

# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

October 9, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Melody Russo Environmental Superintendent Cargill Fertilizer, Inc. 8813 Highway 41 South Riverview, Florida 33569

Re: DRAFT Permit No.: 0570008-013-AC (PSD-FL-234)

Animal Feed Ingredient Plants

Dear Ms. Russo:

Enclosed is one copy of the DRAFT Air Construction Permit for the Animal Feed Ingredient Plants located at the Cargill Riverview Fertilizer Facility, 8813 Highway 41 South, Riverview, Hillsborough County. The Technical Evaluation and Preliminary Determination along with the Department's Intent to Issue Air Construction Permit and the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT" must be published within 30 (thirty) days of receipt of this letter. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the alloted time 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., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Syed Arif or Mr. Linero at 904/488-1344.

Sincerely,

C. H. Fancy, P.E., Chief,

Bureau of Air Regulation

~, P.E. 10/4 for

CHF/sa/h

Enclosures

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In the Matter of an Application for Permit by:

Cargill Fertilizer, Inc 8813 Highway 41 South Riverview, Florida 33569/ DRAFT Permit No.:0570008-013-AC (PSD-FL-234) Animal Feed Ingredient Plants Hillsborough County

#### INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit (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., applied on July 17, 1996, to the Department for an air construction permit for its facility located at 8813 Highway 41 South, Riverview, Hillsborough County. The request is to revise permitted emission limits for the existing animal feed ingredient plant, construct a second identical animal feed ingredient plant, and issue a single permit covering both plants pursuant to Prevention of Significant Deterioration (PSD).

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 that the air construction permit is required to construct the second animal feed ingredient plant and to modify the first one at the described facility.

The Department intends to issue this air construction permit 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 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT". The notice shall be published one time only within 30 (thirty) days in the legal advertisement section of a newspaper of general circulation in the area affected. 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. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. 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: 904/488-1344; Fax 904/922-6979) within 7 (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 pursuant to Rule 62-103.150 (6), F.A.C.

The Department will issue the FINAL Permit, in accordance with the conditions of the enclosed DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

Draft Permit No.: 0570008-013-AC, (PSD-FL-234)

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The Department will accept written comments concerning the proposed DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT." Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the Department shall issue a Revised DRAFT 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., or a party requests mediation as an alternative remedy under Section 120.573 F.S. before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's 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 (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9730, fax: 904/487-4938. Petitions 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. A petitioner must 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 (or a request for mediation, as discussed below) 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 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the 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 the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action addressed in this notice of intent.

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 of intent. 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 person whose substantial interests are affected by the Department's proposed permitting decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by

Draft Permit No.: 0570008-013-AC, (PSD-FL-234)

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filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information: (a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any; (b) A statement of the preliminary agency action; (c) A statement of the relief sought; and (d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following: (a) The names, addresses, and telephone numbers of any persons who may attend the mediation; (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time; (c) The agreed allocation of the costs and fees associated with the mediation; (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation; (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen; (f) The name of each party's representative who shall have authority to settle or recommend settlement; and (g) The signatures of all parties or their authorized representatives.

As provided in Section 120.573 F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.57 F.S. for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.569 and 120.57 F.S. remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

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

Draft Permit No.: 0570008-013-AC, (PSD-FL-234)

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(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.

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

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#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE AIR CONSTRUCTION PERMIT (including the PUBLIC NOTICE, Technical Evaluation and Preliminary Determination, Draft BACT Determination, and the DRAFT permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 10-10-96 to the person(s) listed:

Melody Russo, Cargill \*
Brian Beals, EPA
John Bunyak, NPS
Bill Thomas, SWD
Jerry Campbell, HCEPC
David Buff, P.E., KBN

Clerk Stamp

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

Kmi John 10-10-96 (Clerk) (Date)

#### PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

# STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Permit No.: 0570008-013-AC, (PSD-FL-234)
Cargill Riverview Fertilizer Facility
Animal Feed Ingredient Plants
Hillsborough County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Cargill Fertilizer, Inc., for a revision of the emission limits at a recently constructed animal feed ingredient (AFI) plant, and addition of a second AFI plant at the fertilizer manufacturing facility located on Highway 41 in Riverview, Hillsborough County. A Best Available Control Technology (BACT) determination was required for particulate matter (PM/PM<sub>10</sub>), fluoride (F), and nitrogen oxides (NO<sub>x</sub>) pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The applicant's name and address are: Cargill Fertilizer, Inc., 8813 Highway 41 South, Riverview, Florida 33569.

This permit will revise the allowable emission rates for particulate matter (PM/PM<sub>10</sub>) for the dryer/vents scrubber for the existing animal feed ingredient plant 1. The project will increase the production rate of the animal feed ingredient plants from 150,000 TPY to 300,000 TPY. This increase will be accomplished through the addition of a second animal feed ingredient plant essentially identical to the existing plant. The modification will also increase the operating hours of the granulation operation. The PSD review and BACT determination are applicable to all production from both plants for all applicable pollutants.

Emissions of these pollutants will not exceed the following limits:

| Poliutant | Significant Rate    | Maximum Emissions |
|-----------|---------------------|-------------------|
|           | Tons Per Year (TPY) | TPY               |
| F         | 3                   | 3.26              |
| NOx       | 40                  | 56.84             |
| PM        | 25                  | 57.36             |
| PMin      | 15                  | 57.36             |

An air quality impact analysis was conducted. Emissions from the facility will consume PSD increment but will not significantly contribute to or cause a violation of any state or federal ambient air quality standards. The maximum percent of allowable PSD Class II increments consumed from this project, along with all other sources in the area, will be as follows:

| PSD Class II                          | Increment Consumed (µg/m³) | Allowable Increment (µg/m³) | Percent Increment Consumed |
|---------------------------------------|----------------------------|-----------------------------|----------------------------|
| PM <sub>10</sub><br>24-hour<br>Annual | 11.6<br>1.0                | 30<br>17                    | 39<br>6                    |
| NO₂<br>Annual                         | 5.4                        | 25                          | 22                         |

The project has an insignificant impact on the Chassahowitzka PSD Class I area; therefore, no increment consumption was determined.

The Department will issue the FINAL Permit, in accordance with the conditions of the enclosed DRAFT Permit 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 DRAFT Permit issuance action for a period of 30 (thirty) days from the date of publication of this Notice. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit, the Department shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice.

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A person whose substantial interests are affected by the Department's 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 (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9370, fax: 904/487-4938. Petitions 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. A petitioner must 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 (or a request for mediation, as discussed below) 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 28-5.207 of the Florida Administrative Code.

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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:

Department of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: 904/488-1344

Fax: 904/922-6979

Department of Environmental Protection Southwest District Office Tampa, Florida 33619 Telephone: 813/744-6100 Fax: 813/744-6458

Hillsborough County Environmental Protection Commission Air Management Division 1410 North 21 Street Tampa, Florida 33605 813/272-5960



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 Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 904/488-1344, for additional information.

# TECHNICAL EVALUATION

#### **AND**

# PRELIMINARY DETERMINATION

Cargill Fertilizer, Inc., Riverview, Hillsborough County, Florida

Animal Feed Ingredient Plants 1 and 2 Air Permit Number 0570008-013-AC PSD-FL-234 (Includes Revision of 0570008-002-AC)

Department of Environmental Protection
Bureau of Air Regulation
New Source Review Section

Cargill Fertilizer, Inc. Animal Feed Plant 1 and 2 Air Permit No. 0570008-013-AC PSD-FL-234

#### 1. APPLICATION INFORMATION

#### 1.1 Applicant Name and Address

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

Authorized Representative:
Melody Russo, Environmental Superintendent

#### 1.2 Reviewing and Process Schedule

7-17-96: Date of Receipt of Application

8-16-96: Application complete

#### 2. FACILITY INFORMATION

#### 2.1 Facility Location

#### Cargill Fertilizer, Inc.

Fertilizer Manufacturing Facility UTM: Zone 17, 362.9 and 3082.5

#### 2.2 Standard Industrial Classification Code

| Major Group Number | 28_  | Chemicals & Allied Products |
|--------------------|------|-----------------------------|
| Group Number       | 287  | Agricultural Chemicals      |
| Industry Number    | 2874 | Phosphatic Fertilizers      |

# 2.3 Facility Category

This industry is on the list of the 28 Major Facility Categories per Chapter 62, Table 62-212.400-1, F.A.C. This installation is an existing fertilizer manufacturing facility consisting of phosphoric acid plants, sulfuric acid plants, mono-ammonium phosphate plant, di-ammonium phosphate plant, etc. Air pollutant emissions from the facility are over 100 tons per year (TPY) of particulate matter (PM/PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO) and volatile organic compounds (VOCs). This is a Major Facility per Rule 62-210.200(171), F.A.C. and a Major (Title V) Source of Air Pollution per Rule 62-210.200(173).

Cargill Fertilizer, Inc. Animal Feed Plant 1 and 2 Air Permit No. 0570008-013-AC PSD-FL-234

#### 3. PROJECT DESCRIPTION

3.1 This project involves the following emissions units:

| EMISSION<br>UNIT NO. | EMISSION UNIT DESCRIPTION            |
|----------------------|--------------------------------------|
| 103*                 | Common stack Animal Feed Plant 2     |
| 078#                 | Common stack Animal Feed Plant 1     |
| 079#                 | Diatomaceous Earth Silo              |
| 080#                 | Limestone Silo                       |
| 081#                 | Animal Feed Phosphate Loadout System |

- \* New emission unit
- # Existing emission units common with Animal Feed Plant 1

Cargill Fertilizer, Inc. requested the following:

1. To increase the production rate of the animal feed plant from 150,000 TPY to 300,000 TPY. This expansion will be accomplished through the addition of a second animal feed plant essentially identical to the existing plant.

To increase the existing PM emission limit for the dryer/vents scrubber from 2.82 pounds per hour (lb/hr) to 6.0 lb/hr. The same emission limit is proposed for the new animal feed plants dryer/vents scrubber.

