

Jeb Bush Governor

## Department of Environmental Protection

Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619

David B. Struhs Secretary

### FACSIMILE TRANSMISSION SHEET

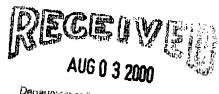
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	DATE - CI O		
TO:	AL LINERO		
	Department DARM		
	Phone	Fax	
FROM:	Jim Medonda		
	O DEP Southwest District Phone: (813) 744-6100 (SunCom 51		
OPERAT	or:		
SUBJECT	EPC.  NOEL MIRERA, BILL THOMA	•	
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	IS THIS OK WITH	_	
	Total Number of Pages, Including Cover I	Page: 5	
DEPSWD	AIR PROGRAM FAX NUMBERS: (813)		
	(Sunco	om) 512-1073	

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

Airborne Express No:

458 325 4583

August 2, 2000

Mr. Jerry Kissell Florida Department of Environmental Protection 3804 Coconut Palm Drive Tampa, FL 33619-8318

Dear.: Mr. Kissell

RE: No. 9 Sulfuric Acid Plant Emission Reductions

As are aware, Cargill has agreed to a reduction in the permitted emission from our No's 8 & 9 Sulfuric Acid Plants at our Riverview facility by June 30, 2003. As the first step in this process for the No. 9 plant, Cargill intends to replace a portion of the conventional vanadium catalyst in the fourth mass with a cesium enhanced vanadium catalyst.

The purpose of this letter is to request an expedited authorization for this work. Due to some unanticipated mechanical problems at this unit, it is necessary for Cargill to conduct maintenance beginning as early as September 1, 2000. We have confirmed that the upgraded catalyst is available at this early date and would like to proceed with this phase of the emission reduction project. If the work is not completed at this time we will be forced to wait until the next turn-around which will likely not be conducted until sometime in 2002. Such a delay will not provide sufficient time to confirm the performance of the new catalyst and identify if any physical modifications are required to the plant to meet the reduced emission objectives by the required date.

The new catalyst is expected to result in immediate emission reductions. The plant is already capable of operating a maximum permitted capacity and has done so on numerous occasions. No increase in permitted production is being requested in conjunction with the catalyst change.



Mr. Jerry Kissell Florida Department of Environmental Protection August 2, 2000 Page 2 of 2

Should you have any questions or need additional information, please feel free to contact me by phone at 813-671-6369 or e-mail at kathy\_edgemon@cargill.com.

Sincerely,

Kathy Edgemon, P.E.

Environmental Superintendent

Cc:

Jerry Campbell, EPCHC Jellerson, Morris File P-10-10

#### Memorandum

## Florida Department of Environmental Protection

TO:

Howard L. Rhodes

THRU:

Clair Fancy

Al Linero (

**FROM** 

Susan DeVore-Fillmore

DATE:

July 22, 1998

SUBJECT:

Cargill Fertilizer, Inc., Sulfuric Acid Plants Nos. 8 & 9, Modification of Permit

No. 0570008-022-AC (PSD-FL-209)

Attached for approval and signature is a letter that will amend construction permit number 0570008-022-AC (PSD-FL-209).

The modification involves the shifting of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9 plant. The two plants were expanded between 1995 and 1998 through a single air construction (PSD) permit which is still in effect. The revised production breakdown between the two plants could have been proposed earlier under the permit to increase production. However, the company only determined after completing the project that the revised breakdown is more efficient. The Department concludes that emissions are not likely to increase as a result of the transfer of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9 plant. Comments were not submitted in response to the public notice.

I recommend your approval and signature.

Attachments

al/sdf

#### FINAL DETERMINATION

Cargill Fertilizer, Inc.

Modification of Permit No. 0570008-022-AC (PSD-FL-209)

Sulfuric Acid Plants Nos. 8 & 9

An Intent to Issue an air construction permit modification for Cargill Fertilizer, Inc., Sulfuric Acid Plants Nos. 8 & 9 located at US Highway 41 South, in Riverview, Hillsborough County, Florida, was distributed on June 12, 1998. The Public Notice of Intent to Issue Air Construction Permit Modification was published in the Tampa Tribune on June 17, 1998. Comments were not submitted in response to the public notice.

