



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

JUL 11 1994

4APT-AEB

Clair H. Fancy, P.E.
Chief
Bureau of Air Regulation
Florida Department of Environmental
Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Cargill Fertilizer, Incorporated, Bartow, Polk County,
Florida, (PSD-FL-211)

Dear Mr. Fancy:

This is to acknowledge receipt of an application for a Prevention of Significant Deterioration (PSD) permit for the above referenced facility by your letter dated March 7, 1994. The major modification proposed consists of increasing the diammonium phosphate (DAP) production rate at the existing No. 4 fertilizer plant from the current 206 tons per hour (TPH) level to 255 TPH. The proposed project will not require construction or modification of any process equipment to achieve the production rate increase. As discussed between Mr. John Reynolds of your staff and Mr. Stan Kukier of my staff on June 23, 1994, we have reviewed the package as submitted and have the following significant comment:

The existing wet scrubber system may be recommended as BACT for Cargill No. 4 DAP Plant process equipment particulate emissions. However, the emission limit proposed as BACT by Cargill for No. 4 Bartow DAP Plant particulate emissions (0.50 lb/ton P_2O_5 feed) is significantly higher than a DAP plant particulate emission limit (0.19 lb/ton P_2O_5 feed) recently determined BACT for the Tampa Riverview Cargill No. 5 DAP Plant (Permit No. AC 29-196763). Recent Bartow Cargill No. 4 DAP Plant stack testing indicates that a DAP plant particulate emission limit of 0.17 lb/ton P_2O_5 feed should be feasible. A review of both the recent BACT determination for the Riverview Cargill DAP plant (PSD-FL-178), and recent Bartow Cargill No. 4 DAP Plant stack test results, indicates that the DAP plant particulate

RECEIVED

JUL 13 1994

Bureau of
Air Regulation

RECEIVED

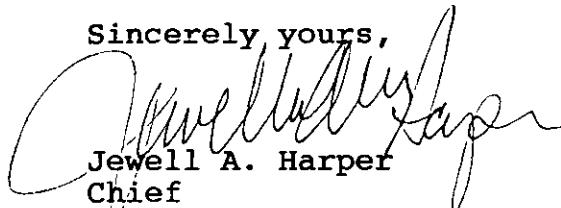
JUL 15 1994

Bureau of
Air Regulation

emission limit proposed by Cargill may be reduced 62% to 66%. We recommend that the applicant provide additional information indicating why a No. 4 DAP Plant particulate emission limit of either 0.17 lb/ton P_2O_5 feed or 0.19 lb/ton P_2O_5 feed is not feasible. EPA-Region IV considers 1991 DAP plant permit emission limits more representative of current particulate control technology than 1980 permit emission limits.

Thank you for the opportunity to review and comment on this application. If you have any questions, please contact Mr. Stan Kukier of my staff at (404) 347-5014.

Sincerely yours,



Jewell A. Harper
Chief
Air Enforcement Branch
Air, Pesticides, and Toxics
Management Division

cc: J. Reynolds
C. Holladay
G. Kessel, SW Dist



RECEIVED

June 27, 1994

JUN 28 1994

Mr. John C. Brown, Jr., P.E.
Administrator, Permitting and Standards
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Bureau of
Air Regulation

Re: Cargill Fertilizer, Inc.
PSD-FL-211
Bartow No. 4 DAP Plant

Dear Mr. Brown:

This correspondence is submitted on behalf of Cargill Fertilizer in response to the Florida Department of Environmental Protection's (FDEP's) letter dated May 5, 1994. Each of FDEP's questions are answered in the order they appear in the March letter.

1. Cargill has on file FDEP's previous approval of the modification which increased the allowable DAP production rate for the No. 4 DAP plant. This approval is in the form of a revision to the construction permit, issued by letter amendment on April 18, 1988, and by revision of the operating permit, issued by letter amendment on May 5, 1988. Copies of these letter amendments are attached.

Note that the amendments did not specifically state that a maximum production limit of 215 TPH was allowed.

2. Based upon further analysis and consideration of the historical PM test data for the No. 4 DAP plant, Cargill is willing to accept a PM limitation of 0.23 lb/ton of P_2O_5 produced (27.6 lb/hr and 117.3 TPY). This limit is much lower than the 1980/1981 BACT determinations, and only slightly higher than the 1991 BACT determination. However, it is emphasized that the historical test data indicate PM levels very close to this level at the lower production rate.

As described in the April 27 response letter to FDEP, the primary differences in the control equipment at the No. 5 DAP plant at Riverview and the No. 4 DAP plant at Bartow are in the tailgas scrubbing system. Bartow does not have a tailgas scrubber on the cooler, whereas Riverview does. As also described in the previous response letter, EPA has previously concluded that a two-stage wet scrubbing system represents BACT for PM emissions. Cargill also employs a two-stage wet scrubbing system on the reactor, granulator and dryer. Only in the case of the cooler is a one-stage scrubbing system used. It is noted that the purpose of the second stage of the two-stage scrubbing systems is fluoride removal, and not PM control, although some additional PM control may be realized by the second stage. Thus, Cargill's proposed BACT control technology of two-stage wet scrubbing is already in-place at the No. 4 DAP plant.

13345A1/2

KBN ENGINEERING AND APPLIED SCIENCES, INC.

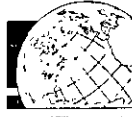
1034 Northwest 57th Street
Gainesville, Florida 32605
904 331 9000
FAX 904 332 4189

5405 West Cypress Street,
Suite 215
Tampa, Florida 33607
813 287 1717 FAX 813 287 1716

1801 Clint Moore Road, Suite 105
Boca Raton, Florida 33487
407 994 9910
FAX 407 994 9393

6821 Southpoint Drive North,
Suite 216
Jacksonville, Florida 32216
904 296 9663 FAX 904 296 0146

One Church Street, Suite 801
Rockville, Maryland 20850
301 738 1100
FAX 301 738 1105



Other than this difference, the only other major differences in the Bartow and Riverview systems are:

- a. The Bartow DAP plant (proposed 120 TPH P_2O_5) is much larger than the Riverview plant (73.5 TPH P_2O_5).
- b. The design and operation of the cooler scrubber at Bartow requires limiting the air flow through the cooler in order to limit particulate carryover.