2. To increase the operating hours of the granulation operation for the existing animal feed plant from 8,300 hours per year to 8,760 hours per year.

The proposed permit revisions and the expansion will, however, result in a significant net emissions increase for  $PM/PM_{10}$ , F, and  $NO_x$ .

# Background Information

The existing Animal Feed Ingredient (AFI) Plant 1 was originally permitted under air construction permit AC29-242897, issued June 16, 1994. This permit was amended on January 12, 1996, with the issuance of air construction permit 0570008-002-AC. This plant is currently permitted to produce a total of 150,000 tons per year (TPY) of granular animal feed ingredient. The new AFI Plant 2 will allow the production rate to increase from 150,000 TPY to 300,000 TPY.

In addition to the proposed increase in production rate, revisions are being sought to increase the allowable PM emission limit for AFI Plant 1. The original vendor guarantees for PM emissions from the control equipment serving the common stack were not routinely achievable based on tests conducted by

Cargill Fertilizer, Inc. Animal Feed Plant 1 and 2 Air Permit No. 0570008-013-AC PSD-FL-234

Cargill. The new PM/PM<sub>10</sub> emission limits for the dryer/vents scrubber at each animal feed plant are proposed to be 6.0 lb/hr and 26.28 TPY compared with the original values of 2.82 lb/hr and 11.69 TPY for each of the animal feed plants.

#### 4. PROJECT DESCRIPTION

#### 4.1 General Information

There are two types of animal feed phosphate (AFP) that are produced at this facility. They are dicalcium phosphate (DCP) and monocalcium phosphate (MCP). The process involves defluorinating the phosphatic fertilizer solution (PFS) from the existing phosphate fertilizer plant, and reacting it with limestone to produce animal feed phosphates. The defluorination process is a batch operation which uses diatomaceous earth and PFS. After reaction with limestone, the products are discharged to a rotary dryer where they are granulated. The solids are discharged from the dryer to the solids handling section of the granulation plant where the product is classified, cooled and de-dusted. Product material is then transferred to bulk storage where it is subsequently loaded into trucks or railcars. The new plant will be essentially identical and adjacent to the existing plant. The new plant will share certain common equipment with the existing plant. The shared equipment will include the diatomaceous earth and limestone unloading systems, and the AFP loadout system.

# 4.2 Process Description

# 4.2.1 Emission Unit ID 079 - Diatomaceous Earth Unloading

Diatomaceous earth (DE) is pneumatically unloaded from trucks or railcars and conveyed to a storage silo. The silo is fitted with an efficient baghouse to control PM emissions from the transfer operation. The maximum DE unloading rate is currently 12 TPH. The DE is then transferred to a weigh bin before it is pneumatically transferred to the acid defluorination tanks. With the proposed plant expansion, the DE unloading operation will remain the same (12 TPH, maximum), but maximum operating hours will increase to 8,760 hr/yr. DE will be pneumatically conveyed to the acid batch tanks in both the existing and the new animal feed plants.

#### 4.2.2 Emission Unit ID 103 - Acid Defluorination

DE is metered from the weigh bin to the acid batch tanks where it is slurried with PFS and defluorinated in a batch stripping process. The existing AFI Plant 1 has two batch tanks. The proposed plant will add two additional batch tanks. At the conclusion of the batch operation, defluorinated PFS is pumped to the storage tanks.

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Fluoride emissions from the acid batch tanks are controlled by wet scrubbers. The two existing AFI Plant 1 batch tanks are controlled by a single wet scrubber. The two new AFI Plant 2 batch tanks will be controlled by a separate wet scrubber, equivalent in design to the existing AFI Plant 1 wet scrubber.

#### 4.2.3 Emission Unit ID 080 - Granulation Process

The defluorinated PFS is reacted with limestone to produce calcium phosphate. Ground limestone is pneumatically unloaded from trucks into a bulk storage silo adjacent to the granulation plant area for AFI Plant 1. The maximum limestone unloading rate is 25 TPH. A baghouse controls PM emissions from the transfer operation. Limestone is periodically transferred from the storage silo by pneumatic conveyor to the limestone day bin in the granulation plant building. PM emissions from the day bin are controlled by a baghouse. The baghouse is vented back inside the building.

The limestone is metered from the limestone day bin into a hopper and then into a high speed mixer where it reacts with heated defluorinated PFS to form a mixture of MCP or DCP. The proportions of limestone and hot acid are adjusted to make the desired grade of AFP. A stream of dust and crushed oversize material from the recycle system are added to the acid/limestone slurry in the pug mill, which produces a granular material. The damp calcium phosphate solids are discharged from the pug mill directly into the rotary dryer. Heated air is supplied to the dryer from a separate combustion chamber which is normally fueled by natural gas. Provisions are made to use No. 2 fuel oil as a stand-by fuel for less than 400 hours per year. Dry solids discharge from the end of the dryer, through a grizzly, into the dryer elevator. The dryer exhaust gases pass through cyclones to capture product, and then through a venturi scrubber for PM control.

The AFI Plant 2 will utilize the existing limestone unloading system and storage silo. This system will be common to both plants. The AFI Plant 2 granulation area will be equivalent in design to the AFI Plant 1 granulation area. The maximum production rate of the AFI Plant 2 dryer will be the same as the AFI Plant 1 dryer: 150,000 TPY of AFP, which equates to 24.17 TPH based on a 17-hour day, 365 days per year. The proposed combined future production rate of both AFI Plants 1 and 2 will be 300,000 TPY, or 48.35 TPH based on a 17-hour day.

# 4.2.4 Emission Unit ID 103 - Solids Handling

The solids handling section of the AFI Plant 1 granulation plant takes the solids discharged from the dryer and classifies, cools and de-dusts the materials. The dryer elevator discharges material onto a double-deck screen which separates the material into oversize, product and fine streams. Provisions are made to bypass excess recycle material around the screen directly to the roller mill, which also receives the oversize material from the screen

Product size material from the screen discharges to a fluid bed classifier/cooler. This unit removes dust and fines from the product stream by entrainment into the fluidizing air and cools the product material

Figure 2-1 Animal Feed Plant Process Flow Diagram

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Source: Cargill Fertilizer, Inc., 1995

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to minimize storage and shipping problems. Cooled, onsize material is discharged from the fluid bed unit into the product storage silos. Particulate emissions from the mills and classifier/cooler are vented to the equipment vents cyclones and then to the dryer venturi scrubber.

AFI Plant 2 will utilize an identical system for solids handling, consisting of a fluid bed cooler/classifier and roller mills. AFP will be sent to the existing product silos which also serve AFI Plant 1. Particulate emissions from the AFI Plant 2 mills and classifier/cooler will be vented to the equipment vent cyclones and then to the dryer venturi scrubber within the plant. The exhaust from the scrubber exits through the AFI Plant 2 common stack.

#### 4.2.5 Emission Unit ID 081- Product Loadout

The existing product loadout system will serve both. Product from the product silos is metered to the loadout elevator and then to the loadout surge bin, loadout weigh bin, and finally to trucks or railcars. The maximum loading rate through the loadout system is 100 TPH. The silos and load-out systems are equipped with ventilation systems and a baghouse to control PM emissions. An 80-ton tank is used to store off-specification material for recycle. PM emissions from the tank are vented to the equipment vent cyclones.

The process flow diagram for this facility is presented in Figure 2-1.

#### 5. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the applicable provisions of Chapter 403, Florida Statutes, and Chapters 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). This facility is located in Hillsborough County, an area designated as air quality maintenance area for PM. The proposed project is subject to review under Rule 62-212.400., F.A.C., Prevention of Significant Deterioration (PSD), because the emission increases for PM/PM<sub>10</sub>, F, and NO<sub>x</sub> exceed the significance emission rates given in Chapter 62, Table 62-212.400-2. This review consists of a determination of Best Available Control Technology (BACT) and unless otherwise exempted, an analysis of the air quality impact of the proposed project's impacts on soils, vegetation and visibility along with air quality impacts resulting from associated commercial, residential and industrial growth. The emission units affected by this modification shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations) and, specifically, the following chapters and rules:

• Chapter 62-4

• Rule 62-204.220

• Rule 62-204.240

**Permits** 

Ambient Air Quality Protection Ambient Air Quality Standards

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| •  | Rule 62-204.260 | Prevention of Significant Deterioration Increments                      |    |
|----|-----------------|---|----|
| •  | Rule 62-204.360 | Designation of Prevention of Significant Deteriration Areas             |    |
| •  | Rule 62-204.800 | Federal Regulations Adopted by Reference                                |    |
| •  | Rule 62-210.300 | Permits Required  |    |
| •  | Rule 62-210.350 | Public Notice and Comments  |    |
| •  | Rule 62-210.370 | Reports   |    |
| •  | Rule 62-210.550 | Stack Height Policy   |    |
| •  | Rule 62-210.650 | Circumvention   |    |
| •  | Rule 62-210.700 | Excess Emissions  |    |
| ●. | Rule 62-210.900 | Forms and Instructions  |    |
| •  | Rule 62-212.300 | General Preconstruction Review Requirements                             |    |
| •  | Rule 62-212.400 | Prevention of Significant Deterioration                                 |    |
| •  | Rule 62-212.500 | Preconstruction Review for Nonattainment Areas                          |    |
| •  | Rule 62-296.320 | General Pollutant Emission Limiting Standards                           |    |
| •  | Rule 62-296.403 | Phosphate Processing  |    |
| •  | Rule 62-296.700 | Reasonable Available Control Technology (RACT) Particulate Matter       | .3 |
| •  | Rule 62-296.705 | Phosphate Processing Operations   |    |
| •  | Rule 62-296.711 | Materials Handling, Sizing, Screening, Crushing and Grinding Operations |    |
| •  | Rule 62-297.310 | General Test Requirements   |    |
| •  | Rule 62-297,400 | EPA Methods Adopted by Reference  | -  |
| •  | Rule 62-297-401 | EPA Test Procedures   |    |
| •  | Rule 62-297.520 | EPA Performance Specifications  |    |
|    |                 |   |    |

Animal Feed Ingredient plants are not subject to the NSPS requirements.

