



**CARGILL  
FERTILIZER, INC.**

**RECEIVED**

JUN 01 1999

BUREAU OF  
AIR REGULATION

8813 Highway 41 South - Riverview, Florida 33569 - Telephone 813-677-9111 - TWX 810-876-0648 - Telex 52666 - FAX 813-671-6146

**Via Courier and Fax: (850) 487-4938**

Office of General Counsel  
Florida Department of Environmental Protection  
3900 Commonwealth Boulevard  
Mail Station 35  
Tallahassee, Florida 32399-3000

ATTN: Cathy Carter

RE: Administrative Hearing Extension Requests  
Draft Permit No. PSD-FL-234A  
DEP File No. 0570008-028-AC  
Cargill Fertilizer, Inc., 8813 Highway 40 South, Riverview, FL 33569

Dear Ms. Carter:

References to Cargill Fertilizer, Inc.'s ("Cargill") earlier requests for an extension of time to file a petition for an administrative hearing and the Department of Environmental Protection's ("DEP") Order, dated April 19, 1999, granting Cargill an extension until May 30, 1999. See Order, OGC Case No. 99-0534, a copy of which is attached. Cargill and the DEP have negotiated a resolution to all outstanding issues related to the air permit for this facility. DEP has advised Cargill that it can proceed with issuance of the air permit as agreed to by the parties if Cargill agrees to waive the remaining time allotted to request an administrative hearing. Accordingly, Cargill withdraws its request for additional time to request an administrative hearing on this permit.

Cargill appreciates your staff's willingness to grant it and DEP additional time to resolve permitting issues without resort to formal hearing procedures. Please contact me at 813-671-6297 if you would like to discuss this request.

Sincerely yours,

David Jellerson

TWM:jmm  
cil/149480

cc: Al Linero, FDEP  
John Reynolds, FDEP (via facsimile: 850/922-6979)





8813 Highway 41 South - Riverview, Florida 33569 - Telephone 813-677-9111 - TWX 810-876-0548 - Telex 52666 - FAX 813-671-6146

**Via Courier and Fax: (850) 487-4938**

Office of General Counsel  
Florida Department of Environmental Protection  
3900 Commonwealth Boulevard  
Mail Station 35  
Tallahassee, Florida 32399-3000

ATTN: Cathy Carter

RE: Administrative Hearing Extension Requests  
Draft Permit No. PSD-FL-234A  
DEP File No. 0570008-028-AC  
Cargill Fertilizer, Inc., 8813 Highway 40 South, Riverview, FL 33569

Dear Ms. Carter:

References to Cargill Fertilizer, Inc.'s ("Cargill") earlier requests for an extension of time to file a petition for an administrative hearing and the Department of Environmental Protection's ("DEP") Order, dated April 19, 1999, granting Cargill an extension until May 30, 1999. See Order, OGC Case No. 99-0534, a copy of which is attached. Cargill and the DEP have negotiated a resolution to all outstanding issues related to the air permit for this facility. DEP has advised Cargill that it can proceed with issuance of the air permit as agreed to by the parties if Cargill agrees to waive the remaining time allotted to request an administrative hearing. Accordingly, Cargill withdraws its request for additional time to request an administrative hearing on this permit.

Cargill appreciates your staff's willingness to grant it and DEP additional time to resolve permitting issues without resort to formal hearing procedures. Please contact me at 813-671-6297 if you would like to discuss this request.

Sincerely yours,

A handwritten signature in black ink that reads "David B. Jellerson". The signature is written in a cursive style with a long, sweeping underline.

David Jellerson

TWM:jmm  
cil/149480

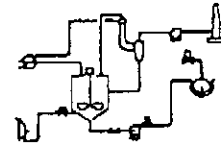
cc: Al Linero, FDEP  
→ John Reynolds, FDEP (via facsimile: 850/922-6979)



5025 IMPERIAL PKWY., SUITE 105  
MULBERRY, FL 33860-9689 USA  
TEL: 041 648-5380  
FAX: 041 647-5210

SNEAS@KEMWORKS.COM  
WWW.KEMWORKS.COM

**KEMWORKS**  
TECHNOLOGY, INC.



# Fax

<b>To:</b> John Reynolds, DEP	<b>From:</b> Steve Neas
<b>Fax:</b> 850-922-6979	<b>Pages:</b> 1
<b>Phone:</b> 850-488-1344	<b>Date:</b> May 20, 1999
<b>E-mail:</b>	<b>CC:</b> Elton Cuman, Cargill Fertilizer, Inc
<b>Re:</b> Cargill Riverview -- AFI Scrubber	<b>PN:</b> 1294

Dear Mr. Reynolds:

The existing AFI scrubber with Kimre packing as designed with 3 stages and 6 layers of Kimre pads per stage is capable of 8 NOG at 19,000 ACFM air flow to the scrubber, with a minimum of 200 gpm of pond water to each stage. With the pond water at 9,000 ppm F and 100 °F.

	NOG each	Total NOG
2 Banks of Sprays in void section	0.7	1.4
3 Banks of Kimre (6 Layers)	2.2	6.6
<b>Total</b>		<b>8.0</b>

Regards,

Stephen M. Neas, PE

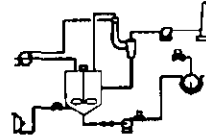
Senior Process Engineer - KEMWORKS TECHNOLOGY, INC.

CC: AFI PERMIT FILE

CARGILL  
234a

5925 IMPERIAL PKWY., SUITE 105  
MULBERRY, FL 33860-8680 USA  
TEL: 941 648-5309  
FAX: 941 647-5219  
SNEAS@KEMWORKS.COM  
WWW.KEMWORKS.COM

**KEMWORKS**  
TECHNOLOGY, INC.



# Fax

<b>To:</b> John Reynolds, DEP	<b>From:</b> Steve Neas
<b>Fax:</b> 850-922-6979	<b>Pages:</b> 1
<b>Phone:</b> 850-488-1344	<b>Date:</b> May 20, 1999
<b>E-mail:</b>	<b>CC:</b> Elton Curran, Cargill Fertilizer, Inc
<b>Re:</b> Cargill Riverview -- AFI Scrubber	<b>PN:</b> 1294

Dear Mr. Reynolds:

The existing AFI scrubber with Kimre packing as designed with 3 stages and 6 layers of Kimre pads per stage is capable of 8 NOG at 19,000 ACFM air flow to the scrubber, with a minimum of 200 gpm of pond water to each stage. With the pond water at 9,000 ppm F and 100 °F.

	NOG each	Total NOG
2 Banks of Sprays in void section	0.7	1.4
3 Banks of Kimre (6 Layers)	2.2	6.6
<b>Total</b>		<b>8.0</b>

Regards,

Stephen M. Neas, PE

Senior Process Engineer – KEMWORKS TECHNOLOGY, INC.

*[Faint handwritten notes]*



8813 Highway 41 South - Riverview, Florida 33569 - Telephone 813-677-9111 - TWX 810-876-0648 - Telex 52666 - FAX 813-671-6146

May 17, 1999

OVERNIGHT Airbill #719 03256

Mr. A. A. Linero, P.E.  
New Source Review Section  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 323992400

**RECEIVED**  
MAY 18 1999  
BUREAU OF  
AIR REGULATION

RE: Cargill Fertilizer, Inc.  
File No. 0570008-028-AC (PSD-FL-234A), AFI Plant

Dear Mr. Linero:

Please find enclosed the following additional information as requested by John Reynolds during our conversation last Thursday:

1. An updated memo from Kimre, Inc. stating that our scrubber will be provide at least 8 NTU's. This statement is based on our commitment to increase the quantity of packing to three stages with six layers each. Each layer will have 200gpm of pond water flow with the water assumed to have the characteristics as presented in the BACT determination contained in the draft permit.
2. A memo from MAC Equipment stating that the dust collectors will generally not exceed an outlet emissions rate of 0.01 gr/dscf. Note that during my discussions with John, I agreed to evaluate the feasibility of testing the emissions from the dust collectors. However, an inspection of the outlet configuration of these units revealed that testing is not possible. These small dust collectors have rectangular exhaust ports flush with the side of the unit with a short overhang on the top. There is no space to collect a sample. As an alternative, we requested that MAC provide us with some assurance that the units are capable of achieving the 0.012 gr/dscf emission rate that the Department would like to set as BACT. The attached MAC memo is being provided to give the Department reasonable assurance that these existing units are capable of meeting this emission level. Note, however, that this emission level has not been guaranteed by MAC. Cargill purchased and installed these units based on the Department's previous BACT determination. The current project revisions do not involve these units and we do not agree that the BACT needs to be changed. However, in order to proceed with this permit processing, we are willing to accept a revised BACT to 0.012 gr/dscf provided that the only testing requirement will be to meet the 5% visible emission limitation.