Cargill believes that to achieve a PM limit of 0.19 lb/ton (22.8 lb/hr) at Bartow would require, as a minimum, replacing the cooler scrubber. Other improvements to the scrubbing systems could also be required (an engineering study would be required to determine all necessary changes). The capital cost for a new cooler scrubber would be approximately \$500,000 in capital cost. The total PM reduction from 117.3 TPY (proposed at 0.23 lb/ton) to 96.9 TPY (at 0.19 lb/ton) is only 20.4 TPY. Therefore, the cost effectiveness of this additional control would be extremely high. This cost of additional control to achieve this lower limit is considered unreasonable and economically infeasible.

3. Based on further consideration of this issue, Cargill is willing to accept a fixed PM emission limit of 0.23 lb/ton of P_2O_5 , 27.6 lb/hr, and 117.3 TPY.

Please call if you have any questions concerning this information.

Sincerely,

David A. Buff

David A. Buff, M.E., P.E.
Professional Engineer #19011

S E A L

DAB/lcb

cc: David Jellerson, Cargill
File (2)

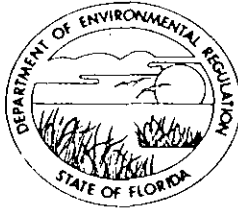
J. Reynolds
C. Halladay
B. Thomas, SW Dist
G. Harper, EPA
G. Bunyak, NPS
Z. Noval, Pold Co.

4/27 L

57964

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



RECEIVED

APR 25 1988

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY
ENVIRONMENTAL AFFAIRS

April 18, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

D. E. R.

JUN 13 1989

SOUTHWEST DISTRICT
TAMPA

Mr. Kenneth V. Ford
Manager-Environmental Affairs
W. R. Grace & Company
P.O. Box 471
Bartow, Florida 33830-0471

Dear Mr. Ford:

RE: Application for Permit Modification - No. 4 DAP Plant

This letter confirms that a new construction permit will not be required for the proposed DAP modification since allowable emission limits will remain the same. The amendment is as stated below:

Present: 1. The maximum production rate of the plant will be 130 TPH DAP (18-46-0) and the plant shall have a maximum production of 800,000 tons DAP per calendar year.

Amended: 1. The maximum production rate of the plant shall be 165 TPH DAP (18-46-0) and the plant shall have a maximum production of 1,300,000 tons of DAP per year.

This amendment letter becomes attachment No. 3 to your construction permit AC 53-24460 so that the amended operating permit to be issued by the district office will be federally enforceable. A refund of your permit application fee is being forwarded separately.

Sincerely,


Dale Twachtman
Secretary

DT/JR/ss

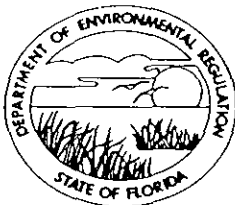
cc: W. Thomas. - SW District

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT

4520 OAK FAIR BLVD.
TAMPA, FLORIDA 33610-7347

813-623-5561
Suncom—552-7612



BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

DR. RICHARD D. GARRITY
DISTRICT MANAGER

May 5, 1988

Mr. David S. Sharpe, General Manager
W. R. Grace & Company
Post Office Box 471
Bartow, Florida 33803

Dear Mr. Sharpe:

Re: Polk County - AP
No. 4 DAP Plant

The Department is in receipt of a request to amend DER permit No. AO53-82350. The following changes are hereby made in the permit:

SPECIFIC CONDITION No. 1

From: The maximum production rate of the plant will be 130 TPH DAP (18-46-0) and the plant shall have a maximum production of 800,000 tons DAP per calendar year.

To: The maximum production rate of the plant will be 165 TPH DAP (18-46-0) and the plant shall have a maximum production of 1,300,000 tons DAP per calendar year.

SPECIFIC CONDITION No. 4

From: Approved compliance stack testing of emissions must be conducted within approximately 10% of the permitted capacity of 130 TPH of DAP. A compliance test submitted at operating levels less than 90% of the permitted capacities will automatically constitute an amended permit at the lesser rate plus 10% until another test (showing compliance) at 90% of the higher capacity is submitted. Failure to submit the input rates or operation at conditions during testing which do not reflect actual operating conditions may invalidate the data (Chapter 403.161(1)(c), Florida Statutes).

To: Approved compliance stack testing of emissions must be conducted within approximately 10% of the permitted capacity of 165 TPH of DAP. A compliance test submitted at operating levels less than 90% of the permitted capacities will automatically constitute an amended permit at the lesser rate plus 10% until another test (showing compliance) at 90% of the higher capacity is submitted. Failure to submit the input rates or operation at conditions during testing which do not reflect actual operating conditions may invalidate the data (Chapter 403.161(1)(c), Florida Statutes).

Mr. David S. Sharpe
Bartow, Florida 33830


Page Two

Persons whose substantial interests are affected by this permit amendment have a right, pursuant to Section 120.57, Florida Statutes, to petition for an administrative determination (hearing) on it. The petition must conform to the requirements of Chapters 17-103 and 28-5.201, FAC, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee 32399-2400, within fourteen (14) days of receipt of this notice. Failure to file a petition within the fourteen (14) days constitutes a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes. This permit amendment is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with this paragraph or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 17-103.070, FAC. Upon timely filing of a petition or a request for an extension of time this permit will not be effective until further Order of the Department.

When the Order (Permit Amendment) is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 days from the date the Final Order is filed with the Clerk of the Department.

This letter must be attached to your permit and becomes a part of that permit.

Sincerely,


Richard D. Garrity, Ph.D.
District Manager
Southwest District

RDG/grs

cc: Kenneth V. Ford

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on MAY 10 1988 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(10), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Marilyn Quispe
Clerk

MAY 10 1988
Date



Lawton Chiles
Governor

Florida Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

May 5, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

RE: PSD Permit Application (PSD-FL-211)
Bartow #4 Diammonium Phosphate (DAP) Plant

Dear Mr. Jellerson:

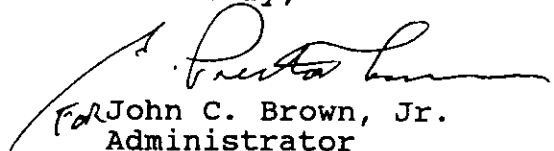
After reviewing the response received on April 27, additional information is required to resolve some of the questions raised in our letter dated March 24. The items are listed in the order presented in the letter of March 24.

