Granulation Plant |

1. Unless otherwise indicated, the modification/construction and operation of the molten sulfur handling system, the Nos. 8 and 9 Sulfuric Acid Plants, the Phosphoric Acid Plant, the EPP Plant, the AFI Plant Nos. 1 and 2, and the No. 5 Ammoniated Phosphate Granulation Plant shall be in accordance with the capacities and specifications stated in the application. [Rule 62-210.300, F.A.C.]

**SUBSECTION G. No. 5 Ammoniated Phosphate Granulation Plant**

The Specific Conditions listed in this section apply to the following emission units:

| EMISSION UNIT No. | EMISSION UNIT DESCRIPTION                    |
|-------------------|--|
| 055               | No. 5 Ammoniated Phosphate Granulation Plant |

1. The process input rate of the No. 5 Ammoniated Phosphate Granulation Plant shall not exceed 1,764 tons per day of 100% phosphorus pentoxide (P<sub>2</sub>O<sub>5</sub>). [Rule 62-210.200, F.A.C.]
4. The No. 5 Ammoniated Phosphate Granulation Plant may operate up to 8,760 hours per year. [Rule 62-210.200, F.A.C.]
5. Emissions from the No. 5 Ammoniated Phosphate Granulation Plant shall not exceed the following [Rule 62-212.400, F.A.C.]

| Pollutant           | Maximum Allowable Emissions          |          |           |
|---------------------|--------------------------------------|----------|-----------|
|                     | lb/ton P <sub>2</sub> O <sub>5</sub> | lb/hr    | TPY       |
| PM/PM <sub>10</sub> | 0.174 0.15                           | 12.8 11  | 56.1 48.2 |
| Fluorides           | 0.04 0.035                           | 2.9 2.54 | 12.9 11.1 |

6. Visible emissions from the No. 5 Ammoniated Phosphate Granulation Plant shall not exceed 10% opacity. [Permit No. 0570008-014-AV]
10. The compliance test shall be conducted under each mode of operation, i.e., if the plant produced DAP and MAP, then compliance testing shall be done under both modes of operation. The two stacks for the No. 5 Granulation Plant shall be tested simultaneously during the compliance test. [Applicant Request]
12. Visible emissions from the micronutrients storage building shall not exceed 5% opacity. [Applicant Request]

A copy of this letter and attachments shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.

Michael G. Cooke, Director  
Division of Air Resources  
Management

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification (order) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on \_\_\_\_\_ to the person(s) listed:

E. O. Morris, Cargill\*  
Jim Little, EPA Region IV  
John Bunyak, NPS  
Gerald Kissel, DEP SWD  
Jerry Campbell, EPCHC  
David Buff, P.E., Golder Associates, Inc.

Clerk Stamp

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

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

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

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. E. O. Morris  
 Vice President  
 Cargill Fertilizer, Incorporated  
 8813 U.S. Highway 41 South  
 Riverview, Florida 33569

**COMPLETE THIS SECTION ON DELIVERY**

A. Signature  Agent  
 Addressee

B. Received by (Printed Name)  
Betty Rees

C. Date of Delivery

D. Is delivery address different from item 1?  Yes  
 If YES, enter delivery address below:  No

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number 7000 1670 0013 3109 8475  
 (Transfer from service label)

PS Form 3811, August 2001

Domestic Return Receipt

102595-02-M-1540

**U.S. Postal Service**  
**CERTIFIED MAIL RECEIPT**  
 (Domestic Mail Only; No Insurance Coverage Provided)

7000 1670 0013 3109 8475

|   |    |
|---|----|
| Postage   | \$ |
| Certified Fee                                       |    |
| Return Receipt Fee<br>(Encouragement Required)      |    |
| Restricted Delivery Fee<br>(Encouragement Required) |    |
| Total Postage & Fees                                | \$ |

Postmark

To: Mr. E. O. Morris  
 Street No. or PO Box No. 8813 US Hwy 41 South  
 City, State, ZIP+4 Riverview, FL 33569

PS Form 3800, May 2000

See Reverse for Instructions