Al Linero  
May 17, 1999  
Page2

I trust that this information is sufficient to resolve the outstanding issues with this permit. As soon as we receive a draft copy of revisions reflecting these issues, we will provide the Department with a letter withdrawing our request for an extension of time to file for an administrative hearing. Should you have any questions or need clarification on any of these issues, please feel free to contact me by phone at 813/671-6297 or by e-mail at [david\\_jellerson@cargill.com](mailto:david_jellerson@cargill.com).

Sincerely,

  
David Jellerson, P.E.

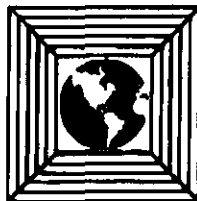
DB/db

cc: David Buff, Golder  
Tom MacLeod, Cargill  
Edgemon, Morris, Weyers

cc: J. Reynolds, BAA  
SWD  
NPS  
EPA  
Hillsboro Co.



recycled paper



**Kimre, Inc.**  
PHASE SEPARATION TECHNOLOGY



The Presidential "E" Award  
For Excellence in Exporting

Visit us on the  
Worldwide Web at  
[www.kimre.com](http://www.kimre.com)

P.O. Box 571240 · Miami, Florida 33257-1240 USA · Phone: (305) 233-4249 · Fax: (305) 233-8687

FAX ID: 704

DATE: 5/14/99

PAGE 1 OF 1

TO: Cargill Fertilizer, Inc.

SUBJECT: Animal Feed Scrubber

ATTN: Mr. Elton C. Curran

SENDER: Michael A. Reyes

TO FAX #: (813) 671-6149

KIMRE FILE #: 031

Dear Mr. Curran:

Kimre, Inc. manufactures a unique type of packing, KON-TANE<sup>®</sup> Tower Packing. For over 25 years, Kimre has been providing the phosphate industry with a new generation of packing. Plants have been replacing dumped packing with the KON-TANE<sup>®</sup> Tower Packing to improve scrubber performance, operation, and maintenance.

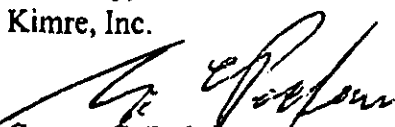
KON-TANE<sup>®</sup> is a highly structured, interlaced monofilament material. This unique mesh is designed to breakup the scrubbing liquid and to create maximum surface area for mass transfer with the vapor phase. KON-TANE<sup>®</sup> Tower Packing provides low pressure drop, excellent performance, with very maintenance friendly operation.

Each stage of KON-TANE<sup>®</sup> Tower Packing is typically designed in a six-layer combination. To utilize the optimum number of transfer units, proper gas velocities and irrigation rates are needed. Cargill reports that the AFI scrubber operates with 200 GPM irrigation to the front face of each stage of KON-TANE<sup>®</sup> Tower Packing and operates with an effective gas velocity of 350 FPM. These values are consistent with proper operation.

Proper irrigation would include a complete and even spray coverage that includes a maximum 90° spray pattern. This optimizes mass transfer by wetting the optimum amount of surface contact area. Properly designed and operated, the Cargill AFI horizontal flow scrubber utilizing three stages of KON-TANE<sup>®</sup> Tower Packing provides at least 8 NTU's.

Thank you for your interest and use of Kimre<sup>™</sup> technology and products. Please contact Kimre's local representative, Tom Allen at Hughes Supply; Michael Reyes, your Kimre Application Engineer; or me with any questions. All of us will be glad to help.

Sincerely,  
Kimre, Inc.

  
George C. Pedersen, P.E.  
President

CC: Mr. Tom Allen

Hughes Supply, Inc.



MAC Equipment, Inc.

**FAX**

D

NO. 3110 1. 1/1

7901 NW 107th Terrace Kansas City MO 64153  
Phone: 816-801-3338 (800) 821-2476  
Fax: (816) 801-3480

**PLEASE NOTE OUR NEW ADDRESS**

To: Carissa  
Company: Cargill, Riverview, Fl  
From: Steve Sargent  
Re: Dust Collector Emissions

Fax: 813-671-6366  
Date: 5-17-99  
Pages: 1 including this one

cc. DAVID JELTERSON

**All information contained in these documents is confidential**

**Notes:**

Reference:

39AVRC21 and 39AVSC36 utilizing MAC Polipleet cartridges:

MAC Equipment, Inc states that the emissions of its 1612 spun-bonded polyester Polipleet cartridges, when properly applied and maintained will generally not exceed an outlet emissions rate of 0.01 gr / dscf based on dry dust particle sizes of 1 micron and larger. Misuse, abuse, operating outside of the original design parameters, and / or water or oil on the media may adversely affect the emissions rate.

Steve Sargent  
Technical Director

**PLEASE NOTE OUR NEW KANSAS CITY ADDRESS**

<u>MAC Manufacturing and Sales Locations</u>		<u>Phone</u>	<u>Toll-free</u>	<u>Fax</u>
623 McWay Drive West	High Point NC 27263	(336) 434-3802	(800) 882-0622	(336) 434-3803
13813 FM 529	Houston TX 77041	(713) 896-1825	(800) 955-7735	(713) 896-8730
7901 NW 107 <sup>th</sup> Terrace	Kansas City MO 64153	(816) 891-9300	(800) 821-2476	(816) 891-8978
PO Box 205, Hwy 75 South	Sabetha KS 66534	(785) 284-2191	(800) 223-2191	(785) 284-3565





RECEIVED

MAY 13 1999

BUREAU OF  
AIR REGULATION

8813 Highway 41 South - Riverview, Florida 33569 - Telephone 813-677-9111 - TWX 810-876-0648 - Telex 52666 - FAX 813-671-6146

May 12, 1999

Airborne: 719 163 3153

Mr. A. A. Linero, P.E.  
New Source Review Section  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

RE: Cargill Fertilizer, Inc.  
File No. 0570008-028-AC (PSD-FL-234A), AFI Plant

Dear Mr. Linero:

Please accept the following comments and information based on our May 5, 1999 meeting regarding the above-referenced permit. Items below are related to the Specific Conditions of the Draft permit.

SC2. The permitted production rate will be revised to 281,050 tpy.

SC4. Attached is a memo from George Pederson of Kimre stating that our scrubber is designed to achieve 8 NTU's. With this assurance it is our understanding that the Specific Condition 4 will be revised to eliminate the requirement to test inlet and outlet of the defluorination scrubber. In addition, the fluoride compliance limit will be based on the emissions achieved during the initial performance test. We request that the condition be reworded as follows:

*An initial fluoride emission test shall be conducted to confirm that the scrubber is capable of performing as designed. The Department will then use these initial testing results to establish a fluoride emission limitation taking into consideration testing and operational variability. The emission limitation will not be lower than 0.5 pounds fluoride/batch-hour.*

SC5. The particulate limit will be revised to 8 #/hr.

SC6. We request that the visible emission limitation be revised to 15%. As we discussed during the meeting we believe that a 15% opacity limit is appropriate. A 15% limit will be consistent with the BACT determination recently completed for our #3 Fertilizer Plant at our Bartow facility. This source has a condensing vapor plume similar to the #3 plant. In addition, there is limited data for this unit on which to base a more stringent VE limit.