1. If it is known that the Department approved a construction permit modification from 165 to 215 TPH, there should be documentation of this in the files. It is unlikely that applicable records of both Seminole Fertilizer and the Department would have been lost or misplaced, or that Cargill's purchase of Seminole would affect availability of documentation of this production increase. Please check your files again for the requested documentation.
2. The response explains the differences in control equipment but does not explain why the differences would justify nonapplicability of the Cargill (Tampa) 1991 BACT emission limit. The application states that the proposed limit of 0.5 pound per ton is "consistent with prior BACT levels". The problem with this statement is that the proposed BACT is consistent only with the 1980 and 1981 BACTs. A 1980 or 1981 BACT will, in most cases, not be sufficient for a 1994 BACT limit for obvious reasons. The Cargill (Tampa) BACT level is 0.19 pound per ton. If Cargill can explain why the Tampa BACT limit should not apply to the Bartow BACT, please advise.
3. The basis for the Department's concern about "capped" emission limits is that the cap can be easily averted by operating just below the maximum rate during a compliance test. The operation permits issued in the future should avoid "capped" limits for this reason. Cargill's proposal assumes that emissions per ton at low capacity are much greater than at full capacity. This is not borne out by the test results in Table 3-1. The 1990 and 1992 data at 70-75 tons per hour show average emissions per ton that are less than the 1991 emissions at 90 tons per hour.

Mr. David B. Jellerson
May 5, 1994
Page Two

Consequently, the information submitted thus far does not justify the scheme proposed. If Cargill can justify the proposed limit on some other basis, please advise.

Sincerely,


For John C. Brown, Jr.
Administrator
Permitting and Standards

JCB/JR/bb

c: W. Thomas, SWD
J. Harper, EPA
J. Bunyak, NPS
D. Buff, P.E.

RECEIVED

SENDER:

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

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

4a. Article Number
 P 872 563 616

4b. Service Type

<input type="checkbox"/> Registered	<input type="checkbox"/> Insured
<input checked="" type="checkbox"/> Certified	<input type="checkbox"/> COD
<input type="checkbox"/> Express Mail	<input type="checkbox"/> Return Receipt for Merchandise

7. Date of Delivery
 5-11-94

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

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

Is your RETURN ADDRESS completed on the reverse side?

PS Form 3811, December 1991 **★U.S. GPO: 1992-323-402** **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service

P 872 563 616



**Receipt for
Certified Mail**

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

PS Form 3800, JUNE 1991

Sent to Mr. David B. Jellerson	
Street and No. 8813 Highway 41 South	
P.O., State and ZIP Code Riverview, Florida 33569	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 5/9/94 PSD-FL-211	



April 22, 1994

Mr. John C. Brown, Jr., PE
Administrator, Permitting and Standards
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Cargill Fertilizer, Inc.
PSD-FL-211
Bartow No. 4 DAP Plant

RECEIVED

APR 27 1994

Bureau of
Air Regulation

Dear Mr. Brown:

This correspondence is submitted on behalf of Cargill Fertilizer in response to the Department's letter dated March 24, 1994. Each of the Department's questions is answered in the order they appear in the March letter.

1. The answer to this question is not known. The plant was owned by Seminole Fertilizer at the time the previous production increase was granted. Nevertheless, it is known that the Department approved the requested increase through a permit amendment.
2. Please note that Cargill's proposed BACT limit is 0.5 lb/ton, not to exceed 32.0 lb/hr. This is very different than a limit based solely on 0.5 lb/ton. It is pointed out that this is the same manner in which the existing operating permit for the plant is worded. As stated on Pages 3-1 and 3-2 of the application, the 32.0 lb/hr cap results in a PM emission rate of 0.27 lb/ton at the maximum production rate of 120 TPH. The 0.27 lb/ton rate would increase linearly until equaling the 0.5 lb/ton limit at a production rate of 64 TPH. Note also that the 32.0 lb/hr limit is only slightly higher than the current permitted limit of 29.9 lb/hr PM.

The primary differences in the control equipment at the No. 5 DAP plant at Riverview and the No. 4 DAP plant at Bartow is in the tailgas scrubbing system. Bartow does not have a tailgas scrubber, whereas Riverview does. It should also be noted that the Riverview DAP plant was unable to achieve the maximum production rates allowed by the PSD permit (PSD-FL-178) issued in 1991. As a result, a new construction permit (AC29-238303) has been issued for the replacement of the existing granulator and the reactor/granulator venturi scrubber. These changes will be in addition to the previous modifications to the control system components.

In the No. 5 DAP plant PSD approval, EPA concluded that a two-stage wet scrubbing system represented BACT for PM emissions (refer to attached letter dated August 28, 1991). As shown in the application for the Bartow No. 4 DAP plant, Cargill also employs a two-stage wet scrubbing system on the reactor, granulator, and dryer. Only in the case of the cooler is a one-stage scrubbing system used. It is noted that the purpose of the second stage of the two-stage scrubbing systems is fluoride removal and not PM control, although some additional PM control

13345C1/RTC/1

KBN ENGINEERING AND APPLIED SCIENCES, INC.

1034 Northwest 57th Street
Gainesville, Florida 32605
904-331-9000
FAX 904-332-4189

5405 West Cypress Street,
Suite 215
Tampa, Florida 33607
813-287-1717 FAX 813-287-1716

1801 Clint Moore Road, Suite 105
Boca Raton, Florida 33487
407-994-9910
FAX 407-994-9393

6821 Southpoint Drive North,
Suite 216
Jacksonville, Florida 32216
904-296-9663 FAX 904-296-0146

One Church Street, Suite 801
Rockville, Maryland 20850
301-738-1100
FAX 301-738-1105



may be realized by the second stage. Thus, Cargill's proposed BACT control technology of two-stage wet scrubbing is already in-place at the No. 4 DAP plant.

3. As discussed above, the more restrictive PM limit proposed is 32.0 lb/hr. Although it is true that the proposed annual emissions increase is about 2.5 times the annual baseline PM emissions, this is also a result of actual versus permitted production rate and operating hours, not only the emission limit. Review of Table 3-1 of the application shows that actual hourly PM emissions for production rates up to 90 TPH have been as high as 25.4 lb/hr and 0.28 lb/ton. Therefore, the proposed 32.0 lb/hr and equivalent 0.27 lb/ton emission rate at the 120 TPH production rate actually results in no safety margin.
4. The materials referenced as Attachment B were inadvertently omitted from the application. These are now attached for your convenience.
5. Attachment B includes a copy of the No. 4 DAP shipping unit construction permit, which requires deactivation of the sources to be shut down (refer to Specific Condition 18).
6. Enclosed are the complete model inputs and outputs in diskette form. Hard copy printouts will follow if required by Cleve Holladay.

Please call if you have any questions concerning this information.