These emission units shall comply with all applicable requirements of 40 CFR 60, General Provisions, Subpart A.

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# 6. SOURCE IMPACT ANALYSIS

# 6.1 Emission Summary

#### ANIMAL FEED INGREDIENT PLANT 1

| Source / Emission<br>Unit ID | Sion Current Pollutants Allowable |       | - ·    |         | •      |  |
|------------------------------|-----------------------------------|-------|--------|---------|--------|--|
|                              |                                   | lb/hr | ton/yr | lb/hr   | ton/yr |  |
| Common Stack /               | PM/PM <sub>10</sub>               | 2.82  | 11.69  | 6.00    | 26.28  |  |
| 078                          | F                                 | 0.53  | 1.6    | 0.53(a) | 1.63   |  |
| DE Silo / 079                | PM/PM <sub>10</sub>               | 0.089 | 0.011  | 0.089   | 0.39   |  |
| Limestone Silo / 080         | PM/PM <sub>10</sub>               | 0.12  | 0.21   | 0.12    | 0.52   |  |
| AFP Loadout System / 081     | PM/PM <sub>10</sub>               | 2.96  | 2.96   | 2.22    | 3.89   |  |

#### ANIMAL FEED INGREDIENT PLANT 2

| Source / Emission | Pollutants          | Proposed Allowable |        |  |
|-------------------|---------------------|--------------------|--------|--|
| Unit ID           |                     | lb/yr              | ton/yr |  |
| Common Stack /    | PM/PM <sub>10</sub> | 6.00               | 26.28  |  |
| 103               | F                   | 0.53 (a)           | 1.63   |  |

#### COMBINED AFI PLANTS 1 and 2

| Source | Pollutants          | Allowa | ble Emissions | Net Increase | PSD<br>Significant Level |
|--------|---------------------|--------|---------------|--------------|--------------------------|
| Source | Tondants            | lb/hr  | ton/yr        | ton/yr       | ton/yr                   |
| Total  | PM/PM <sub>10</sub> | 14.43  | 57.36         | 57.36        | 25/15                    |
| Plant  | F                   | 1.05   | 3.26          | 3.26         | 3                        |

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**Total Emissions from Fuel Combustion** 

| Pollutants      | No.2 Fuel Oil |        | Natu  | ıral Gas |
|-----------------|---------------|--------|-------|----------|
|                 | lb/hr         | ton/yr | lb/hr | ton/yr   |
| SO <sub>2</sub> | 47.01         | 9.40   | 0.056 | 0.24     |
| NO <sub>x</sub> | 13.24         | 2.65   | 12.98 | 56.84    |
| CO              | 3.31          | 0.66   | 3.24  | 14.21    |
| VOC             | 0.132         | 0.026  | 0.26  | 1.14     |

#### Footnote:

(a) - Based on 223.6 tons P<sub>2</sub>O<sub>5</sub> per batch run; 1 batch per day and 17 hours per batch, operating 365 days per year.

#### 6.2 Emission Limitations

This source emits the following PSD regulated pollutants: particulate matter, nitrogen oxides and fluorides: This facility was originally permitted under air construction permit AC29-242897, issued June 16, 1994. This permit was amended on January 12, 1996, with the issuance of air construction permit 0570008-002-AC. The purpose of the amendment was to update the design data for the plant.

This new PSD review, PSD-FL-234, will cover both AFI plants. The permitted emissions and compliance requirements for this facility are summarized in Tables 1-1, Air Pollutant Emission Standards and Terms, and Table 2-1, Compliance Requirements

#### 6.3. AIR QUALITY ANALYSIS

#### 6.3.1 Introduction

The proposed project will emit three pollutants at levels in excess of PSD significant amounts: NO<sub>x</sub>, PM/PM<sub>10</sub>, and F. The air quality impact analyses required by the PSD regulations for these pollutants include:

- \* An analysis of existing air quality for PM<sub>10</sub>, NO<sub>2</sub> and F;
- \* A significant impact analysis for PM<sub>10</sub> and NO<sub>2</sub>;
- \* A PSD increment analysis for PM<sub>10</sub> and NO<sub>2</sub>
- \* An Ambient Air Quality Standards (AAQS) analysis for PM<sub>10</sub> and NO<sub>2</sub>; and
- \* An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality modeling impacts.

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The analysis of existing air quality generally relies on preconstruction monitoring data collected with EPA-approved methods. The significant impact, PSD increment and AAQS analyses depend on air quality dispersion modeling carried out in accordance with EPA guidelines.

Based on the required analyses, the Department has reasonable assurance that the proposed 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 AAQS or PSD increment. However, the following EPA-directed stack height language is included: "In approving this permit, the Department 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 discussion of the required analyses follows.

#### 6.3.2 Analysis Of Existing Air Quality And Determination Of Background Concentrations

Preconstruction ambient air quality monitoring is required for all pollutants subject to PSD review unless otherwise exempted or satisfied. This monitoring requirement may be satisfied by using previously existing representative monitoring data, if available. An exemption to the monitoring requirement may be obtained if the maximum air quality impact resulting from the projected emissions increase, as determined by air quality modeling, is less than a pollutant-specific de minimus concentration. In addition, if an acceptable monitoring method for the specific pollutant has not been established by EPA, monitoring may not be required.

If preconstruction ambient monitoring is exempted, determination of background concentrations for PSD significant pollutants with established AAQS may still be necessary for use in any required AAQS analysis. These concentrations may be established from the required preconstruction ambient air quality monitoring analysis or from previously existing representative monitoring data. These background ambient air quality concentrations are added to pollutant impacts predicted by modeling and represent the air quality impacts of sources not included in the modeling.

The table below shows that PM<sub>10</sub> and F impacts from the project are predicted to be greater than the de minimus levels; therefore, preconstruction ambient air quality monitoring is required for PM<sub>10</sub> and F. The department is not requiring preconstruction monitoring for F for this project because there are no EPA-approved monitoring methods for F. The maximum impact of the project's F emissions were modeled, however, and compared to the department's draft ambient reference concentrations for F; the modeling results are presented in the F impacts section. Additionally, a BACT determination which will set maximum emission limits for F emissions is required for this project. Previously existing representative monitoring data from a PM<sub>10</sub> monitor in the vicinity of the facility (Gardinier Park) are used to fulfill the PM<sub>10</sub> monitoring requirement and to establish a PM<sub>10</sub> background concentration for use in the AAQS analysis. The table below shows that NO, impacts from the project are predicted to be less than the de minimus level. Therefore, preconstruction ambient air quality monitoring is not required for this pollutant. However, since an AAQS analysis is required for NO<sub>2</sub> (the project's impacts alone for this pollutant is greater than significant, as will be discussed later in this section), previously existing representative monitoring data from an NO2 monitor located in the vicinity of the project (Gandy Boulevard) is used to establish a background concentration. Background concentrations for PM<sub>10</sub> and NO, are 20 ug/m3 and 21 ug/m3, respectively.

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Maximum Project Air Quality Impacts for Comparison to the De Minimus Ambient Levels.

| Pollutant        | Avg. Time | Max Predicted<br>Impact <sup>1</sup><br>(ug/m³) | Impact<br>Greater<br>Than De Minimus? | De Minimus<br>Level<br>(ug/m³) |
|------------------|-----------|---|---------------------------------------|--------------------------------|
| PM <sub>10</sub> | 24-hour   | 14.4  | YES                                   | 10                             |
| F                | 24-hour   | 0.83  | YES                                   | 0.25                           |
| NO <sub>2</sub>  | Annual    | 1.4   | NO                                    | 14                             |

# 6.3.3 Models And Meteorological Data Used In Significant Impact, PSD And AAQS Analyses

The EPA-approved Industrial Source Complex Short-Term (ISCST3) dispersion model was used to evaluate the pollutant emissions from the proposed project and other existing major facilities. The model determines ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, area and volume sources. The model incorporates elements for plume rise, transport by the mean wind, Gaussian dispersion, and pollutant removal mechanisms such as deposition. The ISCST3 model allows for the separation of sources, building wake downwash, and various other input and output features. A series of specific model features, recommended by the EPA, are referred to as the regulatory options. The applicant used the EPA recommended regulatory options in each modeling scenario. Direction-specific downwash parameters were used for all sources for which downwash was considered.

Meteorological data used in the ISCST3 model consisted of a concurrent 5-year period of hourly surface weather observations and twice-daily upper air soundings from the National Weather Service (NWS) stations at Tampa International Airport, Florida (surface data) and Ruskin, Florida (upper air data). The 5-year period of meteorological data was from 1987 through 1991. These NWS stations were selected for use in the study because they are the closest primary weather stations to the study area and are most representative of the project site. The surface observations included wind direction, wind speed, temperature, cloud cover and cloud ceiling.

Since five years of data were used in ISCST3, the highest-second- high (HSH) short-term predicted concentrations were compared with the appropriate AAQS or PSD increments. For the annual averages, the highest predicted yearly average was compared with the standards. For determining the project's significant impact area in the vicinity of the facility and if there are significant impacts from the project on any PSD Class I area, both the highest short-term predicted concentrations and the highest predicted yearly averages were compared to their respective significant impact levels.

#### 6.3.4 Significant Impact Analysis

Initially, the applicant conducted modeling using only the proposed project's emissions. Receptors were placed within 5 km of the facility, which is located in a PSD Class II area, and the Chassahowitzka National Wilderness Area (CNWA) which is a PSD Class 1 area located approximately 86 km to the north-northwest of the project at its closest point. For each pollutant subject to PSD and also subject to PSD increment and/or AAQS analyses, this modeling compared maximum predicted impacts due to the project with PSD significant impact levels to determine whether significant impacts due to the project were

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predicted in the vicinity of the facility or in the CNWA. The tables below show the results of this modeling. The radius of significant impact, if any, for each pollutant and applicable pollutant averaging time is also shown in the tables below.

