



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

August 22, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David B. Jellerson, P.E.  
Environmental Superintendent  
Cargill Fertilizer, Inc.  
8813 Highway 41 South  
Riverview, Florida 33569

Dear Mr. Jellerson:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for Cargill Fertilizer to increase the production rate of the No. 4 Diammonium Phosphate plant at the existing facility in Bartow, Polk County, Florida.

Please submit any written comments to be considered concerning the Department's proposed action to Mr. John Brown at the above address.

Sincerely,

C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

CHF/JR/bjb

Attachments

cc: Bill Thomas, SWD  
Jewell Harper, EPA  
Dave Buff, P.E., KBN  
John Bunyak, NPS

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- ☐ Addressee's Address
- ☐ Restricted Delivery

Consult postmaster for fee.

**3. Article Addressed to:**

Mr. David B. Jellerson, P.E.  
Environmental Superintendent  
Cargill Fertilizer, Inc.  
8813 Highway 41 South  
Riverview, FL 33569

**4a. Article Number**

Z 751 859 973

**4b. Service Type**

☐ Registered ☐ Insured

☒ Certified ☐ COD

☐ Express Mail ☐ Return Receipt for Merchandise

**7. Date of Delivery**

AUG 29 1993

**8. Addressee's Address (Only if requested and fee is paid)**

**5. Signature (Addressee)**

*[Signature]*

**6. Signature (Agent)**

*[Signature]*

PS Form 3811, December 1991

★U.S. GPO: 1992-323-402

**DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Z 751 859 973



**Receipt for Certified Mail**

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to Mr. David Jellerson	
Street and No. Cargill Fertilizer 8813 Highway 41 South	
P.O., State and ZIP Code Riverview, FL 33569	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 8-26-94 Permit: AC 53-246403 PSD-FL-211	

PS Form 3800, March 1993

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an  
Application for Permit by:

DEP File No. AC 53-246403  
PSD-FL-211  
Polk County

Mr. David B. Jellerson  
Cargill Fertilizer, Inc.  
P.O. Box 471  
Bartow, Florida 33830

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INTENT TO ISSUE

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

The applicant, Cargill Fertilizer, Inc., applied on March 3, 1994, to the Department of Environmental Protection for a permit to increase the production rate of the No. 4 Diammonium Phosphate plant at their existing facility in Bartow, Polk County, Florida.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-212 and 17-4. The project is not exempt from permitting procedures. The Department has determined that a construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S., and Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "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. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a

waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



C. H. Fancy, P.E., Chief  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399  
904-488-1344


CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 8/26/94 to the listed persons.

Clerk Stamp

**FILING AND ACKNOWLEDGMENT**

FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

 8/26/94  
Clerk Date

Copies furnished to:

Bill Thomas, SWD  
Jewell Harper, EPA  
Dave Buff, P.E., KBN  
John Bunyak, NPS

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF INTENT TO ISSUE PERMIT

AC 53-246403  
PSD-FL-211

The Department of Environmental Protection gives notice of its intent to issue a permit to Cargill Fertilizer, Inc., P. O. Box 471, Bartow, Florida 33830, to increase the production rate of the No. 4 Diammonium Phosphate plant at their existing facility in Bartow, Polk County, Florida. A determination of Best Available Control Technology (BACT) was required. The proposed project is subject to Prevention of Significant Deterioration regulations and federal new source performance standards. The project will increase the annual allowable diammonium phosphate production at the Cargill Fertilizer, Inc., facility by 67% and is not expected to result in significant deterioration of the environment. There is a less than significant consumption of PM/PM10 increment. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, 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 decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application 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:

Department of Environmental Protection  
Bureau of Air Regulation  
111 S. Magnolia Park Courtyard  
Tallahassee, Florida 32301

Department of Environmental Protection  
Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8218

Any person may send written comments on the proposed action to Mr. John Brown at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

Further, a public hearing can be requested by any person(s). Such requests must be submitted within 30 days of this notice.