Sincerely,

David A. Buff

David A. Buff, M.E., P.E.
Professional Engineer #19011

Seal

Attachments

DAB/ehj

cc: David Jellerson, Cargill
File (2)

J. Reynolds
C. Holladay
B. Thomas, SW Dist.
J. Harper, EPA
J. Benyak, NPS
J. Novak, Park County

EPA LETTER REGARDING BACT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

AUG 28 1991

4APT-AEB

Mr. Clair H. Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED
SEP 3 1991
Division of Air
Resources Management

RE: Cargill Fertilizer Incorporated, Riverview, Florida (PSD-FL-178)

Dear Mr. Fancy:

This is to acknowledge receipt of an application for a Prevention of Significant Deterioration (PSD) permit for the above referenced facility by your letter dated May 17, 1991. Cargill (formerly Gardinier, Inc.) proposes to increase maximum diammonium phosphate (DAP) production at the No. 5 DAP plant from 114 TPH to 146 TPH. A copy of additional DAP plant engineering design and netting information requested by FDER was received by EPA-Region IV on June 24, 1991. Further clarification was requested from Cargill regarding the use of "leftover" fluoride (Fl) emission credits in PSD-FL-178 netting calculations by your letter dated July 12, 1991. EPA-Region IV assistance in making an interpretation of PSD regulations regarding the creditability of emissions for netting was also requested by FDER as discussed between Mr. John Reynolds of your staff and Mr. Stan Kukier of my staff on July 18, 1991.

BACKGROUND

Additional information concerning a previous Cargill (Gardinier) No. 5 DAP plant PSD permit and modification (PSD-FL-026) issued on July 5, 1980, and June 14, 1988, respectively, was requested and received from Mr. David Buff of KBN Engineering and Applied Science by fax dated July 22, 1991. The source netted out of PSD review in a construction permit issued for an expansion of the No. 5 DAP plant by the State of Florida (Permit Reference No. AC29-135083) on October 14, 1987. Emissions netting was performed by Cargill for the 1987 No. 5 DAP plant expansion using contemporaneous allowable PM, Fl, and SO₂ triple superphosphate (TSP) reactor belt, dryer, and sizing unit shutdown emission credits.

The original No. 5 DAP plant PSD permit (PSD-FL-026) was amended by EPA-Region IV on June 14, 1988 to reflect changes in PM, Fl, and SO₂ maximum emission rate limits due to the increase in operating capacity, and to make the shutdown of TSP production units federally enforceable. FDER's question concerns whether or not -28.8 TPY of

contemporaneous Fl emission credits "leftover" from the 1987 Cargill emissions netting calculations can still be applied to the 17.7 TPY total estimated PSD-FL-178 Fl emissions after the 1988 PSD-FL-026 EPA permit amendment. A December 29, 1989 guidance memorandum (received via fax by John Reynolds on July 17, 1991) from John Calcagni to Bruce P. Miller regarding the use of netting credits recommends following the procedure described below for considering emissions increases and decreases in a netting calculation. Emissions increases and decreases are considered in their entirety and do not result in "leftover" emissions credits.

USE OF NETTING CREDITS

The pertinent PSD criteria for emissions increases and decreases to be creditable for netting transactions is 40 C.F.R. § 52.21 (b) (3) (iii), which states that emissions increases and decreases are creditable:

b)..."if the reviewing authority has not relied on it (e.g., an emissions decrease) in issuing a permit for the source under regulations approved pursuant to this section, which permit is in effect when the increase in actual emissions from the particular change occurs." [NOTE: EPA's policy is to interpret the permit to be a PSD permit.]

When a source nets out of review, the permitting authority has not relied upon creditable emissions increases or decreases in issuing a PSD permit for that pollutant. Since Cargill netted out of review for fluorides in the 1987 No. 5 DAP plant expansion and no new PSD permit was issued, the creditable Fl emissions decreases are still available for application to estimated PSD-FL-178 Fl emissions. The emissions limit for Fl in the 1987 permit was not a PSD limit. As a result, estimated Fl emissions after netting (-11.1 TPY) will remain below the PSD significance level (3 TPY)

BACT REVIEW

The increase in DAP production capacity to 146 TPH would be accomplished by an increase in the recycle system capacity. Additional screens and mills are to be added and the recycle elevator replaced. The product bucket elevator, belt conveyors, as well as the existing cyclone and wet scrubber system would also be upgraded to accommodate the increased throughput. Significance levels for PSD applicability are exceeded only for PM (65.7 TPY). The maximum PM permit emission rate proposed (15 lb/hr) is less than the maximum rate previously permitted (20 lb/hr). There will also be decreases in maximum permitted emission rates for SO₂ and NO_x. The proposed maximum permit Fl emission rate (4.03 lb/hr), estimated using the 40 C.F.R. § 60.222 (a), Subpart V, DAP, NSPS fluoride

emission factor of 0.06 lb/ton P_2O_5 feed, is higher than the Fl emission rate previously permitted (3.3 lb/hr).

The No. 5 DAP plant process equipment is subject to BACT review. These emission units include the reactor, granulator, dryer, cooler, and materials handling equipment. Process equipment emissions are currently controlled by cyclones, three venturi scrubbers in parallel, and two up-flow tail gas scrubbers also operating in parallel. Control equipment modifications such as airlock, spray nozzle, and mist eliminator replacement, as well as additional instrumentation, larger packing support plate openings, more liquid feed points, and increased water flow and liquor recirculation rates, are proposed to provide improved control of greater PM and Fl process emissions due to increased throughput.

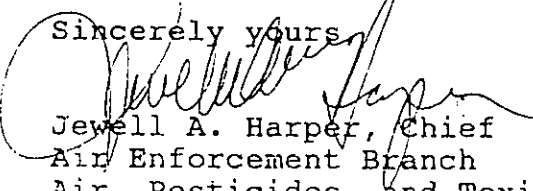
A review of the RACT/BACT/LAER Clearinghouse data base reveals that wet venturi scrubber systems have been determined BACT for two other Florida DAP facilities, Agrico Chemical Co. and W.R. Grace & Co., and one Wyoming DAP facility, Chevron USA Co.. Maximum allowable permit PM emission rates for the Grace and Chevron DAP facilities are 0.50 lb/ton P_2O_5 and 0.0180 gr/acf, respectively. The maximum allowable permit PM emission rate proposed by Cargill is equivalent to 0.22 lb/ton P_2O_5 or 0.0143 gr/acf.