For the baghouse sources, the opacity limit will remain at 5%. However, during the meeting the DEP indicated that the BACT determination for these sources may be revised from 0.02gr/dscf down to 0.012gr/dscf. Based on our concerns that a lowering of this limit is inappropriate for these existing sources which are not being modified, the DEP asked us to obtain a Manufacturer's Guarantee for these units. Please find attached and "Air Quality Assurance" statement from MAC Equipment, Inc. for these existing baghouses. This statement indicates that the manufacturer does not guarantee less than 0.02 grains/dscf. This is consistent with the BACT determination by the Department that was used for the purchase and installation of this equipment. Based on this information, we request that no changes be made to the previous BACT determination for these minor sources.

SC7. Fuel oil combustion will be limited to 400 hr/yr without any consideration for the reason for the use.

SC8. Reference to the New Source Performance Standards will be deleted.

SC9. Based on the performance tests previously submitted, the Department expressed an interest in establishing a stack test condition which provided for measurements of emissions from early in a batch as well as more than 8-hours after beginning of a batch. As we discussed in our meeting, batches typically start at 9-15 hour intervals. Therefore, if a three-run stack test begins shortly after the start of the second batch, the test will include emissions from the beginning of the second batch and late in the first batch. Therefore, as we discussed in our meeting, we propose that this condition be revised to read as follows:

*Before this construction permit expires, and annually, the subject emissions units shall be tested for compliance with the above emission limits. The initial performance tests for the fluoride scrubber shall consist of a three run test to be conducted during defluorination of two batches. The first run of the test shall begin within 1-hour of the start of the second batch. For the duration of all tests the emission units shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90% of the maximum operating rate allowed by the permit). In this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.*

SC10. The references to the 8 NTU's will be deleted.

SC12. The requirement to measure the P2O5 input will be deleted.

We appreciate the Department's willingness to work out the issues on this unique and challenging permit and trust that the above items reflect your understanding of our meeting

Al Linero  
May 12, 1999  
Page3

discussions. As soon as we receive a draft copy of revisions reflecting these issues, we will provide the Department with a letter withdrawing our request for an extension of time to file for an administrative hearing. Should you have any questions or need clarification on any of these issues, please feel free to contact me by phone at 813/671-6297 or by e-mail at [david\\_jellerson@cargill.com](mailto:david_jellerson@cargill.com).

Sincerely,



David Jellerson, P.E.

DB/db

Enclosures

cc: David Buff, Golder  
Tom MacLeod, Cargill  
Edgemon, Morris, Weyers  
File: P-30-39-1

cc: J. Reynolds, BAR  
SWD  
Hillsboro CO  
EPA  
NPS



Visit us on the  
Worldwide Web at  
[www.kimre.com](http://www.kimre.com)



**Kimre, Inc.**  
PHOSPHATE SEPARATION TECHNOLOGY



The Presidential "E" Award  
For Excellence in Exporting

P.O. Box 571240 · Miami, Florida 33257-1240 USA · Phone: (305) 233-4249 · Fax: (305) 233-8687

FAX ID: 613

DATE: 5/11/99

PAGE 1 OF 1

TO: Cargill Fertilizer, Inc. SUBJECT: Animal Feed Scrubber  
ATTN: Mr. Elton C. Curran SENDER: Michael A. Reyes  
TO FAX #: (813) 671-6149 KIMRE FILE #: 031

**MESSAGE:**

Dear Mr. Curran:

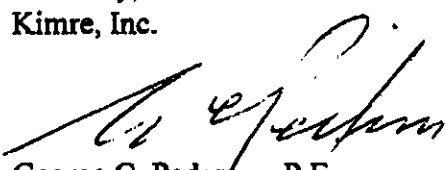
Kimre, Inc. manufactures a unique type of packing, KON-TANE<sup>®</sup> Tower Packing. For over 25 years, Kimre has been providing the phosphate industry with a new generation of packing. Plants have been replacing dumped packing with the KON-TANE<sup>®</sup> Tower Packing to improve scrubber performance, operation, and maintenance.

KON-TANE<sup>®</sup> is a highly structured, interlaced monofilament material. This unique mesh is designed to breakup the scrubbing liquid and to create maximum surface area for mass transfer with the vapor phase. KON-TANE<sup>®</sup> Tower Packing provides low pressure drop, excellent performance, with very maintenance friendly operation.

Each stage of KON-TANE<sup>®</sup> Tower Packing is typically designed in a six-layer combination. Properly designed and operated, the Cargill AFI horizontal flow scrubber utilizing three stages of KON-TANE<sup>®</sup> Tower Packing provides at least 8 NTU's.

Thank you for your interest and use of Kimre<sup>™</sup> technology and products. Please contact Kimre's local representative, Tom Allen at Hughes Supply; Michael Reyes, your Kimre Application Engineer; or me with any questions. All of us will be glad to help.

Sincerely,  
Kimre, Inc.

  
George C. Pedersen, P.E.  
President

CC: Mr. Tom Allen

Hughes Supply, Inc.



*Solution Engineering for Processing Challenges*

## **MAC EQUIPMENT AIR QUALITY ASSURANCE**

Based on 2 micron and larger dust particles, MAC Equipment guarantees their baghouse (fabric filters) when properly applied and maintained, to have a 99.9% or better mass efficiency rating on the dust laden incoming gas stream. As a general statement, emissions will not exceed .02 grains of dry solid particulate matter per dry standard cubic foot of air (45 mg/m<sup>3</sup>).

**CARGILL, INCORPORATED  
LAW DEPARTMENT**

James D. Moe  
Corporate Vice President  
General Counsel  
& Secretary

Linda L. Cutler  
Vice President  
Assistant General Counsel  
& Assistant Secretary

Mailing Address:  
P.O. Box 5624  
Minneapolis, MN 55440-5624

Gretchen Q. Banks  
Karen L. Baril  
David L. Biek  
Shirley R. Boyd  
Frederick L. Budde  
James D. Dingel  
Todd T. Erickson  
Steven Euler  
Phillip M. Fantle

Ronald E. Hunter  
Mark J. Isaacson  
Joseph R. Liesch  
Thomas W. MacLeod  
LaRaye M. Osborne  
Brian R. Pioske  
David A. Robertson  
Randall J. Romsdahl  
Laura Hicks Witte

Ronald L. Laumbach  
Vice President &  
North America  
General Counsel

H. Jed Hepworth  
Latin America  
General Counsel

Location/Shipping Address:  
15407 McGinty Road West  
Wayzata, MN 55391-2399

FAX (612) 742-6349  
or (612) 742-7503  
or (612) 742-1013

March 31, 1999

Brenda J. Arndt  
Carolyn J. Brue  
Glen M. Goldman  
Debra L. Hovland  
Jeffrey B. Johnson  
Jay A. Kroese  
Jon D. Lammers  
Richard L. Mack

Grace P. Mailly  
Karin M. Nelsen  
Christopher W. Putnam  
Mark T. Quayle  
Maria-Inés Rajj  
Jeffrey J. Skelton  
Tracy L. Wessel  
Geri L. Williams

Writer's Direct Dial Number

(612) 742-4653

**Via Courier and Fax: (850) 487-4938**

Office of General Counsel  
Florida Department of Environmental Protection  
3900 Commonwealth Boulevard  
Mail Station 35  
Tallahassee, Florida 32399-3000

ATTN: Cathy Carter

RE: Request for an extension to petition for an administrative hearing  
Draft Permit No. PSD-FL-234A  
DEP File No. 0570008-028-AC  
Cargill Fertilizer, Inc., 8813 Highway 40 South, Riverview, FL 33569

Dear Ms. Carter:

This letter is to request an extension until April 26, 1999 to petition for an administrative hearing on the above-referenced permit. This request is made on behalf of Cargill Fertilizer, Inc. ("Cargill"), which operates the Animal Feed Ingredient Plant in Hillsborough County at 8813 Highway 40 South, Riverview, Florida 33569. Cargill received the Intent to Issue Air Construction Permit for this facility on March 22, 1999 and published the Intent to Issue on March 25, 1999. Cargill is requesting a 30 day extension and, on the advise of the Florida Department of Environmental Protection, requests that this extension start from the date of publication. As good cause for granting the request for an extension of time to petition, Cargill states the following:

**RECEIVED**  
APR 06 1999  
BUREAU OF  
AIR REGULATION

Office of General Counsel

March 31, 1999

Page 2

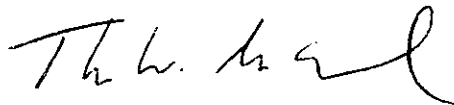
1. The draft Air Construction Permit contains numerous terms and conditions, several of which appear to warrant clarification and/or correction.