Maximum Project Air Quality Impacts for Comparison
to the PSD Class II Significant Impact Levels in the Vicinity of the Facility.

| to ti            | TE I OD CIA33 IX | Significant Ampa                   | Ct Develor in the                      | territy of the z       |   |
|------------------|------------------|------------------------------------|--|------------------------|---|
| Pollutant        | Avg. Time        | Max Predicted<br>Impact<br>(ug/m³) | Significant<br>Impact<br>Level (ug/m³) | Significant<br>Impact? | Radius of<br>Significant<br>Impact (km) |
| PM <sub>10</sub> | Annual           | 2.2                                | 1                                      | YES                    | 3                                       |
|                  | 24-hour          | 14.4                               | 5                                      | YES                    | 3                                       |
| NO <sub>2</sub>  | Annual           | 1.35                               | 1                                      | YES                    | 1.5                                     |

Maximum Project Air Quality Impacts for Comparison to the PSD Class I Significant Impact Levels (CNWA)

| Pollutant        | Averaging<br>Time | Max, Predicted<br>Impact at Class I<br>Area(s)<br>(ug/m³) | Significant<br>Impact? | National Park Service (NPS) Significant Impact Level (ug/m³) |
|------------------|-------------------|---|------------------------|--|
| 70.4             | Annual            | 0.004   | NO                     | 0.08   |
| PM <sub>10</sub> | 24-hour           | 0.09  | NO                     | 0.27   |
| NO <sub>2</sub>  | Annual            | 0.003   | NO                     | 0.025  |

As shown in the tables the maximum air quality impacts due to  $PM_{10}$  and  $NO_X$  emissions from the proposed project are greater than the significant impact levels in the vicinity of the facility but not in the Class I area. Therefore, the applicant was required to do further  $PM_{10}$  and  $NO_2$  modeling in the vicinity of the facility, within the applicable significant impact area, to determine the impacts of the project along with all other sources in the vicinity of the facility. The significant impact area is based upon the predicted radius of significant impact. No further modeling for Class I impacts was required.

# 6.3.5 Receptor Network For PSD Class II Increment And AAQS Analyses

For the AAQS and PSD Class II analyses, receptor grids normally are based on the size of the significant impact area for each pollutant. For predicting maximum PM<sub>10</sub> concentrations in the vicinity of the facility, a polar receptor grid comprised of 119 discrete and 108 regular grid receptors was used for the screening analysis. The discrete receptors included 36 receptors located on the plant property boundary at 10-degree intervals, plus 83 additional off-property receptors at distances of 0.5, 0.8, 1.1, and 1.5 km from the No. 9 Sulfuric Acid Plant stack, which is the origin of the air modeling coordinate system for this project. The regular polar grid receptors were located at radial distances of 2.0, 2.5 and 3.0 km. For

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predicting maximum No<sub>x</sub> impacts in the vicinity of the facility, only the 119 discrete polar grid receptors were used in the modeling analysis since the radius of significant impact for NO<sub>x</sub> was only 1.5 km.

Modeling refinements were done by using a polar receptor grid with a maximum spacing of 100 m along each radial and an angular spacing between radials of 2 degrees.

#### 6.3.6 PSD Class II Increment Analysis

The PSD increment represents the amount that new sources in an area may increase ambient ground level concentrations of a pollutant. The results of the PSD Class II increment analysis are presented in the table below. They show that the maximum predicted impacts are less than the allowable increments.

PSD Class II Increment Analysis

| Pollutant        | Averaging<br>Time | Max. Predicted Impact <sup>1</sup> (ug/m <sup>3</sup> ) | Impact Greater Than Allowable Increment? | Allowable<br>Increment<br>(ug/m³) |
|------------------|-------------------|---|--|-----------------------------------|
|                  | Annual            | (ug/nr-)  | NO NO                                    | (ug/ii )                          |
| PM <sub>10</sub> | 24-hour           | 11.6  | МО                                       | 30                                |
| NO <sub>2</sub>  | Annual            | 5.4   | NO                                       | 25                                |

#### 6.3.7. AAQS Analysis

For pollutants subject to an AAQS review, the total impact on ambient air quality is obtained by adding a "background" concentration to the maximum modeled concentration. This "background" concentration takes into account all sources of a particular pollutant that are not explicitly modeled. The results of the AAQS analysis are summarized in the table below. As shown in this table, emissions from the proposed facility are not expected to cause or contribute to a violation of an AAQS.

Ambient Air Quality Impacts

| Pollutant        | Averaging<br>Time | Major<br>Sources<br>Impact<br>(ug/m³) | Background<br>Conc.<br>(ug/m³) | Total<br>Impact<br>(ug/m³) | Total<br>Impact<br>Greater<br>Than AAQS | Florida<br>AAQS<br>(ug/m³) |
|------------------|-------------------|---------------------------------------|--------------------------------|----------------------------|---|----------------------------|
| PM <sub>10</sub> | Annual            | 23                                    | 20                             | 43                         | NO                                      | 50                         |
|                  | 24-hour           | 93                                    | 20                             | 113                        | NO                                      | 150                        |
| NO <sub>2</sub>  | Annual            | 35                                    | 21                             | 56                         | NO                                      | 100                        |

#### 6.3.8 Fluoride Impacts Analysis

The maximum predicted impacts of F from the project are shown below. These impacts are less than the draft Florida Ambient Reference Concentrations (ARC).

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Fluoride Impacts

| 8                          | hour | 24 hour                    |   |  |
|----------------------------|------|----------------------------|---|--|
| Impact ARC (ug/m³) (ug/m³) |      | Impact ARC (ug/m³) (ug/m³) |   |  |
| 1.62                       | 24   | 0.83                       | 6 |  |

#### 6.4. Additional Impacts Analysis

#### 6.4.1. Impacts On Soils, Vegetation, And Wildlife

The maximum ground-level concentrations predicted to occur for  $PM_{10}$ , and  $NO_x$  as a result of the proposed project, including background concentrations and all other nearby sources, will be below the associated AAQS. The AAQS are designed to protect both the public health and welfare. As such, this project is not expected to have a harmful impact on soils and vegetation in the PSD Class II area. An air quality related values (AQRV) analysis was done by the applicant for the Class I area. No significant impacts on this area are expected.

#### 6.4.2. Impact On Visibility

Visual Impact Screening and Analysis (VISCREEN), the EPA-approved Level I visibility computer model, was used to estimate the impact of the proposed project's stack emissions on visibility in the CNWA. The results indicate that the maximum visibility impacts do not exceed the screening criteria inside or outside this area. As a result, there is no significant impact on visibility predicted for this Class I area. In addition a regional haze analysis was done. This analysis predicted no adverse impacts upon regional haze.

#### 6.4.3 Growth-Related Air Quality Impacts

There will be a small number of temporary construction workers during construction and no significant increase in the number of new permanent workers after project is completed. There will be no significant impacts on air quality caused by associated population growth.

Good Engineering Practice (GEP) stack height means the greater of: (1) 65 m (213 ft) or (2) the maximum nearby building height plus 1.5 times the building height or width, whichever is less. The plant's main stack will be 76.3 m (250 ft), respectively. This stack will not exceed the GEP stack height and will comply with GEP stack height regulations. However, this stack will be less than GEP; therefore, the potential for building downwash to occur was considered in the modeling analysis for this stack.

#### 7. CONCLUSION

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

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Available Control Technology Determination is implemented and certain conditions are met. The General and Specific Conditions are listed in the attached draft conditions of approval.

Permit Engineer: S. Arif



# Department of Environmental Protection

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

Expires:

Virginia B. Wetherell Secretary

#### PERMITTEE:

Cargill Fertilizer, Inc., Riverview Plant 8813 Highway 41 South Riverview, Florida 33569 FID No.: 0570008

PSD No. PSD-FL-234

Permit No: 0570008-013-AC

SIC No. 2874

December 31, 2000

Authorized Representative:
Melody Russo, Environmental Superintendent

#### LOCATED AT:

Cargill Fertilizer, Inc., Riverview Plant, Hillsborough County

Project: Fertilizer Manufacturing Facility

Animal Feed Ingredient Plants 1 and 2.

UTM: Zone 17; 362.9 km E; 3082.5 km N

#### STATEMENT OF BASIS:

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

#### Attached appendices made a part of this permit:

Table 1-1 Air Pollutants Standards and Terms
Table 2-1 Compliance Requirements
Appendix BD-1 BACT Determination
Appendix GC-1 Construction Permit General Conditions

EFFECTIVE DATE:

Howard L. Rhodes, Director
Division of Air Resources Management

Cargill Fertilizer, Inc. Animal Feed Phosphate Plant



ARMS ID No.: 0570008-013-AC

PSD-FL-234

#### SECTION I. FACILITY INFORMATION

#### **FACILITY DESCRIPTION:**

This installation is an existing fertilizer manufacturing facility consisting of phosphoric acid plants. sulfuric acid plants, mono-ammonium phosphate plant, di-ammonium phosphate plant, animal feed ingredient (AFI) Plant 1, etc. This project involves the addition of a second animal feed, designated as AFI Plant 2, identical to the existing plant and the preparation of a single permit covering both AFI plants.

#### **EMISSION UNITS**

This permit addresses the following emission units:

| EMISSIONS<br>UNIT NO. | EMISSIONS UNIT DESCRIPTION           |
|-----------------------|--------------------------------------|
| 078                   | Common Stack Animal Feed Plant No. 1 |
| 079                   | Diatomaceous Earth Silo              |
| 080                   | Limestone Silo                       |
| 081                   | Animal Feed Plant Loadout System     |
| 103                   | Common Stack Animal Feed Plant No. 2 |

#### REGULATORY CLASSIFICATION

This industry is listed in Table 62-212.400-1, "Major Facility Categories," Chapter 62-212, F.A.C..." Therefore, stack and fugitive emissions of over 100 tons per year of carbon monoxide, volatile organic compounds, sulfur dioxide, nitrogen oxides, or particulate matter characterize the installation as a major facility subject to the requirements of Rule 62-204.800, F.A.C., which incorporates 40 CFR Subpart F. the New Source Performance Standards (NSPS) for Phosphate Fertilizer Industry. This facility is a Title V source because it is in the list of the 28, Major Facility Categories Table 212.400-1, F.A.C. and also because the Florida Administrative Code defined all facilities subject to NSPS as Title V sources.