Wet scrubbers are mentioned as the exclusive means of DAP plant emission control in EPA-340/1-77-009, "Phosphate Fertilizer Plants Inspectional Manual for Enforcement of New Source Performance Standards", due to the necessity for both gaseous and particulate emission removal and the presence of high humidity in the gas streams. Primary venturi scrubbers are the key control devices used in DAP plants, with secondary packed flow scrubbers used to provide high Fl emission control efficiencies. Background information for standards of performance for the phosphate fertilizer industry (EPA-450/2-74-019a) mentions packed scrubbers as representing the best demonstrated Fl emission control technology. EPA-450/3-79-038, "Review of New Source Performance Standards for the Phosphate Fertilizer Industry", states that scrubbers have remained the principal means of controlling Fl emissions from phosphate plants since NSPS publication. EPA-600/2-79-169, "Evaluation of Control Technology for the Phosphate Fertilizer Industry", also mentions use of a two-stage primary venturi/secondary tail gas scrubber combination as being able to provide exceptional DAP plant particulate and gaseous fluoride emission control. Current actual Cargill No. 5 DAP plant venturi scrubber PM and tail gas scrubber Fl removal efficiencies are 98% and 95%, respectively.

Based upon our review of previous BACT determinations and all available EPA background documentation concerning DAP facilities, the modified two-stage wet scrubber system as proposed by Cargill can be recommended as BACT for particulate emission control. The PM emission limit proposed by Cargill is lower than PM emission limits previously determined BACT for both Grace and Chevron DAP plants, and 25% lower than the previous allowable PSD-FL-026 amendment PM emission limit. EPA-600/2-79-169 also describes DAP facilities utilizing a venturi/tail gas scrubber combination control system for PM and Fl emissions as being well controlled.

Thank you for the opportunity to review and comment on this package. If you have any questions or comments, please contact Mr. Stan Kukier of my staff at (404) 347-5014.

Sincerely yours,


Jewell A. Harper, Chief
Air Enforcement Branch
Air, Pesticides, and Toxics
Management Division

cc: G. Reynolds
B. Andrews
M. Finn
B. Thomas, SWH
D. Graziani, EPEHC
C. Shaw, NPS
J. Goff, RSD ✓

ATTACHMENT B

Table B-1: CREDITABLE EMISSIONS DECREASES

SRC #	SOURCE DESCRIPTION	PERMIT #	AVERAGE ANNUAL EMISSIONS (TPY)				LAST OPERATED
			TSP	F	NOX	VOC's	
05	KVS Ball Mills Controlled by a Micro Pulsaire Co Bag	A053-176565	1.44	0.99	0.00	0.00	1993
07	Dry Mill Rock Transfer System, R9	A053-172177	13.80	1.90	5.10	0.00	1993
09	Dry Rock Storage Bldg. Southern Portion, R4	A053-168541	13.45	6.65	5.15	0.00	1993
11	Doyle Scrubber on Phos Acid No. 5 Plant	A053-185774	0.30	0.00	0.00	0.00	1993
13	300 X Fertilizer Plant to Produce 28 TPH OF GTSP	A053-166906	0.25	0.00	0.00	0.00	1993
14	GTSP Shipping Scrubber - Stack No.13	A053-174210	0.25	0.00	0.00	0.00	1993
16	GTSP Storage & Shipping Bldg. E-1	A053-170130	8.29	1.68	0.00	0.00	1993
18	32 TPH GTSP Conveyor Belt System	A053-159762	0.04	0.02	0.00	0.00	1993
19	Raymond Grinding Mill "B" W/Custom Designed Airtron	A053-176443	0.03	0.00	0.00	0.00	1993
22	MAP/DAP GTSP ROP Storage & Shipping W/Cyclonic Scrub	A053-170134	0.07	0.00	0.00	0.00	1991
23	Raymond Mill A Controlled by a Airtron Scrubber	A053-176090	0.06	0.00	0.00	0.00	1993
24	Dry Rock Storage Bldg. Northern Portion R6	A053-169649	0.15	0.00	0.00	0.00	1993
25	Dry Rock Storage Bldg. Central Portion R5	A053-169648	0.04	0.00	0.00	0.00	1993
26	Dry Mill Rock Transfer System Baghouses R10, 11, 12	A053-172178	0.04	0.00	0.00	0.00	1993
27	Dry Rock Transfer System Scrubber R8	A053-172277	0.14	0.01	0.00	0.00	1993
29	GTSP Screening Scrubber - Stack No. 14	A053-174211	0.33	0.10	0.00	0.00	1993
30	300-Y GTSP Plant (28 TPH) Scrubber at a Flow of 1000	A053-166957	0.03	0.00	0.00	0.00	1993
31 & 39	Rock Dryer W/Wet ESP - Stacks R1 & R2 (EAST & WEST))	A053-176564	0.34	0.00	0.00	0.00	1993
35	Raymond Grinding Mill C Controlled by Airtron Scrub	A053-176444	0.42	0.00	0.00	0.00	1993
36	Rock Transfer Point No. 27 Controlled by Airtron Scrub	A053-172278	0.10	0.00	0.00	0.00	1993
37	Rock Transfer Point No. 28 Controlled by Airtron Scrub	A053-172280	2.15	0.00	2.00	0.05	1993
38	Rock Transfer Point No. 29 Controlled by Airtron Scrub	A053-172281	4.82	0.00	0.00	0.00	1993
40	300 Y Acidulator Tank (One of Two) at Fertilizer Plant	A053-179572	0.78	0.22	0.00	0.00	1993
41	300 X Acidulator Tank (One of Two) at Fertilizer Plant	A053-182948	0.88	0.30	0.00	0.00	1993
42	300 XY Storage Bin	A053-174858	0.00	0.24	0.00	0.00	1993
44	300 X Fertilizer Plant - Granulator, Launder, Fines	A053-186774	1.28	1.55	0.00	0.00	1993
TOTAL CREDITABLE EMISSIONS DECREASE (tpy):			49.44	13.64	12.25	0.05	

NOTE: In accordance with a letter dated 6/22/93, Cargill Fertilizer, Inc. has deactivated the above sources.



Lawton Chiles
Governor

Florida Department of Environmental Protection

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619
813-744-6100

Virginia B. Wetherell
Secretary

PERMITTEE:

Cargill Fertilizer, Inc.
3200 Highway 60 West
P.O. Box 9002
Bartow, FL 3830

PERMIT/CERTIFICATION:

Permit No: AC53-239194
County: Polk
Expiration Date: 12/31/94
Project: DAP Plant No. 4 Product
Shipping System

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-200 through 297 and Chapter 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the modification of the DAP Plant No. 4 Product Shipping System to increase the permitted truck/rail loading rate from 300 tons/hour to 660 tons/hour. The product shipping system includes material conveyors, transfer points, and one (1) truck and two (2) rail car shipping bins and loadout spouts. This modification will involve the replacement and/or upgrade of several belt conveyors to increase product carrying capacities, and increasing the capacity of the rail car mover system.