2. Cargill has conferred with Al Linero, Administrator, New Source Review Section, FDEP, and understands that the FDEP is willing to discuss these issues and agrees that a thirty day extension from the date of publication is acceptable. Cargill is optimistic that the FDEP and it can resolve these issues through additional discussion.

3. Cargill files this request as a protective measure to avoid waiver of Cargill's right to challenge the permit as currently drafted. Granting this request will not prejudice either party but will further their mutual interest and likely avoid the need to initiate formal administrative proceedings.

If this request for an extension to petition for an administrative hearing is not granted, please consider this letter a request for an administrative hearing. If you have any questions on this matter, please contact me. Thank you for your assistance in this matter.

Sincerely yours,



Thomas W. MacLeod

TWM:jmm  
cil/147147

cc: Mr. Al Linero, FDEP  
D. Jellerson, Cargill/Tampa, FL

cc: J. Reynolds, BAR  
Hillsboro Co  
SWD  
EPA  
NPS



**CARGILL  
FERTILIZER, INC.**

**RECEIVED**

APR 05 1999

BUREAU OF  
AIR REGULATION

8813 Highway 41 South - Riverview, Florida 33569 - Telephone 813-677-9111 - TWX 810-876-0648 - Telex 52666 - FAX 813-671-6146

**CERTIFIED MAIL: Z 589 341 643**

March 29, 1999

Mr. Al Linero, P.E., Administrator  
New Source Review Section  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Subject: Proof of Publication - Notice of Intent to Issue a Revised Air  
Construction Permit - DEP File No. 0570008-028-AC (PSD-FL-234A)

Gentlemen:

You will find attached Proof of Publication of the Notice of Intent to Issue a Permit Revision for the Modification of the Animal Feed Ingredients (AFI) Plant at Cargill's facility located at 8813 Hwy. 41 South, Riverview, Florida 33569, as required by Florida Department of Environmental Protection.

If there are any questions, please contact me at (813) 671-6297

Sincerely,

David B. Jellerson  
Environmental Superintendent

/dh  
Enclosure

x.c. O. Morris  
File: P-30-39- 1

cc: J. Reynolds, BAR  
SWP  
Hillsboro CO

EPA  
NPS



recycled paper



**THE TAMPA TRIBUNE**  
**Published Daily**  
**Tampa, Hillsborough County, Florida**

State of Florida }  
 County of Hillsborough } ss.

Before the undersigned authority personally appeared J. Rosenthal, who on oath says that she is Classified Billing Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE

in the matter of \_\_\_\_\_

PUBLIC NOTICE OF INTENT

was published in said newspaper in the issues of \_\_\_\_\_

MARCH 25, 1999

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

*J. Rosenthal*  
 \_\_\_\_\_  
 25

sworn to and subscribed before me, this \_\_\_\_\_ day  
 \_\_\_\_\_, MARCH, A.D. 19<sup>99</sup>

Personally Known \_\_\_\_\_ or Product Identification \_\_\_\_\_  
 Type of Identification Produced \_\_\_\_\_

(SEAL)

*Susie Lee Slaton*  
 \_\_\_\_\_

OFFICIAL NOTARY SEAL  
 SUSIE LEE SLATON  
 COMMISSION NUMBER  
 CC635424  
 MY COMMISSION EXP.  
 APRIL 16, 2001

**RECEIVED**  
 APR 05 1999

BUREAU OF  
 AIR REGULATION

**PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT**  
 STATE OF FLORIDA  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 DEP File No. 0570008-028-AC  
 (PSD-FL-234A) Cargill Riverview Animal Feed Ingredients Plant  
 Hillsborough County

The Department of Environmental Protection (Department) gives notice of its intent to issue a revised air construction permit to Cargill Fertilizer, Inc. to modify the Airne Food Ingredients (AFI) Plant at its facility located on Highway 41 South near Riverview in Hillsborough County, Florida. A Revised Best Available Control Technology (BACT) determination was required for particulate matter (PM/PM10), fluorides (F), and visible emissions pursuant to Rule 62.212.400, F.A.C. The applicant's name and address are: Cargill Fertilizer, Inc., 8813 Highway 41 South, Riverview, Florida 33569.

The AFI Plant manufactures granulated defluorinated phosphate products used in animal feeds. The production capacity of the existing plant will be increased from 580 to 770 tons per day (TPD) while the permitted capacity will be decreased from 1160 to 770 TPD. The modification will consist of installing additional scrubbing capacity for removal of fluoride emissions and particulate matter emissions. F will be controlled to 0.5 pounds per batch-hour by a crossflow scrubber using pond water. PM/PM10 will be controlled to 6.0 pounds per hour using a venturi scrubber. Visible emissions will be limited to 10 percent.

An additional air quality impact analysis was not required because the impacts were evaluated when the plant was permitted to increase production from 580 to 1160 TPD in 1996. The final revised project will have less impacts than the project previously approved. Emissions from the facility will not contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the final permit with the attached conditions 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 requests for a public hearing (meeting) for a period of 14 (fourteen) days and written comments concerning the proposed 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 should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

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

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

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, as well as the rules and

statutes which entitle the petitioner to relief; and (f) A demand for relief.

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

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

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

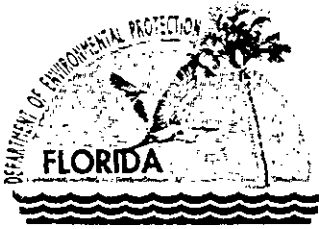
Dept. of Environmental Protection  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4,  
Tallahassee, Florida 32301  
Telephone: 850/488-0114  
Fax: 850/922-6979

Dept. of Environmental Protection  
Southwest District Office  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8218  
Telephone: 813/744-6100  
Fax: 813/744-6084

Hillsborough County EPC  
Air Management Division  
1410 North 21st Street  
Tampa, Florida 33605  
Telephone: 813/272-5690

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

1926 3/25/99



Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

June 17, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED


Mr. David B. Jellerson  
Environmental Superintendent  
Cargill Fertilizer, Inc.  
8813 Highway 40 South  
Riverview, Florida 33569

Re: Typographical Error in Permit No. 0570008-028-AC (PSD-FL-234A)  
Animal Feed Ingredient Plant

Dear Mr. Jellerson:

We discovered a minor typo in the referenced permit. Section II, Page 3, Condition 9. Annual Reports, should include "and the Environmental Protection Commission of Hillsborough County". Enclosed is a corrected copy of page 3. If there are any questions, please contact John Reynolds at (850)921-9536.