#### PERMIT SCHEDULE:

- (DATE) Petition for an administrative hearing
- Received proof of publication in (DATE) issue of Newspaper (DATE)
- Issued Notice of Intent to issue Permit (DATE)
- 08-16-96 Application deemed complete

Cargill Fertilizer, Inc.
Animal Feed Phosphate Plant



ARMS ID No.: 0570008-013-AC

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#### SECTION II. EMISSION UNIT(S) COMMON SPECIFIC CONDITIONS

#### 1.0 ADMINISTRATIVE

- 1.1 <u>Regulating Agencies</u>: All applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Department of Environmental Protection (DEP) Hillsborough County Environmental Protection Commission (HCEPC) located at 1410 North 21 Street, Tampa, Florida 33605, and phone number (813)272-5530. All applications for permits to construct or modify an emission unit(s) subject to the Prevention of Significant Deterioration requirements should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP) located at 2600 Blairstone Road, Tallahassee, Florida 32399-2400 and phone number (904)488-1344.
- 1.2 <u>General Conditions</u>: The owner and operators shall be aware of, and operate under, the attached General Permit Conditions G.1 through G.15 listed in *Appendix GC* of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 1.3 <u>Terminology</u>: The terms used in this permit have specific meanings as defined in the corresponding chapter of the Florida Administrative Code
- 1.4 <u>Forms and Application Procedures</u>: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
- 1.5 Expiration: This air construction permit shall expire on December 31, 2000. [Rule 62-210.300(1), F.A.C.]
- 1.6 <u>Application for Title V Permit</u>: This air construction permit revises specific permit conditions to reflect the current applicable requirements and new BACT limits. Emissions stack testing that is required by this permit shall be performed to show compliance with all new applicable BACT limits. Therefore, the air operation permit will be issued based on this revised permit. [Rule 62-210.300(2), F.A.C.] A revision of the Title V operating permit application pursuant to Chapter 62-213 F.A.C. shall be submitted to the DEP District office in Tampa.
- 1.7 <u>Applicable Regulations</u>: This facility is subject to the following regulations: Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-296, 62-297; and the Code of Federal Regulations Section 40, Part 60. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]

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#### SECTION II. EMISSION UNIT(S) COMMON SPECIFIC CONDITIONS

#### 2.0 Emission Limiting Standards

- 2.1 <u>General Visible Emissions Standard</u>: [Rule 62-296.310(4)(b), F.A.C.] Unless otherwise specified by rule or permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere any air pollutants from new, or existing emissions units, the opacity of which is equal to:
- Visible emissions of all minor sources controlled by baghouses shall not exceed 5% opacity.
- 2.2 Unconfined Emissions of Particulate Matter [Rule 62-296.310(4)(c), F.A.C.]
  - (a) The owner or operators shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any source whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission.
  - (b) Reasonable precautions shall include the following:
    - All permanent haul roads shall be paved.
    - Temporary haul road shall be watered or treated with chemical dust suppressants at regular intervals.
    - Dry materials (moisture content < 14%) shall be stored below grade, in silos, or in enclosed structures.
    - Abandoned haul road and other disturbed areas shall be revegetated within 60 days of the date that active service of the roads ends.

<u>NOTE</u>: Facilities that cause frequent, valid complaints may be required by the Southwest District office in Tampa to take these or other reasonable precautions. In determining what constitutes reasonable precautions for a particular source, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

# 2.3 General Pollutant Emission Limiting Standards: [Rule 62-296.320, F.A.C.]

- (a) The owner or operator shall not store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems.
- (b) No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

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# SECTION II. EMISSION UNIT(S) COMMON SPECIFIC CONDITIONS

<u>NOTE</u>: An objectionable odor is defined as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [F.A.C. 62-212.198(123)]

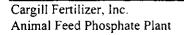
#### 3.0 OPERATION AND MAINTENANCE

3.1 <u>Summary of Sources:</u> The following is a summary of the sources, emission control equipment, limitations on production and hours of operation for this facility:

| Source   | Control Device                 | Manufacturer/Model                                   | Design Capacity          | Oper.Hours     |
|--|--------------------------------|--|--------------------------|----------------|
| COMMON STACK AFI No. 1 & 2 Defluor. Tanks Reactor/Granulator/ Materials Handling | Wet Scrubber<br>Dryer Scrubber | BCI/Bithell CF4x4-3<br>Fisher-Klosterman/<br>MS 1200 | 9000 acfm<br>85,000 acfm | 8,760<br>8,760 |
| D.E. SILO  | Baghouse                       | MAC 39-AVRC-21                                       | 518 dscfm                | 8,760          |
| LIMESTONE SILO   | Baghouse                       | MAC39-AVRC-21  | 691 dscfm                | 8,760          |
| AFP LOADOUT SYSTEM   | Baghouse                       | MAC 144-MCF-255                                      | 12,960 dscfm             | 3,500          |

Production Limitation (Combined AFI No. 1 & 2): 48 tons/hour and 300,000 tons/year, based on 223.6 tons of  $P_2O_5$  per batch and two-17 hours batches per day, 365 days per year.

- 3.2 <u>Changes/Modifications</u>: The owner or operator shall submit to the Department of Environmental Protection, Bureau of Air Regulation and/or the HCEPC office in Tampa, for review any changes in, or modifications to: the method of operation; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain, an air construction permit prior to making the desired change. FDEP will provide a clear point of entry for any substantially-affected parties to challenge any of FDEP's proposed determinations in this regard. Routine maintenance of equipment would not constitute a modification of this permit. [Rule 62-4.030, 62-210.300 and 62-4.070(3), F.A.C.]
- 3.3 <u>Plant Operation Problems</u>: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the owner or operator shall notify the HCEPC office in Tampa as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the





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#### SECTION II. EMISSION UNIT(S) COMMON SPECIFIC CONDITIONS

permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]

- 3.4 <u>Circumvention</u>: The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]
- 3.5 Excess Emissions Requirements [Rule 62-210.700, F.A.C.]
  - (a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units 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 Southwest District office for longer duration. [Rule 62-210.700(1), F.A.C.]
  - (b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
  - (c) In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Air Pollution Control Section of the HCEPC office within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the problem; and the corrective actions being taken to prevent recurrence. [Rule 62-210.700(6), F.A.C.]

#### 4.0 Monitoring of Operations

#### 4.1 <u>Determination of Process Variables</u>

- (a) The permittee shall install, operate, and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C]

#### 5.0 TEST REQUIREMENTS

5.1 <u>Test Performance</u>: The owner or operator shall conduct initial performance test (s) within 30 days of achieving maximum production rates but no later than 180 days of completion of construction pursuant to 40 CFR 60.8, Subpart A, General Provisions.

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## SECTION II. EMISSION UNIT(S) COMMON SPECIFIC CONDITIONS

- Test procedures: Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90-100% of the maximum operating rate allowed by the permit. A compliance test submitted at a rate less than 90% of the rate specified above will automatically constitute an amended permit rate at that lesser rate plus 10%. Within 30 days of that lower amended permitted rate being exceeded by more than 10%, a new compliance test shall be conducted at the higher rate. The test results shall be submitted to the HCEPC office in Tampa within 45 days of testing. Acceptance of the test by the Department will automatically constitute an amended permit at the higher tested rate plus 10%, but in no case shall the maximum permitted rate be exceeded. Failure to submit records of the production rate during the test period and for the 30 production days prior to the test period, along with the test report, may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 62-4.070 (3), F.A.C.]
- 5.3 Test Notification: The owner or operator shall notify the HCEPC office in Tampa in writing at least (30) days prior to each scheduled compliance test of the test date, the expected test time, the facility contact person for the test, and the person or company conducting test. The (30) day notification requirement may be waived at the discretion of the Department. Likewise, if circumstances prevent testing during the test window specified for the emission unit, the owner or operator may request an alternate test date before the expiration of this window. [Rule 62-297.310 and 40 CFR 60.8, F.A.C.]
- 5.4 Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rule 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the HCEPC office in Tampa. [Rule 62-297.310 F.A.C.]
- 5.5 <u>Stack Testing Facilities</u>: The owner or operator shall install stack testing facilities in accordance with **Rule** 62-297.310 F.A.C.
- 5.6 Exceptions and Approval of Alternate Procedures and Requirements: An Alternate Sampling Procedure (ASP) may be requested from the Bureau of Air Regulation of the Florida Department of Environmental Protection in accordance with the procedures specified in Rule 62-297.620, F.A.C.

#### 6.0 REPORTS AND RECORDS

- 6.1 <u>Duration</u>: All reports and records required by this permit shall be kept for at least (5) years from the date the information was recorded. [Rule 62-4-160(14)(b), F.A.C.]
- 6.2 <u>Emission Compliance Stack Test Reports</u>:
  - (a) A test report indicating the results of the required compliance tests shall be filed with the HCEPC office in Tampa as soon as practical, <u>but no later than 45 days</u> after the last sampling run is completed. [Rule 62-297. 310 F.A.C.]

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#### SECTION II. EMISSION UNIT(S) COMMON SPECIFIC CONDITIONS

- (b) The report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in **Rule 62-297.310 F.A.C.**
- 6.3 Excess Emissions Report: If excess emissions occur, the owner or operator shall notify the Air Compliance Section of the HCEPC office in Tampa within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7. [Rules 62-4.130 and 62-210.700(6), F.A.C.]
- 6.4 <u>Annual Operating Report for Air Pollutant Emitting Facility</u>: Before March 1st of each year, the owner or operator shall submit to the Department this required report [DEP Form No. 62-210.900(5)], which summarizes operations for the previous calendar year. [Rule 62-210.370(2), F.A.C.]