Technical Evaluation  
and  
Preliminary Determination

Cargill Fertilizer, Inc.  
Polk County  
Bartow, Florida

No. 4 Diammonium Phosphate Plant  
Production Modifications

Permit No. AC 53-246403  
PSD-FL-211

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

August 22, 1994

## I. Application Information

### A. Applicant

Cargill Fertilizer, Inc.  
P. O. Box 471  
Bartow, Florida 33830

### B. Request

The Department received an application on March 3, 1994, for a permit to increase the production rate of the No. 4 Diammonium Phosphate (DAP) plant at the applicant's phosphate complex in Bartow, Florida. After receiving additional information on April 27 and June 28, 1994, the application was deemed complete.

### C. Classification/Location

The applicant's facility (SIC Code 2874) is located one mile north of State Road 60, 3 miles west of Bartow, Polk County, Florida. Latitude is 27°54'22"N and longitude is 81°54'59"W. The UTM coordinates of the site are: Zone 17, 409.5 km E and 3086.8 km N.

## II. Project Description/Emissions

It is proposed to increase the annual production rate of the No. 4 DAP plant from 1,300,000 TPY to 2,170,212 TPY of diammonium phosphate product (46 - 47% P<sub>2</sub>O<sub>5</sub>) while reducing the allowable annual production hours from 8,760 to 8,500. The hourly production rate will increase from 165 TPH (76 TPH @ 100% P<sub>2</sub>O<sub>5</sub>) to 261 TPH (120 TPH @ 100% P<sub>2</sub>O<sub>5</sub>). The requested production increase will be accomplished without any changes to the process equipment or pollution control equipment.

Annual emission changes resulting from the increased production rate are summarized in the following table:

EMISSIONS (TONS/YR)

Pollutant	TPY		TPY Proposed Allowable	Contemporaneous Changes	Net Increase
	Current	Actual			
PM/PM <sub>10</sub>	53.4		96.9	19.7	23.8
SO <sub>2</sub>	0.04		37.8	-	37.8
Fluorides	7.5		23.4	13.6	2.3
NO <sub>x</sub>	9.7		27.2	12.3	5.2
CO	2.4		6.0	-	3.6
VOC	0.4		0.6	-	0.2

The increase in emissions of PM/PM<sub>10</sub> exceeds the significant emissions rate of 15 TPY listed in Table 212.400-2 of Chapter 17-212, F.A.C. A list of creditable emissions decreases is included in the application.

### III. Rule Applicability

The construction permit application is subject to review under Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-209 through 17-297 and 17-4. The facility is located in an area designated attainment for all criteria pollutants (Rule 17-275.400, F.A.C.). The proposed project is subject to the preconstruction review requirements of Rule 17-212.400, F.A.C., Prevention of Significant Deterioration (PSD). The proposed increase in PM/PM<sub>10</sub> emissions exceeds the significant level set forth in Table 17-212.400-2 of Chapter 17-212, F.A.C. Preconstruction review must include a determination of Best Available Control Technology (BACT), good-engineering practice stack height, ambient impact analysis, impact on soils, vegetation, and visibility. Rules 17-212.400(2)(g), 17-296.800, Table 296.800-1, Section 60.220, and 17-297.300, Table 297.330-1, apply to this production increase. PM/PM<sub>10</sub> emissions and visible emissions will be limited by the BACT determination. Fluoride emissions will be limited by the federal new source performance standards, 40 CFR 60, Subpart V.