All material transfer points are located inside the material handling building and are covered and evacuated to prevent fugitive emissions. The truck and rail car loading operations are beneath the building and enclosed on two sides. Loading is done via a telescoping choke feeder which is also evacuated to the dust control system. Emissions collected by the evacuation system are controlled by an Ametec Type 7070 high energy venturi scrubber followed by an Ametec Type 7063 cyclonic liquid/air separator.

As an alternative to full-time utilization of the evacuation scrubber dust control system, the use of dust suppressant to control the generation of dust will be allowed.

Location: Highway 60, 4 miles west of Bartow

UTM: 17-409.8 E 3086.9 N NEDS NO: 0046 Point ID No: 02

Modifies Permit No.: A053-167640

PERMITTEE:

Cargill Fertilizer, Inc.
Bartow, FL

PERMIT/PROJECT:

Permit No. : AC53-239194
Project: DAP Plant No. 4 Product
Shipping System

Description (continued):

1. A part of this permit is the attached 15 General Conditions.
[Rule 17-4.160, F.A.C.].
2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 17-200 through 17-297, or any other requirements under federal, state or local law.
[Rule 17-210.300, F.A.C.].

Operational and Emission Limitations

3. The DAP Plant No. 4 Product Shipping System is permitted to operate a maximum of 6,000 hours in any 12 consecutive month period.
[As requested by Cargill Fertilizer, Inc. in letter of December 6, 1993 submitted as an addendum to the modification application]
4. The maximum truck and/or railcar product loading rate shall not exceed 660 tons per hour.
[Modification application]
5. Particulate matter (PM) emissions from the DAP Plant No. 4 Product Shipping System shall exceed neither 0.03 grains/dscf nor 10.54 pounds per hour (based upon a maximum exhaust gas flow rate of 41,000 dcsfm). Based upon the hours of operation limitation of Specific Condition No. 3, this results in a maximum annual emission rate limitation of 31.6 tons/12 consecutive month period.
[BACT Determination of January 2, 1981 and modification application]
6. At all times that the DAP Plant No. 4 Product Shipping System is in operation particulate matter emissions shall be controlled by one (or both) of the following methods:
 - A. Operation of the evacuation and scrubber dust control system in a manner to insure a minimum scrubber liquid flow rate of 250 gallons per minute and a minimum pressure drop across the scrubber of 4 inches W.G.;
 - B. Use of a dust suppression oil applied to the product prior to or at the beginning of the DAP Plant No. 4 Product Shipping System conveyors at such a rate so as to result in no visible emissions (see Specific Condition No. 8);

[Rule 17-210.650, F.A.C. and modification application]

7. Visible emissions from the DAP Plant No. 4 Product Shipping System evacuation scrubber dust control system shall be less than 20 opacity.
[BACT Determination of January 2, 1981]

PERMITTEE:

Cargill Fertilizer, Inc.
Bartow, FL

PERMIT/PROJECT:

Permit No. : AC53-239194
Project: DAP Plant No. 4 Product
Shipping System

Description (continued):

8. There shall be no visible emissions (i.e. opacity less than 5%) to the ambient atmosphere from any point the DAP Plant No. 4 Product Shipping System when application of a dust suppressant is being used to control particulate emissions in lieu of operation of the evacuation and scrubber dust control system.
[Rule 17-4.070(3), F.A.C. and Cargill Fertilizer, Inc. letter of December 6, 1993 submitted as an addendum to the modification application]

9. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 17-296.320(2), F.A.C.]

10. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provisions in Rule 17-296.310(3)(c), F.A.C. These provisions are applicable to any source, including but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions shall include the use of dust suppressants as necessary.
[Rule 17-296.310(3)(c), F.A.C.]

Compliance Testing Requirements

11. The DAP Plant No. 4 Product Shipping System scrubber exhaust stack shall be tested for particulate matter and visible emissions within 45 days of completing the necessary physical modifications to operate at the higher rate. A report of the test data shall be submitted to the Air Program of the Southwest District Office of the Department within 45 days of the testing.
[Rules 17-297.340 and 17-297.570, F.A.C.].

12. Compliance with the emission limitations of Specific Condition Nos. 5, 7, and 8 shall be determined using EPA Methods 1, 2, 4, 5 and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 17-297, F.A.C. The minimum requirements for stationary point source emissions test procedures and reporting shall be in accordance with Rule 17-297, F.A.C. and 40 CFR 60, Appendix A.
[Rule 17-297, F.A.C.]

PERMITTEE:

Cargill Fertilizer, Inc.
Bartow, FL

PERMIT/PROJECT:

Permit No. : AC53-239194
Project: DAP Plant No. 4 Product
Shipping System

Description (continued):

13. Testing of emissions from the DAP Plant No. 4 Product Shipping System scrubber exhaust stack shall be conducted during operation at 90-100% of the maximum permitted product loading rate of 660 tons per hour if feasible. Testing at a rate less than 90% of the maximum permitted rates will result in an operation permit being issued for the lower tested operating rates plus 10%. In order to receive approval for higher operating rates (never to exceed the maximum permitted rate of 660 tons per hour), it will be necessary to conduct additional compliance tests at the higher rate. A statement of the product loading rate shall be included with any test reports. Failure to submit the operating rates, or operating under conditions that are not representative of normal operation, may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 17-4.070(3), F.A.C.]

14. The permittee shall notify the Air Program of the Southwest District Office of the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 17-297.340(1)(i), F.A.C.]

15. The permittee shall conduct a performance test on the type(s) of dust suppression oils to be used to control generation of dust in the DAP Plant No. 4 Product Shipping System. A report of the results of this performance testing shall be submitted to the Air Program of the Department with the application for an operation permit. The report shall at a minimum include the following:

- A. The specific type of dust suppression oil to be used (include a MSDS sheet on this material if available);
- B. The point of application of the dust suppression oil, the minimum rate at which it will be applied, and a description of how the rate of application will be controlled and measured (for the purposes of recordkeeping);
- C. Statement of the results of observation of visible emissions from transfer and loading points when dust suppression oil is being applied at the minimum rate.