#### 7.0 OTHER REQUIREMENTS

7.1 <u>Waste Disposal</u>: The owner or operator shall treat, store, and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable Federal, State, and Local regulations. This air pollution permit does not preclude the permittee from securing any other types of required permits, licenses, or certifications.

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### SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

#### SUBSECTION A. 40 CFR 60 SUBPART A, GENERAL PROVISIONS, COMMON CONDITIONS:

#### **EMISSION UNITS**

This permit addresses the following emission units.

| EMISSION UNIT NO. | EMISSION UNIT DESCRIPTION        |
|-------------------|----------------------------------|
| 078               | Common Stack Animal Feed Plant 1 |
| 079               | Diatomaceous Earth Silo          |
| 080               | Limestone Silo                   |
| 081               | Animal Feed Plant Loadout System |
| 103               | Common Stack Animal Feed Plant 2 |

These emission units shall comply with all applicable requirements of 40 CFR 60, General Provisions, Subpart.

- A1. [49 CFR 60.7, Notification and record keeping]
- A2. [40 CFR 60.8, Performance tests]
- A3 [40 CFR 60.11, Compliance with standards and maintenance requirements]
- A4. [40 CFR 60.12, Circumvention]
- A5. [40CFR 60.13, Monitoring requirements]
- A6. [40 CFR 60.19, General notification and reporting requirements]



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#### SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

#### SUBSECTION B. SPECIFIC CONDITIONS:

The following Specific Conditions apply to the following emission units:

| EMISSION UNIT NO. | Emission Unit Description        |
|-------------------|----------------------------------|
| 078               | Common Stack Animal Feed Plant 1 |
| 103               | Common Stack Animal Feed Plant 2 |

#### **EMISSION LIMITATIONS**

- B1. The emissions from these emission units shall not exceed the allowable emission rates listed in Table 1-1 Air Pollutant Standards and Terms (attached).
- B2. The initial emission limit for fluorides has been set at 0.04 lb/ton P<sub>2</sub>O<sub>5</sub>. The final fluoride emission limit will be determined by the Department's Bureau of Air Regulation in Tallahassee, Florida, within 45 days following receipt of the performance test results required in Specific Condition B16. [Rule 62-212.400(6).,F.A.C.]
- B3. In order to minimize excess emissions during startup/shutdown/malfunction this emission units shall adhere to best operational practices. [Rule 62-210.700, F.A.C. and 40 CFR 60.7]

#### CONTROL EQUIPMENT

- B4. The BACT determination requires the installation of a packed crossflow scrubber for control of gaseous fluoride and particulate matter emissions. The scrubber design should be essentially identical to the design of the existing packed crossflow scrubber for emission unit 078. If a different design is proposed, the permittee shall submit the necessary scrubber efficiency calculations and drawings to the Department for approval prior to construction. [Rule 62-212.400(6), F.A.C.]
- B5. The following scrubber operating parameters shall be monitored during any compliance test and a summary of this data shall be included in any emissions test report. [Rule 62-4.070(3), F.A.C.]
  - (X) Water Pressure
  - (X) Volumetric Liquid Water Flow Rate
  - (X) Gas Pressure Drop
- B6. To provide reasonable assurance of compliance with specific condition B1, Cargill shall create and keep a record log of the scrubber operating parameters. The record log shall contain, at a minimum, the volumetric liquid water flow rate, the gas pressure drop, the date and time of the measurements, and the person responsible for performing the measurements. A record log entry shall be made at least once for every 8 hour shift that the animal feed ingredient plants operate. The record log shall be maintained at the facility and shall be retained at least three years from the date of measurement. [Rule 62-4.070(3), F.A.C.]



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## SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

B7 Cargill may, at its option, substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by specific condition B6. If this option is exercised, then all calibration and maintenance records and all original strip chart recordings shall be retained at least three years. [Rule 62-4.070(3), F.A.C.]

#### **OPERATIONAL LIMITATIONS**

B8. Animal Feed Plant 1 and 2 are allowed to operate continuously (8760 hours/year). [Rule 62-210.200, F.A.C. Definitions-Potential to emit (PTE)]

B9 Process operating rates:

The combined maximum process or throughput rates for Animal Feed Plants 1 and 2 shall not exceed 250 ton/hr of phosphatic fertilizer solution. [Rule 62-210.200, F.A.C., (PTE)]

The combined maximum production rates for Animal Feed Plants 1 and 2 shall not exceed 48 ton/hr. [Rule 62-210.200, F.A.C., (PTE)]

B10. The dryers for each Animal Feed Plant shall be fired with natural gas as primary fuel or with new No. 2 fuel oil having a maximum sulfur content not to exceed 0.5% by weight as standby during natural gas curtailment at a maximum of 400 hours/year. The maximum natural gas usage for the two dryers combined shall not exceed 93,000 cubic feet/hour. The maximum new No.2 fuel oil usage for the two dryers combined shall not exceed 660 gallons/hour. Use of fuels other than those listed above is prohibited. [Rule 62-210.200, **F.A.C.**, (PTE)]

B11. Any other operating parameters (including control equipment operating parameters) established during compliance testing and/or inspection that will confirm the proper operation of each emission unit shall be included in the operating permit. [Rules 62-297.310 and 62-4.070, F.A.C.]

#### TEST METHODS AND PROCEDURES

- B12. Emission Units 078 and 103 shall be tested in accordance with the EPA/reference method, testing time frequency, and minimum compliance test duration in Table 2-1. Compliance Requirements (attached). [Rules 62-204.800, 62-297.310, 62-297.400, and 62-297.401, F.A.C.]
- B13. In conducting the compliance tests (initial/annual) required in 40 CFR 60.8, the permittee shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specific in this permit, except as provided for in 40 CFR 60.8(b). No other test method shall be used unless approval from the Department has been received in writing. [Rules 62-297.400, 62-297.620, F.A.C. and 40 CFR 60.64]

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Animal Feed Phosphate Plant



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### SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

B14. Compliance with the particulate matter, fluoride and nitrogen oxides standards contained in Table 1 (attached) shall be determined using EPA Method 5, EPA Methods 13A or 13B and EPA Method 7E respectively. [Rules 62-204.800 and 62-297.401, F.A.C., and 40 CFR 60.64(b)(1) - (3)]

- B15. The visible emissions test shall be conducted by a certified observer and be a minimum of 60 minutes in duration. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rule 62-297.310 (7), F.A.C. and 40 CFR 60.11]
- B16. Test results will be the average of three valid one-hour runs. The HCEPC office in Tampa will be notified at least 30 days in writing in advance of the compliance test(s). The notification shall include the compliance test date, time, and place of such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 62-297.310 F.A.C.]
- B17. Operating procedures shall include good combustion practices and proper training of all operators and supervisors. The good combustion practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.].

#### RECORDKEEPING AND REPORTING REQUIREMENTS

B18. The following fuel records shall be maintained and made available upon request:

### 1. Liquid Fuels:

- (a) The fuel type (number) and usage rate in gal/day.
- (b) Records of the sulfur content and heating value (Btu/gal) of each oil shipment based upon analysis of a sample representative of the shipment.

#### 2. Natural Gas:

- (a) The fuel usage rate in cubic feet per day.
- (b) The average heating value (Btu/Ft<sup>3</sup>) provided by the gas supplier. [Rule 62-4.070(3), F.A.C.].
- B19. Two copies of the results of the emission tests for the pollutants listed in Condition 1 for these emission units shall be submitted within forty-five days of the last sampling run to the HCEPC office in Tampa. Reports shall be in a format consistent with and shall include the information in accordance with Rule 62-297.310 (8), F.A.C. [Rule 62-210.370 (3) and Rule 62-.297.310(8), F.A.C.]
- B20. The owner or operator shall submit reports of the malfunction information required to be recorded by 40 CFR 60.7(b). These reports shall include the frequency, duration, and cause of any incident resulting in deenergization of any device controlling emissions or in the venting of emissions directly to the atmosphere. [Rule 62-204.800, F.A.C.; 40 CFR 60.65 (c)]

#### Daily Operation and Maintenance (O&M) Log:

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## SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

B21. This facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. Operators shall keep a daily O&M log to include, at a minimum, the following information:

- the data collected from in-stack monitoring instruments;
- the records on daily feed rates and production rate;
- the amount and type of fuel burned per affected unit;
- the results of all source tests;
- calibration logs for all instruments;
- maintenance/repair logs for any work performed on equipment or instrument which is subject to this permit; and,
- Fuel analysis data.

All measurements, records, and other data required to be maintained by Cargill, shall be retained for at least five (5) years following the data on which such measurements, records, or data are recorded. These data shall be made available to the Department upon request. The HCEPC office in Tampa shall be notified in writing at least 15 days prior to the testing (auditing) of any instrument required to be operated by these specific conditions of certification in order to allow witnessing by authorized personnel. [Rule 62-4.070(3), F.A.C.]