### IV. Air Quality Analysis

#### a. Introduction

The production rate increases due to the project will result in actual emissions increases, which are projected to be greater than the PSD significant rates for PM/PM<sub>10</sub>. Therefore, the project is subject to the PSD review requirements contained in Rule 17-212.400, F.A.C. Part of these requirements is an air quality impact analysis for these pollutants, which includes:

- \* Analysis of existing air quality.
- \* PSD increment analysis for PM/PM<sub>10</sub>.
- \* Ambient Air Quality Standards (AAQS) analysis.
- \* Analysis of impacts on soils, vegetation, visibility, and growth-related air quality impacts.
- \* Good Engineering Practice (GEP) stack height determination

The analysis of existing air quality generally relies on preconstruction monitoring data collected in accordance with EPA-approved methods. The PSD increment and AAQS analyses are based on air quality dispersion modeling completed in accordance with EPA guidelines. Based on these required analyses, the Department has reasonable assurance that the project, as described in this report and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any PSD

increment or AAQS. However, the following EPA-directed stack height language is included: "In approving this permit, the Florida Department of Environmental Protection has determined that the application complies with the applicable provisions of the stack height regulations as revised by EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in NRDC v. Thomas, 838 F. 2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when EPA revises the regulation in response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators." A brief description of the modeling method used and results of the required analyses follow. A more complete description is contained in the permit application on file.

#### b. Analysis of the Existing Air Quality

Preconstruction ambient air quality monitoring may be required for pollutants subject to PSD review. However, an exemption from the monitoring requirement can be obtained if the maximum air quality impact resulting from the projected emissions increase, as determined through air quality modeling, is less than a pollutant-specific de minimus concentration.

The predicted maximum concentration increase for PM/PM<sub>10</sub> is 2.74 ug/m<sup>3</sup>, which is less than the 24-hour average PSD de minimus concentration of 10 ug/m<sup>3</sup>. Therefore, no preconstruction monitoring analysis is required.

#### c. Modeling Method

The EPA-approved Industrial Source Complex Short-Term (ISCST2) dispersion model was used by the applicant to predict the impact of increased PM/PM<sub>10</sub> emissions from the proposed project on the surrounding ambient air. All recommended EPA default options were used. The potential for building downwash was also assessed. Five years of sequential hourly surface and mixing depth data from the Tampa, Florida National Weather Service, collected during 1982 through 1986, were used in this model. The highest predicted yearly average was compared with the standards.

#### d. Modeling Results

Dispersion modeling was performed with 216 regular grid receptors placed along the 36 standard radial directions (10 degrees apart) surrounding the proposed source at the following downwind distances: 5, 6, 7, 8, 9 and 10 km from the No. 4 plant stack. In addition, 216 discrete receptors were placed along the plant boundary and beyond at distances of 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, and 4.5 km. The following results are based on the applicant's modeling, which assumed the applicant's proposed emission limit of 32 lbs/hr vs. the Department's proposed limit of

22.8 lbs/hr: 2.74 ug/m<sup>3</sup> for the 24-hour averaging time and 0.11 ug/m<sup>3</sup> for the annual. These values are less than the significance levels of 5 and 1 ug/m<sup>3</sup>, respectively. Therefore, further dispersion modeling was not required.

The Chassahowitzka National Wilderness Area is a Class I area that is located approximately 105 km north-northwest of the Cargill plant. The maximum impact from this production increase was evaluated at 13 discrete receptors located along the border of the Class I area and compared to the Class I significance levels recommended by the National Park Service (NPS). The maximum 24-hour PM/PM<sub>10</sub> impact is 0.033 ug/m<sup>3</sup>, which is less than the NPS significant impact level of 0.33 ug/m<sup>3</sup>. The maximum annual PM/PM<sub>10</sub> impact is 0.0013 ug/m<sup>3</sup>, which is less than the NPS significant impact level of 0.08 ug/m<sup>3</sup>. Therefore, no further dispersion modeling for comparison with Class I increment consumption was required.