Sincerely,

 6/17  
A. A. Linero, P.E., Administrator  
New Source Review Section

AAL/jr

c: Bill Thomas, SWD  
Ben Kalra, EPCHC  
David Buff, P.E., Golder Associates

7 333 618 165

US Postal Service  
**Receipt for Certified Mail**

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

Sent to		David Jellerson
Street & Number		Carsile Fert
Post Office, State & ZIP Code		Riverview FL
Postage	\$	
Certified Fee		
Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt Showing to Whom & Date Delivered		
Return Receipt Showing to Whom, Date, & Addressee's Address		
TOTAL Postage & Fees	\$	
Postmark or Date		6-22-99
057005-028-AC PSD-F-234A		

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:** [Redacted] **Fold at line over top of envelope to**

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

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

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
David Jellerson, ES  
Carsile Fertilizer  
8813 Hwy 40 South  
Riverview, FL  
33569

4a. Article Number  
7333 618 165

4b. Service Type

- Registered
- Express Mail
- Return Receipt for Merchandise
- Certified
- Insured
- COD

7. Date of Delivery

5. Received By: (Print Name)  
C. Summerall

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

6. Signature: (Addressee or Agent)  
X C. Summerall

Thank you for using Return Receipt Service.

## AIR CONSTRUCTION PERMIT PSD-FL-255 (1050046-008-AC )

### SECTION II - ADMINISTRATIVE REQUIREMENTS

---

1. Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Department's Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8218. All applications for permits to construct or modify an emissions unit(s) *subject to the Prevention of Significant Deterioration or Nonattainment (NA) review requirements* should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), 2600 Blair Stone Road, MS 5505, Tallahassee, Florida 32399-2400 (phone number 850/488-0114).
2. General Conditions: The owner and operator is subject to and shall 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.]
3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
4. Forms and Application Procedures: 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.]
5. Expiration: This air construction permit shall expire on March 31, 2001 [Rule 62-210.300(1), F.A.C.]. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the Department's Southwest District Office of any delays in completion of the project which would affect the startup day by more than 90 days. [Rule 62-4.090, F.A.C.]
6. Application for Title V Permit: An application for a Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the Department's Southwest District Office. [Chapter 62-213, F.A.C.]
7. Permit Approval: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)].
8. BACT Determination: In conjunction with extension of the 18 month periods to commence or continue construction, or extension of the permit expiration date, the permittee may be required to demonstrate the adequacy of any previous determination of best available control technology for the source. [40 CFR 52.21(j)(4)]
9. Annual Reports: Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports using DEP Form 62-210.900(4) shall be sent to the DEP's Southwest District office and the Environmental Protection Commission of Hillsborough County by March 1st of each year.
10. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
11. Quarterly Reports: Quarterly excess emission reports, in accordance with 40 CFR 60.7 (a)(7) (c) (1997 version), shall be submitted to the DEP's Southwest District office and the Environmental Protection Commission of Hillsborough County.

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF FINAL PERMIT

In the Matter of an  
Application for Permit by

Mr. David B. Jellerson  
Environmental Superintendent  
Cargill Fertilizer, Inc.  
8813 Highway 40 South  
Riverview, Florida 33569

DEP File No. 0570008-028-AC  
PSD-FL-234A  
AFI Plant  
Hillsborough County

Enclosed is the FINAL Permit Number PSD-FL-234A to make modifications necessary to increase production from 580 to 770 tons per day of animal feed ingredients at the applicant's facility in Riverview, Hillsborough County. This permit is issued pursuant to Chapter 403, Florida Statutes and in accordance with Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration (PSD) and Best Available Control Technology (BACT).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.



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

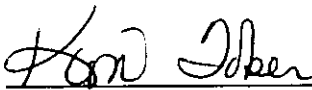
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 6-8-99 to the person(s) listed:

David B. Jellerson, Cargill\*  
Greg Worley, EPA  
John Bunyak, NPS  
David Buff, P.E., Golder Assoc.  
Bill Thomas, DEP SWD  
Rick Kirby, Hillsborough County

Clerk Stamp

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

  
(Clerk)

6-8-99  
(Date)

FINAL DETERMINATION  
CARGILL FERTILIZER, INC.  
AFI Plant Modification - Riverview  
Permit No. 0570008-028-AC  
PSD-FL-234A

An Intent to Issue Air Construction Permit to Cargill Fertilizer, Inc. for the modification of the Animal Feed Ingredients (AFI) Plant at the applicant's facility in Riverview, Hillsborough County, Florida was distributed on March 19, 1999. The proposed permit provided for modifications necessary to increase the production rate from 580 to 770 tons per day (TPD) of AFI product.

The Public Notice of Intent to Issue Air Construction Permit was published in the Tampa Tribune on March 25, 1999. Copies of the draft construction permit and related documents were available for public inspection at the Department's offices in Tallahassee and Tampa and at the Environmental Protection Commission of Hillsborough County in Tampa. Comments were submitted by the applicant following publication of the Public Notice of Intent to Issue and the applicant's issues were subsequently resolved.

The final action of the Department will be to issue the permit as modified.

Z 333 618 160

US Postal Service  
**Receipt for Certified Mail**

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

Sent to David Jellerson	
Street & Number Cargill Fert.	
Post Office, State, & ZIP Code Riverview FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	6-8-99
0570008-028-AC PSD-FI-234A	

PS Form 3800, April 1995

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

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

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

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
David Jellerson, ES  
Cargill Fertilizer  
8813 Hwy 40 South  
Riverview, FL  
33569

5. Received By: (Print Name)  
ROY BARNETT

6. Signature: (Addressee or Agent)  
X *[Signature]*

4a. Article Number  
2333 618 160

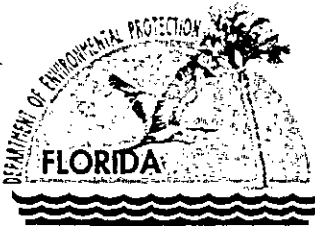
4b. Service Type  
 Registered  
 Express Mail  
 Return Receipt for Merchandise  
 Certified  
 Insured  
 COD

7. Date of Delivery  
6-10-99

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

Thank you for using Return Receipt Service.





Jeb Bush  
Governor

# Department of Environmental Protection

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

David B. Struhs  
Secretary

## PERMITTEE:

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

File No.	0570008-028-AC
Permit No.	PSD-FL-234A
SIC No.	2874
Project:	Animal Feed Plant
Expires:	December 31, 2000

## Authorized Representative:

David Jellerson  
Environmental Superintendent

## PROJECT AND LOCATION:

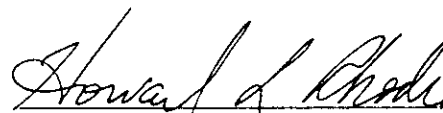
Permit for the construction/modification of the Animal Feed Plant that produces defluorinated phosphate animal feed ingredients (AFI). The project involves the replacement of air pollution control equipment and process modifications necessary to increase the production rate from 580 to 770 tons per day (TPD) of AFI. The project is located at the Cargill Fertilizer facility, 8813 Highway 41 South, Riverview, Hillsborough County. UTM coordinates are 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, and 62-297. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

## ATTACHED APPENDICES ARE MADE A PART OF THIS PERMIT:

Appendix BD      BACT Determination  
Appendix GC      Construction Permit General Conditions

  
Howard L. Rhodes, Director  
Division of Air Resources  
Management

**SECTION I – FACILITY INFORMATION**

---

FACILITY DESCRIPTION

Cargill Fertilizer, Inc. operates a phosphate fertilizer manufacturing facility near Riverview, Hillsborough County, Florida, producing sulfuric acid, wet-process phosphoric acid, and ammoniated phosphate fertilizers and related products. The company has applied to increase the production rate from 580 TPD to 770 TPD at its AFI Plant. The modifications will improve emissions while increasing the maximum production rate. As a result of this production rate modification, increases in the emissions of particulate matter (PM), PM with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), sulfur dioxide (SO<sub>2</sub>), fluoride (F) and other pollutants will occur.

REGULATORY CLASSIFICATION

The AFI Plant is classified as a "Major or Title V Source" per Rule 62-210.200, F.A.C., because it has the potential to emit at least 100 tons per year of particulate matter when potential fugitive emissions are included with potential controlled emissions.

Phosphate rock processing plants (includes plants that process phosphate rock-derived products) are listed as a Major Facility Category in Table 62-212.400-1, F.A.C., "Major Facility Categories." Therefore, stack and fugitive emissions of over 100 TPY of a regulated pollutant are sufficient to classify the installation as a "Major Facility" per the definitions in Rule 62-210.200, F.A.C., subject to the Significant Emission Rates given in Table 62-212.400-2, F.A.C. and the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) and Best Available Control Technology (BACT).