Should the permittee decide at some time in the future to change dust suppression oil vendors, additional performance testing shall be conducted within 15 days of the change and a report, containing the items described above, submitted to the Department within 30 days.

[Rule 17-4.070(3), F.A.C. and Cargill Fertilizer, Inc. letter of December 6, 1993 submitted as an addendum to the modification application]

PERMITTEE:

Cargill Fertilizer, Inc.
Bartow, FL

PERMIT/PROJECT:

Permit No. : AC53-239194

Project: DAP Plant No. 4 Product
Shipping System

Description (continued):**Recordkeeping Requirements**

16. In order to document compliance with Specific Condition Nos. 3, 4 and 6, the permittee shall maintain the following records:

- A. Daily and monthly total hours of operation of the DAP Plant No. 4 Product Shipping System (time periods operated, and total hours/day and hours/month);
- B. Quantity of product loaded out each day (tons/day);
- C. For each period of operation, a statement of whether the evacuation and scrubber dust control system was in service or whether dust suppressant oil was being applied to the product being processed;
- D. For each period when dust suppressant oil was being used to control particulate emissions, a statement of the rate of application of the suppressant oil (gallons/minute or hour);
- E. For each period when the evacuation and scrubber dust control system was in service to control particulate emissions, a log of the following scrubber parameters shall be kept:
 1. pressure drop across the scrubber (in inches W.G.);
 2. scrubber fan amps;
 3. visual verification that the scrubber pump is operating properly;

An entry shall be made in the scrubber operation log for each of the above parameters at least once per shift.

These records shall be recorded in a permanent form suitable for inspection by the Department upon request, and shall be retained for at least a two year period.
[Rule 17-4.070(3), F.A.C.].

Reporting Requirements

17. The permittee shall submit to the Air Program of the Southwest District Office of the Department each calendar year on or before March 1, completed DER Form 17-213.900(4), "Annual Operating Report for Air Pollutant Emitting Facility," for the preceding calendar year. [Rule 17-210.370(2), F.A.C.]

PERMITTEE:

Cargill Fertilizer, Inc.
Bartow, FL

PERMIT/PROJECT:

Permit No. : ACS3-239194
Project: DAP Plant No. 4 Product
Shipping System

Description (continued):Permits

18. Upon completion of the DAP Plant No. 4 Product Shipping System modification and operation at the higher rate, the permittee shall permanently deactivate the operation of the Dry Mill Rock Transfer System (APIS Point ID 07 permitted on permit A053-172177).

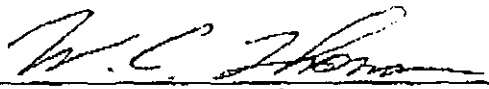
(Note: This modification could have triggered PSD review under Rule 17-212.400, F.A.C. However, the permittee requested the use of creditable actual emission reductions from deactivated sources to reduce the net emissions increase from this project below the PSD significant levels. Based upon deactivation of the Dry Mill Rock Transfer System, the net emissions increase for PM/PM₁₀ was reduced below the 15 TPY PM₁₀ PSD significant level.)
[Rule 17-4.070(3), F.A.C. and modification application]

19. At least two applications for an operating permit amendment shall be submitted to the Air Program of the Southwest District Office of the Department within 45 days of testing or at least 60 days prior to the expiration date of this permit, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the following:

- A. the appropriate application form (Certificate of Completion of Construction) noting any deviations from the construction permit application;
- B. the compliance test reports as required by Specific Condition No. 11;
- C. the dust suppression oil performance test information as required by Specific Condition No. 15.

Upon complete receipt of the above information, operation permit A053-167640 will be amended (or renewed if the renewal application for the above permit is due and also submitted) to incorporate the modifications included in this construction modification permit.
[Rules 17-4.070(3) and 17-297.340(1)(a), F.A.C.].

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION


For Richard D. Garrity, Ph.D.
Director of District Management
Southwest District

MODEL PRINTOUTS

Summary of ISCST Model Runs Provided to FDEP for Cargill Bartow–No. 4 Fertilizer Plant Expansion PSD Application

File Name	File Description
<u>CARGBART.ZIP</u>	
CGBTPM32.O<yr>	PM Significant Impact Run (Screening)
CGBTRF32.O<yr>	PM Significant Impact Run (24–Hour Refinements)
CGBTRFAN.O<yr>	PM Significant Impact Run (Annual Refinements)
<u>CLASS1.ZIP</u>	
CGBTC1.O<yr>	PM Class I Significant Impact Run

Note: yr = meteorological year of model run.

*.SUM files on disk are summary output files which show highest impacts for all modeled years.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

1875 Century Boulevard
Atlanta, Georgia 30345

RECEIVED

IN REPLY REFER TO

March 30, 1994

APR 05 1994

Bureau of
Air Regulation

Mr. Clair H. Fancy
Chief, Bureau of Air Regulation
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399

Dear Mr. Fancy:

We have reviewed the Prevention of Significant Deterioration Application for the proposed increase in production of diammonium phosphate at Cargill Fertilizer, Inc., No. 4 Fertilizer plant. The facility is located 105 km south of Chassahowitzka Wilderness Area (WA), a Class I air quality area, administered by the Fish and Wildlife Service (Service). The proposed modification will result in a significant increase in particulate matter (PM) emissions of 63 tons per year.

The air quality modeling analysis predicted maximum impacts at Chassahowitzka WA that are well below the Service's recommended significance levels for PM. Therefore, the potential for impacts to resources at Chassahowitzka WA is low.

Thank you for giving us the opportunity to comment on this permit application. We appreciate your cooperation in notifying us of proposed projects with the potential to impact the air quality and related resources of our Class I air quality areas. If you have questions, please contact Ms. Ellen Porter of our Air Quality Branch in Denver at 303/969-2071.