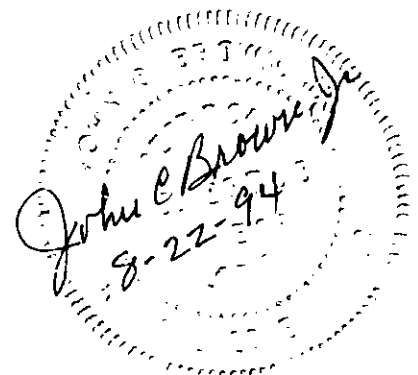
#### e. Additional Impacts Analysis

A Level-1 screening analysis using the EPA model VISCREEN was used to determine any potential adverse visibility impacts on the Class I Chassahowitzka National Wilderness Area. Based on this analysis, the maximum predicted visual impacts due to the proposed project are less than the screening criteria both inside and outside the Class I area.

The maximum predicted concentrations from PM/PM<sub>10</sub> are predicted to be less than the national primary and secondary ambient air quality standards (AAQS). Consequently, no harmful effect on soils and vegetation is expected. In addition, the proposed production increase will not significantly change employment, population, housing or commercial/industrial development in the area to the extent that a significant air quality impact will result.

#### V. Conclusion

Based on the information provided by Cargill Fertilizer, the Department has reasonable assurance that the proposed project, as proposed herein, will not cause or contribute to a violation of an ambient air quality standard, PSD increment, or any other technical provisions of Chapters 17-209 through 17-297 of the Florida Administrative Code.





# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

**PERMITTEE:**  
Cargill Fertilizer, Inc.  
P. O. Box 471  
Bartow, Florida 33830

**Permit Number:** AC53-246403  
PSD-FL-211  
**Expiration Date:** June 2, 1995  
**County:** Polk  
**Latitude/Longitude:** 27°54'22"N  
81°54'59"W  
**Project:** Bartow No. 4 Diammonium  
Phosphate Plant - Production  
Increase to 261 TPH (120 TPH @ 100%  
P<sub>2</sub>O<sub>5</sub>)

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 17-210, 212, 272, 275, 296, and 297; and, 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached and specifically described as follows:

For an increase in production of diammonium phosphate from 165 TPH (76 TPH @ 100% P<sub>2</sub>O<sub>5</sub>) to 261 TPH (120 TPH @ 100% P<sub>2</sub>O<sub>5</sub>) and from 1,300,000 TPY to 2,170,212 TPY in the No. 4 diammonium phosphate plant. This emission unit/source is located at the permittee's existing facility in Bartow, Polk County, Florida. The UTM coordinates are Zone 17, 409.5 km East and 3086.8 km North.

The emission unit/source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. DEP letter dated March 24, 1994.
2. NPS letter dated March 30, 1994.
3. KBN letter dated April 22, 1994.
4. DEP letter dated May 9, 1994.
4. KBN letter dated June 27, 1994.
5. EPA letter dated July 11, 1994.

**PERMITTEE:**  
**Cargill Fertilizer, Inc.**

**Permit Number: AC 53-246403**  
**PSD-FL-211**  
**Expiration Date: June 2, 1995**

**GENERAL CONDITIONS:**

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 any 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 of 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 acknowledgement 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.

**PERMITTEE:**  
Cargill Fertilizer, Inc.

**Permit Number:** AC 53-246403  
PSD-FL-211  
**Expiration Date:** June 2, 1995

**GENERAL CONDITIONS:**

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 any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. A description of and cause of non-compliance; and,
- b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

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

**PERMITTEE:**  
Cargill Fertilizer, Inc.

**Permit Number:** AC 53-246403  
PSD-FL-211  
**Expiration Date:** June 2, 1995

**GENERAL CONDITIONS:**

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 17-4.120 and 17-30.300, 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:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards (NSPS)

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 for 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.

PERMITTEE:  
Cargill Fertilizer, Inc.

Permit Number: AC 53-246403  
PSD-FL-211  
Expiration Date: June 2, 1995

**GENERAL CONDITIONS:**

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and,
- 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.