PERMIT SCHEDULE:

- 12-17-98: Application Received
- 01-12-99: Application Complete
- 03-19-99: Draft Permit Issued

RELEVANT DOCUMENTS:

The documents listed below are specifically related to this permitting action and form the basis of the permit. They are on file with the Department:

- Application received 12-17-98
- Department's incompleteness letter dated 12-21-98
- Applicant's submittal received 01-12-99
- Technical Evaluation and Preliminary Determination dated 03-18-99
- Best Available Control Technology determination (issued concurrently with permit)
- Applicant's submittal received 05-24-99

## AIR CONSTRUCTION PERMIT PSD-FL-255 (1050046-008-AC )

### SECTION II - ADMINISTRATIVE REQUIREMENTS

---

1. Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Department's Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-8218. All applications for permits to construct or modify an emissions unit(s) *subject to the Prevention of Significant Deterioration or Nonattainment (NA) review requirements* should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), 2600 Blair Stone Road, MS 5505, Tallahassee, Florida 32399-2400 (phone number 850/488-0114).
2. General Conditions: The owner and operator is subject to and shall 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.]
3. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
4. Forms and Application Procedures: 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.]
5. Expiration: This air construction permit shall expire on March 31, 2001 [Rule 62-210.300(1), F.A.C.]. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the Department's Southwest District Office of any delays in completion of the project which would affect the startup day by more than 90 days. [Rule 62-4.090, F.A.C.]
6. Application for Title V Permit: An application for a Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the Department's Southwest District Office. [Chapter 62-213, F.A.C.]
7. Permit Approval: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)].
8. BACT Determination: In conjunction with extension of the 18 month periods to commence or continue construction, or extension of the permit expiration date, the permittee may be required to demonstrate the adequacy of any previous determination of best available control technology for the source. [40 CFR 52.21(j)(4)]
9. Annual Reports: Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports using DEP Form 62-210.900(4) shall be sent to the DEP's Southwest District office by March 1st of each year.
10. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
11. Quarterly Reports: Quarterly excess emission reports, in accordance with 40 CFR 60.7 (a)(7) (c) (1997 version), shall be submitted to the DEP's Southwest District office and the Environmental Protection Commission of Hillsborough County.

AIR CONSTRUCTION PERMIT PSD-FL-234A (0570008-028-AC )

**SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS**

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

EMISSION UNIT NO.	EMISSION UNIT DESCRIPTION
078	Animal Feed Ingredient (AFI) Plant
079	Diatomaceous Earth Silo
080	Limestone Silo
081	Loadout System

1. Unless otherwise stated herein, the modification and operation of the subject AFI Plant shall be in accordance with the capacities and specifications stated in the application or in updated submittals. [Rule 62-210.300, F.A.C.]
2. The AFI Plant shall not produce more than 770 tons of AFI product per day (daily average) or more than 281,050 tons of AFI product per year. [Rule 62-210.200, F.A.C.]
3. The subject emission unit is allowed to operate continuously (8760 hours/year). [Rule 62-210.200, F.A.C.]
4. Unless the Department determines that the initial scrubber performance test data justify a higher limit, total fluoride emissions from the AFI Plant shall not exceed 0.50 lb./batch-hr and 4.30 TPY based on 281,050 tons AFI/year, and 15,768 batch-hours/year (projection based on 90% operating factor) or 7,884 double batch-hours/year. Since the duct configuration is not appropriate for a scrubber inlet test to be done, the fluoride scrubber design requirement shall be that the minimum capability of 8.0 mass transfer units be attested to by the scrubber manufacturer in writing. Compliance with the mass transfer requirement shall be determined by the Bureau of Air Regulation in Tallahassee based on calculations using test data. If the scrubber achieves an average of 8.0 mass transfer units using normal pond water, the Department shall consider the tests as successful and shall adjust the fluoride emission limit as appropriate. [Rule 62-212.400, F.A.C.]
5. Particulate matter emissions from the AFI Plant stack shall not exceed 8.0 lb/hr and 35 TPY based on recent stack tests. [Rule 62-212.400, F.A.C.]
6. Visible emissions from the AFI Plant stack shall not exceed 15% opacity based on recent stack tests. Visible emissions from Emissions Units Nos. 079, 080 and 081 shall not exceed 5% opacity. [Rule 62-212.400, F.A.C.]
7. During periods of firing natural gas only, sulfur dioxide emissions from the stack shall be presumed as minimal and a sulfur dioxide compliance test shall be waived. No. 2 fuel oil with a maximum sulfur content of 0.5% sulfur by weight may be fired up to a maximum of 400 hours per year. The firing rate of either fuel shall not exceed 50 million BTU per hour. The permittee shall maintain records of the fuel oil supplier's sulfur content analysis. [Rule 62-210.200(227), F.A.C.]
8. The venturi/cyclonic scrubber shall be operated at a minimum pressure drop of 15 inches H<sub>2</sub>O. Instances may occur such as low operating rates during which the total pressure drop across the venturi/cyclonic scrubber may be less than the normal rate minimum of 15 inches of H<sub>2</sub>O. The permittee shall install, calibrate, operate and maintain monitoring devices that continuously measure and record the total pressure drop across each scrubbing system. Accuracy of the monitoring devices shall be ± 5% over the operating range. [Rules 62-4.070 and 62-296.800, 62-212.410, F.A.C.]
9. Before this construction permit expires, and annually thereafter, the subject emissions units shall be tested for compliance with the above emission limits. The initial performance tests for the fluoride scrubber shall consist of a three-run test during a double-batch beginning within one hour of the start of the second batch. For the duration of all tests the emission units shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90% of the maximum operating rate allowed by the permit). In this case, subsequent emission unit operation is limited to 110 percent of the test load until a new

## AIR CONSTRUCTION PERMIT PSD-FL-234A (0570008-028-AC )

### SECTION III - EMISSIONS UNIT(S) SPECIFIC CONDITIONS

---

test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. [Rule 62-297.310, F.A.C.]

10. The Department's Southwest District office and the Environmental Protection Commission of Hillsborough County in Tampa shall be notified in writing at least 15 days prior to any compliance test. Written reports of the initial performance test results shall be submitted to the Bureau of Air Regulation (BAR) in Tallahassee for a determination of compliance with the minimum requirement of 8.0 mass transfer units (NTU). Following BAR's approval of the scrubber performance, subsequent test reports shall be submitted to the Southwest District office and the Environmental Protection Commission of Hillsborough County within 45 days of test completion. [Rule 62-297.310, F.A.C.]
11. The compliance test procedures shall be in accordance with EPA Reference Methods 1, 2, 3, 4, 5, 9 and 13A or 13B, as appropriate, as published in 40 CFR 60, Appendix A. 60, Appendix A. [Rules 62-204.800 and 62-297.310(7)(c), F.A.C.]
12. All measurements, records, and other data required to be maintained by this facility shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These data shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C.] The permittee shall determine the mass flow of phosphorus-bearing feed material to the process by a means acceptable to the Department. The monitoring method shall have an accuracy of  $\pm 5$  percent. The permittee shall maintain a daily record of the tonnage of AFI product produced. [Rule 62-296.800, F.A.C.]
13. No person shall cause, suffer, allow, or permit the discharge of air pollutants that cause or contribute to an objectionable odor. [Rule 62-296.320, F.A.C.]
14. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
15. The subject emissions units shall be subject to the following:
  - Excess emissions resulting from startup, shutdown or malfunction of any source shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700, F.A.C.]
  - Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700, F.A.C.]
  - Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest. [Rule 62-210.700, F.A.C.]
  - In case of excess emissions resulting from malfunctions, each source shall notify the Department or the Environmental Protection Commission of Hillsborough County in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700, F.A.C.]
16. The permittee shall submit an Annual Operating Report using DEP Form 62-210.900(4) to the Department's Southwest District office by March 1 of the following year for the previous year's operation. [Rule 62-210.370, F.A.C.]