Sincerely yours,

James W. Pulliam, Jr.
James W. Pulliam, Jr.
Regional Director

CC:

Ms. Jewell Harper, Chief
Air Enforcement Branch
Air, Pesticides and Toxic Management Division
U.S. EPA, Region 4
345 Courtland Street, NE.
Atlanta, Georgia 30365

G. Reynolds
C. Holladay
B. Thomas, SW Dist.
G. Campbell, EPCHE
D. Buff, RBN

bcc:
FWS-REG. 4: AQC
CHAS: Refuge Manager
AQD-DEN: Ellen Porter
National Park Service - AIR
P.O. Box 25287
Denver, CO 80225



Lawton Chiles
Governor

Florida Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

March 24, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

RE: PSD Permit Application (PSD-FL-211)
Bartow #4 Diammonium Phosphate (DAP) Plant

Dear Mr. Jellerson:

Additional information is required to evaluate the proposed production increase for the Bartow #4 DAP plant. The items needed are listed below:

1. According to Department records, the last permit amendment for a production increase for the #4 DAP plant was in 1988 and involved an increase from 130 tons per hour (TPH) to 165 TPH DAP. Please explain how the plant was allowed to increase production from 165 TPH to the current level of 215 TPH DAP without a construction permit modification.
2. The discussion at the bottom of page 3-1 and the top of page 3-2 seems to ignore the applicability of the Cargill (Tampa) BACT for particulate matter done in 1991 (0.19 pound per ton) and places more emphasis on the two BACTs done ten years earlier (0.5 pound per ton) which match Cargill's currently proposed BACT limit of 0.5 pound per ton. A conclusion is stated to the effect that the proposed limit of 0.5 pound per ton is consistent with prior BACT levels, "considering the existing emission control equipment". Additional clarification should be provided as to what control equipment differences exist and why the differences would justify nonapplicability of the Cargill (Tampa) 1991 BACT level.
3. The request for a 0.5 pound per ton limit appears to involve an enormous safety factor even after adjustment for the increase in production. Please explain why such a safety margin is justified (the proposed annual emissions would exceed the baseline average by a factor of 2.5).

Mr. David B. Jellerson
March 24, 1994
Page Two

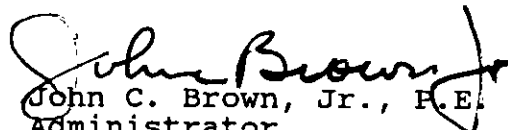
4. On page 2-1 reference is made to emissions from the shutdown of the "X" and "Y" Granular Triple Super Phosphate plants having been quantified by Cargill in Attachment "B". However, Attachment "B" was apparently not included. A discussion of shutdown credits appears on page 1-7, but this is not identified as Attachment "B". Please explain.

5. A condition is typically included in construction permits requiring the operating permits for plants that were shut down to be surrendered to the Department. If this has already been done, please advise.

6. The air dispersion modeling outputs are missing and the inputs have been provided in paper format only. Please provide all air dispersion modeling inputs and outputs in both paper and diskette format.

If there are questions about any of the above, please contact John Reynolds or Cleve Holladay at 904-488-1344.

Sincerely,


John C. Brown, Jr., P.E.
Administrator
Permitting and Standards

JCB/JR/bb

cc: W. Thomas, SWD
J. Harper, EPA
J. Bunyak, NPS
D. Buff, P.E.

Is your RETURN ADDRESS completed on the reverse side?

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

3. Article Addressed to:
 Mr. David B. Jellerson, P.E.
 Environmental Specialist
 Cargil Fertilizer, Inc.
 8813 Highway 41 South
 Riverview, Florida 33569

4a. Article Number
 P 872 563 627

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

7. Date of Delivery
 3/26/94

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

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

1. I also wish to receive the following services (for an extra fee):
 1. ☐ Addressee's Address
 2. ☐ Restricted Delivery
 Consult postmaster for fee.

PS Form 3811, December 1991 *U.S. GPO: 1992-323-402 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service

P 872 563 627



Receipt for Certified Mail

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

Sent to
 Mr. David B. Jellerson

Street and No.
 8813 Highway 41 South

P.O., State and ZIP Code
 Riverview, Florida 33569

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$

Postmark or Date
 Mailed: 3/24/94
 PSD-FL-211
 Bartow #4 Diammonium Phosphate (DAP) Plant

PS Form 3800, JUNE 1991



Lawton Chiles
Governor

Florida Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

March 7, 1994

Ms. Jewell A. Harper, Chief
Air Enforcement Branch
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30308

Dear Ms. Harper:

RE: Cargill Fertilizer, Inc.
#4 DAP Plant, Bartow Facility
Polk County, PSD-FL-211

The Department has received the above referenced PSD application package. Please review this package and forward your comments to the Department's Bureau of Air Regulation by March 28, 1994. The Bureau's FAX number is (904)922-6979.

If you have any questions, please contact John Reynolds or Cleve Holladay at (904)488-1344 or write to me at the above address.

Sincerely,

Patricia G. Adams
for **e. H. Fancy, P.E.**
Chief
Bureau of Air Regulation

CHF/pa

Enclosures



Lawton Chiles
Governor

Florida Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

March 7, 1994

Mr. John Bunyak, Chief
Policy, Planning and Permit Review Branch
National Park Service-Air Quality Division
P. O. Box 25287
Denver, CO 80225

Dear Mr. Bunyak:

RE: Cargill Fertilizer
#4 DAP Plant, Bartow Facility
Polk County, PSD-FL-211

The Department has received the above referenced PSD application package. Please review this package and forward your comments to the Department's Bureau of Air Regulation by March 28, 1994. The Bureau's FAX number is (904)922-6979.

If you have any questions, please contact John Reynolds or Cleve Holladay at (904)488-1344 or write to me at the above address.

Sincerely,

Patricia G. Adams
for C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/pa

Enclosures



Lawton Chiles
Governor

Florida Department of Environmental Protection

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

Virginia B. Wetherell
Secretary

March 7, 1994

Ms. Linda Novak
Polk County Air Quality Program
P. O. Box 39
Bartow, FL 33830

Dear Ms. Novak:

RE: Cargill Fertilizer, Inc.
#4 DAP Plant, Bartow, Facility
Polk County, PSD-FL-211

The Department has received the above referenced PSD application package. Please review this package and forward your comments to the Department's Bureau of Air Regulation by March 28, 1994. The Bureau's FAX number is (904)922-6979.

If you have any questions, please call John Reynolds or Cleve Holladay at (904)488-1344 or write to me at the above address.

Sincerely,

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

CHF/pa

Enclosure



CARGILL FERTILIZER, INC.

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

March 4, 1994

Ms. Patricia G. Adams
Florida Department of Environmental Protection
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

RECEIVED

MAR 7 1994

Bureau of
Air Regulation

Subject: Cargill Fertilizer, Inc. - Bartow #4 DAP Plant
PSD Permit Application

Dear Ms. Adams,

As per your request, please find enclosed two additional copies of the above-referenced permit application originally sent to your office on March 1, 1994.

Should you have any questions, or require additional information, please feel free to contact me at 813/534-9613.

Sincerely,

David B. Jellerson, P.E.
Environmental Superintendent



recycled paper