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### SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

#### SUBSECTION C. SPECIFIC CONDITIONS:

The following Specific Conditions apply to the following emission units:

| Emission              |                                  |
|-----------------------|----------------------------------|
| Unit <sub>i</sub> No. | Emission Unit Description        |
| 079                   | Diatomaceous Earth Silo          |
| 080                   | Limestone Silo                   |
| 081                   | Animal Feed Plant Loadout System |

#### **EMISSION LIMITATIONS**

- C1. The emissions from these emission units shall not exceed the allowable emission rates listed in Table 1-1 Air Pollutant Standards and Terms (attached). Because of the expense and complexity of conducting a stack test on minor sources of particulate matter, and because these sources are equipped with a baghouse control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% in lieu of a particulate stack test. [Rule 62-297.620(4), F.A.C.]
- C2. In order to minimize excess emissions during startup/shutdown/malfunction this emission units shall adhere to best operational practices. [Rule 62-210.700, F.A.C. and 40 CFR 60.7]

#### **OPERATIONAL LIMITATIONS**

- C3. The Diatomaceous Earth Silo and the Limestone Earth Silo are allowed to operate continuously (8760 hours/year). Animal Feed Plant Loadout System is allowed to operate 3500 hours/year. [Rule 62-210.200, F.A.C. Definitions-Potential to emit (PTE)]
- C4. Any operating parameters (including control equipment operating parameters) established during compliance testing and/or inspection that will confirm the proper operation of each emission unit shall be included in the operating permit [Rule 62-297.310, F.A.C. and 62-4.070, F.A.C.]. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]

#### TEST METHODS AND PROCEDURES

C5. The visible emissions test shall be conducted by a certified observer and be a minimum of 60 minutes in duration. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [40 CFR 60.11.and Rule 62-297.310 (7), F.A.C.]

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## SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

### Daily Operation and Maintenance (O&M) Log:

C6. This facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. Operators shall keep a daily O&M log to include, at a minimum, the following information:

- the amount and type of fuel burned per affected unit;
- the results of all source tests;
- calibration logs for all instruments;
- maintenance/repair logs for any work performed on equipment or instrument which is subject to this permit; and,
- Fuel analysis data.

All measurements, records, and other data required to be maintained by Cargill, shall be retained for at least five (5) years following the data on which such measurements, records, or data are recorded. These data shall be made available to the Department upon request. The HCEPC office in Tampa shall be notified in writing at least 15 days prior to the testing (auditing) of any instrument required to be operated by these specific conditions of certification in order to allow witnessing by authorized personnel. [Rule 62-4.070(3), F.A.C]

Cargill Fertilizer, Inc.
Animal Feed Phosphate Plant



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#### SECTION IV. PERMITTING HISTORY

### **Permitting History**

A detailed Permitting History of the emission units modified in this permit are found in Appendix PH.

June 16, 1994

Permit AC29-242897 to construct AFI Plant 1.

January 12, 1996

Amendment of AC29-242897. Updating the design data for the plant with the

issuance of air construction permit 0570008-002-AC.

July 17, 1996

Request to construct another AFI Plant. The request is to increase the production

rate of the plant and to increase emissions of PM/PM<sub>10</sub>, F, and NO<sub>x</sub>. A detailed

project description is listed in the Technical Evaluation and Preliminary

Determination.

NOTE: This permit revises and supersedes air construction permits number 0570008-002-AC.

Table 1-1. Air Pollutant Standards and Terms.

FACILITY ID NUMBER:

0570008

Permittee:

Cargill Fertilizer, Inc.

**Animal Feed Ingredient Plant** 

Emission Unit 078/103 - AFI No. 1/AFI No. 2

Emission Unit 079/080/081 - DE Silo/Limestone Silo/Loadout System

DRAFT Permit No.: 0570008-013-AC

| E.U. ID# | Description    | Pollutant ID        | Fuel(s) | gr/dscf | lb/ton P <sub>2</sub> O <sub>5</sub> | lb/hr | TPY   | Regulation(s)              |
|----------|----------------|---------------------|---------|---------|--------------------------------------|-------|-------|----------------------------|
| 078      | AFI No. 1      | PM/PM <sub>10</sub> | Gas/Oil | 0.01    | N/A                                  | 6.00  | 26.28 | Rule 62-212.410, F.A.C.    |
| 078      | AFI No. 1      | F                   | Gas/Oil | N/A     | 0.04                                 | 0.53  | 1.63  | Rule 62-212.410, F.A.C.    |
| 078      | AFI No. 1      | NO <sub>x</sub>     | Gas/Oil | N/A     | N/A                                  | 6.50  | 28.42 | Rule 62-212.410, F.A.C.    |
| 078      | AFI No. 1      | 20% VE              | Gas/Oil | N/A     | N/A                                  | N/A   | N/A   | Rule 62-204.800, F.A.C.    |
| 103      | AFI No. 2      | PM/PM <sub>10</sub> | Gas/Oil | 0.01    | N/A                                  | 6.00  | 26.28 | Rule 62-212.410, F.A.C.    |
| 103      | AFI No. 2      | F                   | Gas/Oil | N/A     | 0.04                                 | 0.53  | 1.63  | Rule 62-212.410, F.A.C.    |
| 103      | AFI No. 2      | NOx                 | Gas/Oil | N/A     | N/A                                  | 6.50  | 28.42 | Rule 62-212.410, F.A.C.    |
| 103      | AFI No. 2      | 20% VE              | Gas/Oil | N/A     | N/A                                  | N/A   | N/A   | Rule 62-204.800, F.A.C.    |
| 079      | DE Silo        | 5% VE               | N/A     | 0.02    | N/A                                  | 0.09  | 0.39  | Rule 62-297.620(4), F.A.C. |
| 080      | Limestone Silo | 5% VE               | N/A     | 0.02    | N/A                                  | 0.12  | 0.52  | Rule 62-297.620(4), F.A.C. |
| 081      | Loadout System | 5% VE               | N/A     | 0.02    | N/A                                  | 2.22  | 3.89  | Rule 62-297.620(4), F.A.C. |

#### **ALLOWABLE OPERATING RATES**

|                    |      | AFI No.1 | AFI No. 2 | DE Silo | LIMESTONE Silo | LOADOUT System |
|--------------------|------|----------|-----------|---------|----------------|----------------|
| Hours of operation | hr   | 8760     | 8760      | 8760    | 8760           | 3500           |
| Production rate    | TPH  | 24       | 24        | N/A     | N/A            | N/A            |
| Gas flow rate      | dscf | 69,895   | 69,895    | 518     | 691            | 12,960         |
|                    |      |          |           |         |                |                |



CF1.XLS

Table 2-1. Compliance Requirements.

FACILITY ID NUMBER:

0570008

Permittee:

Cargill Fertilizer, Inc.

**Animal Feed Ingredient Plant** 

DRAFT Permit No.: No.: 0570008-013-AC

|           |                  |                     |         |               | Testing        | Min. Compliance |
|-----------|------------------|---------------------|---------|---------------|----------------|-----------------|
|           |                  | Pollutant Name      |         | EPA/Reference | Time           | Test            |
| E.U. ID#  | Description      | or parameter        | Fuel(s) | Method *      | Frequency      | Duration        |
| 078 & 103 | AFI No.1 & No.2  | PM/PM <sub>10</sub> | Gas/Oil | 5             | initial/annuel | 3hr             |
| 078 & 103 | AFI No.1 & No.2  | VE                  | Gas/Oil | 9             | annual         | 1hr             |
| 078 & 103 | AFI No.1 & No.2  | NO <sub>x</sub>     | Gas/Oil | 7E            | initial/annual | 3hr             |
| 078 & 103 | AFI No.1 & No. 2 | F                   | Gas/Oil | 13A or 13B    | initial/annual | 3hr             |
| 079       | DE Silo          | VE                  | N/A     | 9             | initial/annual | 1hr             |
| 080       | Limestone Silo   | VE                  | N/A     | 9             | initial/annual | 1hr             |
| 081       | Loadout System   | VE                  | N/A     | 9             | initial/annual | 1hr             |

#### Notes:

- [1] Testing of emissions shall be conducted while burning natural gas.
- [2] Both AFI plants are allowed to burn No. 2 fuel oil with a maximum sulfur content of 0.5% by weight for 400 hours as auxiliary fuel. See specific condition No. B5.



## CARGILL FERTILIZER, INC. ANIMAL FEED INGREDIENT PLANT PSD-FL-234 and 0570008-013-AC Hillsborough County



The applicant, Cargill Fertilizer, Inc., (Cargill) requested to revise the allowable emissions limits for particulate matter (PM/PM<sub>10s</sub>) at their existing Animal Feed Ingredient (AFI) Plant 1. Cargill also requested to construct a second AFI plant, designated as AFI Plant 2, which will increase the production rate of AFI from 150,000 tons/year (TPY) to 300,000 TPY. The original AFI project constituted a minor modification to an existing major source. Since an alteration in federally enforceable permit restrictions is being requested, air permitting source applicability is determined as though construction had not yet commenced on the AFI plant [Rule 62-212.500(2)(d)5]. The proposed modification at Cargill will result in significant net emissions increase for particulate matter and particulate matter less than or equal to 10 micrometers (PM/PM<sub>10</sub>), fluorides (F), and nitrogen oxides (NO<sub>x</sub>). Therefore a review for prevention of significant deterioration (PSD) as well as a determination of Best Available Control technology are required for these pollutants.

This source consists of two plants (AFI Plants 1 and 2) with a maximum combined production rate of 48 ton per hour of animal feed product (AFP). It includes defluorinated acid batch tanks (2), pug mill, dryer and cooler/classifier along with diatomaceous earth and limestone unloading systems, and the AFI loadout system. A process description is included in the Technical Evaluation and Preliminary Determination.

Following is the BACT determination proposed by the applicant:

## BACT DETERMINATION REQUESTED BY THE APPLICANT:

| POLLUTANT                           | EMISSION LIMIT                                  |
|-------------------------------------|---|
| PM/PM10 (Material Handling Sources) | 0.02 gr/dscf by baghouses                       |
| PM/PM10 (Process Equipment)         | 0.01 gr/dscf by scrubber                        |
| F                                   | 0.04 lb/ton P <sub>2</sub> O <sub>5</sub> input |
| $NO_x$                              | Low nitrogen fuels<br>Combustion Control        |

The animal feed plant uses a combination of baghouses, cyclones and wet scrubbers to control PM/PM<sub>10</sub> emissions. Baghouses are used to control all raw material (diatomaceous earth and

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limestone) handling operations, as well as product loadout operations. PM/PM<sub>10</sub> emissions from the animal feed dryers and cooler/classifier systems are controlled by cyclones followed by a wet scrubber.