**SPECIFIC CONDITIONS:**

1. Pursuant to Rule 17-212.200(56), F.A.C., Potential to Emit (PTE), the maximum permitted diammonium phosphate (DAP) production rate for the No. 4 DAP plant shall be 261 TPH (120 TPH @ 100% P<sub>2</sub>O<sub>5</sub>) and 2,170,212 TPY. Records shall be maintained by the permittee to document the hourly production.

2. Pursuant to Rule 17-212.200(56), F.A.C., the No. 4 DAP plant shall be operated no more than 8,500 hours per year.

3. Pursuant to Rule 17-212.200(56), F.A.C., natural gas shall be the primary fuel used in the drying operation. The maximum heat input rate to the dryer shall be 40 MMBtu/hr.

4. Pursuant to Rule 17-212.410, F.A.C., BACT, the total allowable emissions/limitations from the No. 4 DAP plant shall not exceed:

Pollutant	Basis	Total Allowable Emissions/Limitations
PM/PM <sub>10</sub>	0.19 lb/ton P <sub>2</sub> O <sub>5</sub>	22.8 lbs/hr and 96.9 tons/yr
VE	Similar source permits	10% opacity max.

5. Pursuant to Rules 17-212.200(56) and 17-212.400(2)(g), F.A.C., PTE and Source Obligation, respectively, maximum SO<sub>2</sub> emissions from the No. 4 DAP plant shall be limited in accordance with the following fuel oil limitations; in addition, the No. 6 fuel oil is for emergency use only; and, any increase of SO<sub>2</sub> emissions of 2.2 TPY will require BACT:

Pollutant	Fuel Oil Limitation	Total Allowable Fuel Oil Usage
SO <sub>2</sub>	No. 6 fuel oil, max. 2.4%, by weight, sulfur	max. 200,000 gals/yr and 750 hrs/yr

**PERMITTEE:**  
**Cargill Fertilizer, Inc.**

**Permit Number: AC 53-246403**  
**PSD-FL-211**  
**Expiration Date: June 2, 1995**

**SPECIFIC CONDITIONS:**

6. Pursuant to Rule 17-296.800, F.A.C., the following standards are incorporated by reference and are applicable:

o **40 CFR 60.222 Standard for fluorides.**

(a) Total fluoride emissions from this plant shall not exceed 30 g/metric ton of equivalent  $P_2O_5$  feed (0.060 lb/ton; 5.50 lbs/hr; 23.40 TPY).

o **40 CFR 60.223 Monitoring of operations.**

(a) The owner or operator shall install, calibrate, maintain, and operate a monitoring device which can be used to determine the mass flow of phosphorus-bearing feed material to the process. The monitoring device shall have an accuracy of  $\pm 5$  percent over its operating range.

(b) The owner or operator shall maintain a daily record of equivalent  $P_2O_5$  feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using the flow monitoring device meeting the requirements of 40 CFR 60.223(a) and then by proceeding according to 40 CFR 60.224(b)(3).

(c) The owner or operator shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the process scrubbing system. The monitoring device shall have an accuracy of  $\pm 5$  percent over its operating range.

7. Pursuant to Rules 17-296.800 and 17-297.401, F.A.C., the following standards are incorporated by reference and applicable:

o **40 CFR 60.224 Test methods and procedures.**

(a) The owner or operator shall use as reference methods and procedures the test methods in 40 CFR 60 Appendix A, except as provided in 40 CFR 60.8(b).

(b) The owner or operator shall determine compliance with the total fluoride emission standards as follows:

PERMITTEE:  
Cargill Fertilizer, Inc.

Permit Number: AC 53-246403  
PSD-FL-211  
Expiration Date: June 2, 1995

**SPECIFIC CONDITIONS:**

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \frac{\sum_{i=1}^N C_{si} Q_{sdi}}{(P K)}$$

where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent  $P_2O_5$  feed.

$C_{si}$  = concentration of total fluorides from emission point "i", mg/dscm (mg/dscf).