**APPENDIX BD**  
**REVISED BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

---

**CARGILL FERTILIZER, INC.**  
**ANIMAL FEED INGREDIENT PLANT**  
**PSD-FL-234A and 0570008-028-AC**  
**Hillsborough County**

Cargill Fertilizer, Inc. has applied to revise its construction permit PSD-FL-234 (0570008-013-AC) issued on June 12, 1997 to construct an animal feed ingredient (AFI) plant at its existing fertilizer manufacturing facility in Riverview, Florida. The plant 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 05700008-002-AC to update the design data for the plant. The original plant capacity was 480 tons per day (TPD) and 150,000 tons per year (TPY) of AFI, based on two acid defluorination batch tanks and one granulation unit. The AFI plant began initial operations in January 1996. An application was submitted in 1996 to expand the AFI Plant by adding a third acid defluorination batch tank and a second granulation unit. This expansion, permitted under air construction permit no. 0570008-013-AC issued on June 12, 1997, increased the AFI production capacity to 1,160 TPD (580 TPD for each granulation unit) and 300,000 TPY.

Cargill later installed the third acid defluorination tank but did not construct the second granulation unit. The second granulation unit permitted under permit no. 0570008-013-AC will not be constructed. Instead, Cargill proposes that the capacity of the existing granulation unit be increased through implementing modifications to the system. The proposed actual increase in permitted rate capacity of the existing plant is from 580 TPD to 770 TPD of product. The current allowable permitted rate based on two granulation units is 1,160 TPD. The proposed modification includes installing additional screens and mills and upgrading the granulation venturi scrubber to handle the increased air evacuation rate.

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 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 venturi scrubber. Fluoride emissions from the acid defluorination step are controlled by a packed crossflow scrubber using pond water.

As required for major facilities listed in Florida Administrative Code (F.A.C.) Chapter 62-212, Table 212.400-1, a BACT determination must be made for each pollutant exceeding the significant emission rates in Table 212.400-2, "Regulated Air Pollutants Significant Emissions Rates," which in this case are particulate matter (PM/PM<sub>10</sub>) and fluoride (F). Nitrogen oxides (NO<sub>x</sub>) had been included in the original BACT determination but have been excluded in this revision since test results showed that these emissions are less than significant.

Since the existing granulator scrubber will be handling a higher flow rate and particle loading than originally planned, and since the performance test on the fluoride scrubber shows that it did not meet the requirements of the original permit and BACT determination, the BACT determination is being revised accordingly.

**APPENDIX BD**  
**REVISED BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

---

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 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 infeasible 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 facility 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:

- Combustion Products (e.g., SO<sub>2</sub>, NO<sub>x</sub>). These are controlled generally by gaseous control devices and fuel quality.
- Products of Incomplete Combustion (e.g., CO, VOC). Control is largely achieved by proper combustion techniques.
- Emissions from materials handling, conveyance, and storage (primarily PM). These are controlled generally by fabric filters and reasonable precautions.

**APPENDIX BD**  
**REVISED BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

---

Grouping the pollutants in this manner facilitates the BACT analysis by enabling the examination of equipment available to control the type or group of pollutants emitted and the corresponding energy, economic, and environmental impacts 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, SO<sub>2</sub>, H<sub>2</sub>SO<sub>4</sub>, fluorides, 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.

BACT POLLUTANT ANALYSIS

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

Particulate matter is generated by the material handling sources and process equipment used in this facility. Fabric filters (baghouses) are used to control all raw material (diatomaceous earth and limestone) handling operations, as well as product loadout operations. Baghouse technology represents the state of the art in control of PM/PM<sub>10</sub> emissions for material handling sources. Baghouses are highly efficient and allow collected PM to be recovered as product.

PM emissions from the animal feed dryers and cooler/classifier systems are controlled by cyclones followed by a venturi 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 venturi scrubber control is an efficient control device and is the most appropriate technology for gas streams that contain a significant amount of moisture.

Other common PM control devices include settling chambers, inertial separators, impingement separators, wet scrubbers, fabric filters, and electrostatic precipitators. Baghouses and electrostatic precipitators (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.

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.

Fluorides (F)

AFI Plant No. 1, when originally permitted in 1994, was subject to Rule 62-296.403(1)(I), which requires BACT for fluorides. Consequently, AFI Plant No. 1 underwent a BACT determination. The resulting BACT was determined to be a wet cross-flow scrubber/demister 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 lb/ton of P<sub>2</sub>O<sub>5</sub> input (0.53 lb/hr or 1.63 TPY). Since that time a third acid batch tank was added and the crossflow scrubber modified to accommodate two batch tanks defluorinating acid at any one time. The fluoride limit was changed to reflect the new double-batch mode of operation.



**APPENDIX BD**  
**REVISED BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

---

BACT DETERMINATION REQUESTED BY THE APPLICANT:

<u>POLLUTANT</u>	<u>EMISSION LIMIT</u>
PM/PM <sub>10</sub> (Material Handling Sources)	0.02 gr/dscf by baghouses
PM/PM <sub>10</sub> (Process Equipment)	8.0 lb/hr by wet scrubber
F	0.04 lb/ton P <sub>2</sub> O <sub>5</sub> input
NO <sub>x</sub>	Low nitrogen fuels/Good combustion

BACT DETERMINATION BY THE DEPARTMENT:

For PM/PM<sub>10</sub> emissions, the Department's original acceptance of the applicant's proposed standard of 0.02 gr/dscf for material handling sources utilizing baghouses has been revised to more closely reflect BACT determinations for similar applications. For years the Department has required a more stringent BACT limit than 0.02 gr/dscf for this type of application. The 0.02 standard for baghouses dates back probably twenty years or more. More recently, the Department's BACT determinations for baghouses in this industry have been around 0.012 gr/dscf. Since compliance for baghouses is demonstrated by opacity readings rather than mass emission tests, lowering the baghouse mass emission limits should not have any adverse impact for the permittee. Test results show that even the venturi scrubber was able to average about 0.012 gr/dscf. On this basis, the mass emission limits for the baghouses are revised in the Table 1.

The performance test results for the AFI Plant stack reflect the efficiency of the venturi scrubber in removing PM/PM<sub>10</sub> from the pug mill/dryer and screens/mills exhaust streams. While the average for three test runs was barely within the BACT limit (5.85 vs. 6.0 lb/hr), wide variation occurred with the first and third runs being above the limit (the third run was 8.49 lb/hr). Pressure drop measurements show that the scrubber was not operating as efficiently (13 in. vs. 14 in. H<sub>2</sub>O) during the third run. In any event, the minimum pressure drop has been 15 in H<sub>2</sub>O in recent BACT determinations by the Department for similar applications. By including a requirement that the venturi scrubber pressure drop be maintained at a minimum of 15 in. H<sub>2</sub>O, the Department will have reasonable assurance that the BACT limit of 8.0 lb/hr will be achieved consistently. The visible emission measurements were sufficiently low that the BACT limit can be lowered to 15% opacity.

Performance test results for fluorides show that compliance with the original BACT limit of 7.70 lb F/batch was not achieved. Averaged over the total batch time of 15.5 hours, fluoride emissions were 1.15 lb/hr totaling 17.9 lb for the two batches, thus exceeding the two-batch limit of 15.4 lb F. Test results also showed that the fluoride emissions did not drop off after the first five hours as had been reported. Emissions actually increased during the last half of the batch processing time.