Fertilizer Manufacturing plants are among the major facilities listed in Table 212.400-1, "Major Facilities Categories," Rule 62-212, F.A.C. A BACT determination is required for each pollutant exceeding the significant emission rates in Table 212.400-2, "Regulated Air Pollutants Significant Emissions Rates," which in this case are PM/PM<sub>10</sub>, F, and NO<sub>x</sub>.

## DATE OF RECEIPT OF A BACT APPLICATION:

July 17, 1996

#### **REVIEW GROUP MEMBERS:**

Syed Arif and A. A. Linero of the New Source Review Section.

## **BACT Determination Procedure**

In accordance with Chapter 62-212, F.A.C., this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (Department), on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that, in making the BACT determination, the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of BACT pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 Standards of Performance for New Stationary Sources or 40 CFR Part 61 National Emission Standards for Hazardous Air Pollutants.
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determination of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine, for the emission unit in question, the most stringent

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control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically not feasible for the emission unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

The air pollutant emissions from this source can be grouped into categories based upon the control equipment and techniques that are available to control emissions from these emission units. Using this approach, the emissions can be classified as follows:

- o Defluorination and reaction products (PM, F). Controlled by scrubbing.
- o Combustion Products (e.g., SO<sub>2</sub>, NO<sub>x</sub>). Controlled generally by good combustion of clean fuels.
- o Products of Incomplete Combustion (e.g. CO, VOC). Control is largely achieved by proper combustion techniques.
- o Emissions from materials handling, conveyance, and storage (primarily PM). Controlled generally by cyclones, scrubbers, fabric filters and reasonable precautions.

Grouping the pollutants in this manner facilitates the BACT analysis because it enables the equipment available to control the type or group of pollutants emitted and the corresponding energy, economic, and environmental impacts to be examined on a common basis. Although all of the pollutants addressed in the BACT analysis may be subject to a specific emission limiting standard as a result of PSD review, the control of "non-regulated" air pollutants is considered in imposing a more stringent BACT limit on a "regulated" pollutant (i.e., PM, NO<sub>x</sub>, F, etc.), if a reduction in "non-regulated" air pollutants can be directly attributed to the control device selected as BACT for the abatement of the "regulated" pollutants.

## Particulate Matter (PM, PM<sub>10</sub>)

Particulate Matter is generated by the material handling sources and process equipment from this facility. Baghouses are used to control all raw material (diatomaceous earth and limestone) handling operations, as well as product loadout operations. Baghouses are highly efficient and allow collected PM to be recovered as product. Baghouse technology is proposed as BACT for the material handling sources within the animal feed plants. The applicant's proposed BACT emission level for the material handling sources is 0.02 gr/dscf for each baghouse.



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PM emissions from the animal feed dryers and cooler/classifier systems are controlled by cyclones followed by a wet scrubber. This combination provides for a high overall PM collection efficiency. The cyclones allow for recovery of product in a dry form, with subsequent recycling back to the process. The wet venturi scrubber control is an efficient control device and is the most appropriate technology for gas streams that contain a significant amount of moisture. The applicant's proposed BACT emission level for the process equipment is 0.01 gr/dscf for the wet venturi scrubber.

Common control devices include settling chambers, inertial separators, impingement separators, wet scrubbers, fabric filters, and electrostatic precipitators. Fabric filters (baghouses) and electrostatic precipitator (ESPs) are generally considered equivalent for particulate control. Both types of devices can achieve removal efficiencies of over 99%. Both types of control equipment provide for the recovery/recycling of collected dust back into the process stream. Baghouses are also used to control particulate emissions from most other material processing operations at fertilizer manufacturing plants.

Common controls to limit particulate emissions from fugitive sources (such as roadways, stockpiles, and material processing and conveying equipment) include wet suppression, sweeping, application of surfactants, paving of roads and covering of stockpiles to reduce wind erosion. Wet suppression of fugitive particulate emissions is considered as BACT for most material handling operations and unpaved roads. Dust from stockpiles can be minimized by relatively high material moisture content with additional water spraying as necessary.

A review of the BACT Clearinghouse shows that baghouses and scrubbers are widely used to control particulate matter from process emission units at fertilizer manufacturing plants. They are commonly accepted as BACT.

#### Fluorides (F)

AFI Plant 1, when originally permitted as a minor source in 1994, was subject to Rule 62-296.403(1)(i), which requires BACT for fluorides. Consequently, AFI Plant 1 underwent a BACT determination. The resulting BACT was based on wet cross-flow scrubbers/demisters utilizing pond water as the scrubbing medium and discharging to a common stack. The BACT emission limit from the defluorination systems, reactor/granulation system and the dryer was 0.04 pounds of fluoride per ton of phosphate pentoxide input (lb F/ton  $P_2O_5$ ). This is equivalent to 0.53 lb/hr or 1.63 TPY.

AFI Plant 2 is proposed to utilize an identical or equivalent crossflow scrubber/demister system and to meet a fluoride emission limit identical to AFI Plant 1. The BACT emission limit from the defluorination systems, reactor/granulation system and the dryer discharging to a

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common stack for AFI Plant 2 is proposed by the applicant as 0.04 lb/ton of  $P_2O_5$  input (0.53 lb/hr or 1.63 TPY).

## Nitrogen Oxides (NO<sub>x</sub>)

In the animal feed plant, NO<sub>x</sub> is created during the combustion of natural gas, the primary fuel, or No. 2 fuel oil, the backup fuel. The fuel combustion takes place in the rotary dryer, which dries the wet granulated animal feed product. The use of natural gas, which contains no fuel bound nitrogen, and No. 2 fuel oil, which contains low fuel bound nitrogen levels, result in low NO<sub>x</sub> emissions relative to burning of other types of fossil fuel, such as No. 6 fuel oil or coal. Good combustion practices are implemented to achieve the highest combustion efficiency. While this reduces fuel consumption and lowers carbon monoxide and volatile organic compounds emissions, higher NO<sub>x</sub> emissions can result. However, the level of NO<sub>x</sub> emissions (57 TPY) are relatively low, and do not warrant further reduction.

Phosphate fertilizer plants typically have several rotary dryers located throughout the plant, such as those associated with DAP, MAP and GTSP production. Although several add-on  $NO_x$  control technologies are potentially available for application to rotary dryers, these are not known to have been applied in the phosphate industry. These technologies include flue gas recirculation, selective non-catalytic reduction (SNCR by ammonia or urea injection), and selective catalytic reduction (SCR).

Based on the low  $NO_x$  emissions from the expanded animal feed plant, the use of low nitrogen containing fuels (natural gas and No. 2 fuel oil) and good combustion practices are proposed by the applicant as BACT for  $NO_x$  emissions.

## **BACT Determination by DEP:**

Based on the information provided by the applicant and the information searches conducted by the Department, a top-down BACT approach for  $PM/PM_{10}$ , F and  $NO_x$  was employed.

For PM/PM<sub>10</sub> emissions, the Department accepts the applicant proposed 0.02 gr/dscf for material handling sources utilizing baghouses, and 0.01 gr/dscf for process equipment utilizing venturi scrubber.

For F emissions, the Department is requiring that AFI Plant 2 also utilize an equivalent cross-flow scrubber/demister, and not to exceed an initial limit for fluorides of 0.04 lb/ton  $P_2O_5$ . The Department intended to set the BACT limit for fluoride based on compliance tests conducted on the existing AFI plant 1. However these tests were deferred at the request of the applicant and the Department does not yet have the best data upon which to base a final BACT limit. Therefore the

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final BACT limit for fluorides will be determined later by the Department and will be based on the performance test results.

For NO<sub>x</sub> emissions, the Department accepts the applicant proposed use of low nitrogen containing fuels and good combustion practices.

The BACT emission levels established by the Department are as follows:

| Source                                  | Pollutant Emission Limit   |
|---|--|
| Common Stack (PM/PM10) AFI Plant 1 or 2 | 0.01gr/dscf or 6.0 lb/hr (26.28 TPY)   |
| Common Stack (F) AFI Plant 1 or 2       | Initially 0.04 lb/ton of P <sub>2</sub> O <sub>5</sub> input 0.53 lb/hr (1.63 TPY) |
| Common Stack (VE)                       | Visible emissions not to exceed 20% opacity  |
| Minor points sources with baghouses     | Visible emissions not to exceed 5% opacity   |

Compliance with the particulate emission limitations shall be in accordance with the EPA Reference Method 5 as contained in Appendix A, 40 CFR 60.

Compliance with the F limitations shall be in accordance with the EPA Reference Method 13A or 13B as contained in Appendix A, 40 CFR 60.

Compliance with opacity standards (minor sources controlled by baghouses) shall be determined by conducting observations in accordance with 40 CFR 60, Appendix A, Method 9.

### DETAILS OF THE ANALYSIS MAY BE OBTAINED BY CONTACTING:

Syed Arif, Review Engineer or A. A. Linero, P.E Administrator, New Source Review Section Department of Environmental Protection Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400



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| Recommended By:                                      | Approved By:  |  |  |
|--|---|--|--|
| C. H. Fancy, P.E., Chief<br>Bureau of Air Regulation | Howard L. Rhodes, Director Division of Air Resources Management |  |  |
| Date:  | Date:   |  |  |

## APPENDIX GC GENERAL PERMIT CONDITIONS [F.A.C



- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.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 or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.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.
- G.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:

Have access to and copy and records that must be kept under the conditions of the permit; Inspect the facility, equipment, practices, or operations regulated or required under this permit, and, 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.

G.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 description of and cause of non-compliance, and

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.

#### APPENDIX GC





- G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extend it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:

Determination of Best Available Control Technology (X) - Attached and incorporated as a condition of this permit. Determination of Prevention of Significant Deterioration (X); and Compliance with New Source Performance Standards ( ).

- G.14 The permittee shall comply with the following:
  - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
    - (c) Records of monitoring information shall include:

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.

G.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.