$Q_{sdi}$  = volumetric flow rate of effluent gas from emission point "i", dscm/hr (dscf/hr).

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

P = equivalent  $P_2O_5$  feed rate, metric ton/hr (ton/hr).

K = conversion factor, 1000 mg/g (453,500 mg/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration ( $C_{si}$ ) and volumetric flow rate ( $Q_{sdi}$ ) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent  $P_2O_5$  feed rate (P) shall be computed for each run using the following equation:

$$P = M_p R_p$$

where:

$M_p$  = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).

$R_p$  =  $P_2O_5$  content, decimal fraction.

(i) The accountability system of 40 CFR 60.223(a) shall be used to determine the mass flow rate ( $M_p$ ) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference-see 40 CFR 60.17) shall be used to determine the  $P_2O_5$  content ( $R_p$ ) of the feed.

8. Fugitive emissions from the process shall be controlled by sealing and/or venting all particulate matter and fumes from the equipment to the pollution abatement system.

9. Pursuant to Rule 17-297.340(1)(a), F.A.C., and before this construction permit expires, testing for PM/PM<sub>10</sub>, visible emissions and fluoride shall be conducted on the No. 4 DAP plant's common

**PERMITTEE:**  
**Cargill Fertilizer, Inc.**

**Permit Number: AC 53-246403**  
**PSD-FL-211**  
**Expiration Date: June 2, 1995**

**SPECIFIC CONDITIONS:**

stack with the emission unit/source operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit/source may be tested at less than capacity (i.e., less than 90% of maximum operating rate allowed by the permit); in this case, subsequent emission unit/source operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit/source is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.

10. Pursuant to Rule 17-297.340(1)(i), the Department's Southwest District office shall be notified in writing at least 15 days prior to source testing. Pursuant to Rule 17-297.570(1) and (2), written reports of the test results shall be submitted to that office within 45 days of test completion.

11. Pursuant to Rules 17-296.800 and 17-297.401, F.A.C., the test procedures for PM/PM10, visible emissions and fluorides, shall be in accordance with EPA Reference Methods 1, 2, 3, 4 and 5, 9, and 13A or 13B, respectively, as published in 40 CFR 60, Appendix A (July 1, 1993 version). Compliance with the fuel oil sulfur content shall be determined using ASTM D240 or ASTM D1552 in accordance with 40 CFR 60.17 (July 1, 1992 version).

12. Pursuant to Rule 17-296.320(2), F.A.C., Objectionable Odor Prohibited, no person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

13. Pursuant to Rule 17-210.650, F.A.C., 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.

14. Pursuant to Rule 17-210.700, Excess Emissions, the No. 4 DAP plant is subject to the following:

a. Rule 17-210.700(1): Excess emissions resulting from startup, shutdown or malfunction of any source 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.

b. Rule 17-210.700(4): Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other

**PERMITTEE:**  
Cargill Fertilizer, Inc.

**Permit Number:** AC 53-246403  
PSD-FL-211  
**Expiration Date:** June 2, 1995

**SPECIFIC CONDITIONS:**

equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

c. Rule 17-210.700(5): Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

d. Rule 17-210.700(6): In case of excess emissions resulting from malfunctions, each source shall notify the Department or the appropriate Local Program in accordance with Rule 17-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

15. Pursuant to Rules 17-210.370(2)(a) and (b), F.A.C., Reports, the permittee shall submit an Annual Operating Report using DER Form 17-210.900(4) to the Department's Southwest District office by March 1 of the following year for the previous year's operation.

16. Pursuant to Rule 17-4.090, F.A.C., the permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit.

17. Pursuant to Rules 17-4.055 and 17-4.220, F.A.C., an application for an operation permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit.

Issued this \_\_\_\_\_ day  
of \_\_\_\_\_, 1994

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION**

\_\_\_\_\_  
Virginia B. Wetherell, Secretary