As indicated below, analysis of the fluoride scrubber performance raises reasonable doubts that it can consistently meet the design requirement of 8.0 mass transfer units:

Assumptions: 9,000 ppm F in pond H<sub>2</sub>O @ 90° F ~ 2.0 mg F/M<sup>3</sup> @ equilibrium  
For two batches: ~800 tons Phosphoric Acid => 16,000 lb F @ 1.0% F  
Average Scrubber Inlet Conc.: ~16,000 lb F/66.4(10<sup>6</sup>) SCF = 109 mg F/SCF

**APPENDIX BD**  
**REVISED BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

Average Scrubber Outlet Conc.: 0.002 gr/SCF => 0.13 mg F/SCF

Equilibrium Conc.: 2.0 mg F/M<sup>3</sup> => 0.057 mg F/SCF

$$NTU = \ln(109 - 0.057/0.13 - 0.057) = 7.3 < 8.0$$

To achieve the additional 0.7 NTU, the quotient must be doubled.

If the Equilibrium Conc. is reduced to about 1.0 mg F/M<sup>3</sup> => 0.029 mg/SCF, the outlet concentration is lowered to about 0.065 mg/SCF, thus

$$NTU = \ln(109 - 0.029/0.065 - 0.029) = \sim 8.0$$

With NTU = 8.0 and the Equilibrium Concentration at 1.0 mg F/M<sup>3</sup>, the fluoride emission rate would be about 0.6 lb/hr for two batches, or 0.3 lb/batch-hour.

To achieve 8.0 NTU at an Equilibrium Concentration of 2.0 mg F/M<sup>3</sup>, an additional scrubber would be required giving an outlet of  $[8.0 = \ln(109 - 0.057)/(x - 0.057)]$  where  $x = 0.0935$  mg/SCF and the emission rate is 0.9 lb/hr or 0.45 lb F/batch-hour.

The fluoride control options include the use of fresh water in the back section of the scrubber, reducing the fluoride concentration of the scrubber water through neutralization and settling, or adding additional contact area by way of additional scrubbing capacity. The applicant indicated subsequently that the option of adding another scrubber section will be preferred over the other options. For reasonable assurance that the minimum of 8.0 NTU is achieved, the performance tests shall consist of a three-run test during a double batch beginning within one hour of the start of the second batch.

Cost-benefit evaluations performed for recent permits indicate that the incremental cost effectiveness of pond water neutralization can vary considerably depending on the circumstances at each facility. If neutralization combined with a dedicated scrubber pond is chosen, costs per ton removed can range upward from \$4,000 depending on the circumstances. Adding additional scrubbing capacity to achieve a greater approach to equilibrium with the pond water may be accomplished at a lower incremental cost for Cargill. Test results indicate that the new limit of 0.5 lb F/batch-hour can be met consistently through installation of any of the BACT options. Four of the nine test runs conducted in October 1998 were below this limit, and with the additional scrubber capacity that Cargill has agreed to install, the 0.5 limit can be met consistently. However, if BAR's analysis of representative performance test results shows that the 0.5 lb F/batch-hour is exceeded while achieving at least 8.0 NTU using normal pond water, the fluoride limit will be revised to reflect the appropriate figure.

The BACT emission levels established by the Department are listed in the Table below:

E.U. ID #	Description	Pollutant	Limit	TPY*	Basis	Regulation
078	AFI Stack	PM/PM <sub>10</sub>	8.0 lb/hr	35.04	Test Data	Rule 62-212.410, FAC
078	AFI Stack	F	0.5 lb/batch-hr	4.30	99.9% eff. (NTU= 8)	Rule 62-212.410, FAC
078	AFI Stack	VE	15% opacity	N/A	Test Data	Rule 62-212.410, FAC
079	DE Silo	PM/PM <sub>10</sub>	5% opacity	0.16	0.012 gr/dscf	Rule 62-297.620(4), FAC
080	Limestone Silo	PM/PM <sub>10</sub>	5% opacity	0.21	0.012 gr/dscf	Rule 62-297.620(4), FAC
081	Loadout System	PM/PM <sub>10</sub>	5% opacity	1.56	0.012 gr/dscf	Rule 62-297.620(4), FAC

\* Basis: 281,050 tons AFI/year, 15,768 batch-hours/year, 7,884 double batch-hours/year (90% operating factor)

**APPENDIX BD**  
**REVISED BEST AVAILABLE CONTROL TECHNOLOGY (BACT)**

---

COMPLIANCE

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, 13B or Modified 13B as contained in Appendix A, 40 CFR 60.

Compliance with visible emission standards 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:


John Reynolds, Permit Engineer  
A. A. Linero, Administrator, New Source Review Section  
Department of Environmental Protection  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Recommended By:

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

6/7/99  
Date:

Approved By:

  
\_\_\_\_\_  
Howard L. Rhodes, Director  
Division of Air Resources Management

6/7/99  
Date:

**APPENDIX BD**  
**BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)**

---

**REFERENCES**

- Pierre Becker. 1989. Phosphates and Phosphoric Acid. Marcel Dekker, Inc. New York.
- Robert E. Treybal. 1980. Mass Transfer Operations. McGraw-Hill, Inc. New York.
- Aaron J. Teller. Control of Gaseous Fluoride Emissions. Chemical Engineering Progress. March 1967. (Vol. 63 # 3)
- U.S. Environmental Protection Agency. 1987. Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD).
- U.S. Environmental Protection Agency. 1985. BACT/LAER Clearinghouse - A Compilation of Control Technology Determinations.
- U.S. Environmental Protection Agency. 1980. Workbook for Estimating Visibility Impairment. Office of Air, Noise and Radiation, Office of Air Quality Planning and Standards.
- U.S. Environmental Protection Agency. 1978. Diagnosing Vegetation Injury Caused by Air Pollution. Prepared by Applied Sciences Associates, Inc. EPA-450/3-78-005. Research Triangle Park, NC.
- U.S. Fish and Wildlife Service (USFWS). 1995. Air Quality Branch, Technical Review of Cargill Fertilizer PSD Application June 26, 1995.
- U.S. Environmental Protection Agency. 1985. BACT/LAER Clearinghouse - A Compilation of Control Technology Determinations.
- U.S. Environmental Protection Agency. 1980. Workbook for Estimating Visibility Impairment. Office of Air, Noise and Radiation, Office of Air Quality Planning and Standards.
- U.S. Environmental Protection Agency. 1978. Diagnosing Vegetation Injury Caused by Air Pollution. Prepared by Applied Sciences Associates, Inc. EPA-450/3-78-005. Research Triangle Park, NC.
- U.S. Fish and Wildlife Service (USFWS). 1995. Air Quality Branch, Technical Review of Cargill Fertilizer PSD Application June 26, 1995.

**APPENDIX GC**  
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

---

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

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

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

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

**APPENDIX GC**  
**GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]**

---

- 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 extent 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:
- (a) Determination of Best Available Control Technology (X);
  - (b) Determination of Prevention of Significant Deterioration (X); and
  - (c) Compliance with New Source Performance Standards (X)
- 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:
    - 1. The date, exact place, and time of sampling or measurements;
    - 2. The person responsible for performing the sampling or measurements;
    - 3. The dates analyses were performed;
    - 4. The person responsible for performing the analyses;
    - 5. The analytical techniques or methods used; and
    - 6. The results of such analyses.
- 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.

Memorandum

Florida Department of  
Environmental Protection

---

BAR

TO: Howard L. Rhodes

THRU: Clair Fancy *CAF*  
Al Linero *AL*

FROM: John Reynolds *JR*

DATE: June 1, 1999

SUBJECT: Cargill Fertilizer, Inc., 0570008-028-AC, PSD-FL-234A

Attached for approval and signature is a construction permit for modifications to Cargill's animal feed ingredient plant located in Riverview, Florida. This plant was permitted as a new source two years ago. Fluoride emissions are controlled by a cross-flow packed scrubber. Particulate emissions are controlled by baghouses.

This permit changes the plant's design configuration from three batch reactors and two granulation units to only one granulation unit. Consequently, the single granulation unit will have to handle a higher load requiring a larger venturi scrubber. Since it was discovered that the plant failed to pass the fluoride performance test, Cargill agreed to install an additional scrubber section as required by the revised BACT determination. Also, emission limits were made more stringent to reflect recent BACT determinations.