The modification includes the shifting of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9 plant. The two plants were expanded between 1995 and 1998 through a single air construction (PSD) permit which is still in effect. The revised production breakdown between the two plants could have been proposed earlier under the permit to increase production. However, the company only determined after completing the project that the revised breakdown is more efficient. The Department concludes that emissions are not likely to increase as a result of the transfer of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9 plant.

The final action of the Department will be to issue the permit modification as noted above.

PUBLIC NOTICE OF INTENT
TO ISSUE AIR
CONSTRUCTION PERMIT
MODIFICATION
STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL
PROTECTION
DEP FILE No. 0570008-022-AC
(PSD-FL-209)
Carglil Fertilizer Sulfuric Acid
Plants Nos. 8 & 9
Hillsborough County
The Department of Environ-

The Department of Environ-mental Protection (Depart-ment) gives notice of its Intent ment) gives notice of its intent to Issue an air construction permit modification to Cargilli Fertilizer, Inc. to shift 200 tons, per day (TPD) of sulfuric acid production capacity from the existing No. 8 Sulfuric Acid Plant. The plants are located on U.S. Highway 41 South in Riverview, Hillsborough County. The applicant's name and address are: Cargill Fertilizer, Inc; 8813 U.S. Highway 41 South, Riverview, Florida 33569.

south, Klverview, Florida 33569.

The sulfuric acid plant produces the reagent used to ocidulate phosphate rock to make fertilizers. Molten sulfur is the necessary row material for sulfuric acid production. The modification will decrease the permitted capacity of Plant No. 8 from 2,900 to 2,700 tons per day of 100% sulfuric acid and increase the permitted capacity of Plant No. 9 from 2,000 to 3,400 tons per day of 100% sulfuric acid, maintaining the existing 5,700 tons per day of 100% sulfuric acid, cap for the two plants combined.

The two plants were expan-

combined.

The two plants were expanded between 1995 and 1998 through a single air construction (PSD) permit which is still in effect. The revised production breakdown between the two plants could have been proposed earlier under the permit to increase production. However, the company only determined after completing the project that the revised breakdown is more efficient. The Department concludes that emissions are not likely to increase as a result of the increase as a result of the fransfer of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9

sulfuric acid capacity from the No. 8 plant to the No. 9 plant.

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

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

The Department will issue FINAL Permit Modification with the conditions of the DRAFT Per

unless a timely petition for an administrative hearing is filled pursuant to Sections 120.569 and 120.57 F.S. The procedures for petitioning for a hearing are set forth below. Mediation is not available for this action. mediation in no available for this action. A person whose substantial interests are af-fected by the Department's proposed permitting decision-may petition for an adminis-

## CACGIII DEPT. 05 70008-022-AC PSN-F1-709

trative hearing in accordance with Sections 120.509, and 120.57 F.S. The petition must contain the information set forth below and must be filled (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 23399-3000, telephone: 850/488-570, fax: 850/487-4938. Petitions must be filled within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first, A petitioner must mail a copy of the petition to the applicant at the whichever occurs tirst. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure, of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S.; or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Fiorida Administrative Code. trative Code.

in compliance with Rule 28-5207 of the Florida Administrative Code.

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

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

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

through Friday, except legal holidays, at the property of Environmental Protection Bureau of Air Regulation 111 S. Magnolila Drive, Suite 4 Tallahassee, Florida 32301 Telephone: 850/483-0114 Fax: 850/922-679 Department of Environmental Protection Southwest District Office 1886 Coconut Palm Drive Protection
Southwest District Office
18804 Coconut Palm Drive
Tampo, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084
Hillsborough Co.
Environmental Protection
Commission
1410 North 21 Street
Tampo, Florida 33605
Telephone: 813/272-5505
The complete protect file includes the Draft Permit Modification, 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 Administrator. F.S. Interested persons that contact the Administrator, New Resource Review Section at 111 South Magnolla Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information. 2554 6/17/98



## Department of Environmental Protection

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

October 22, 1998

Virginia B. Wetherell Secretary

#### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David B. Jellerson, P.E. Environmental Superintendent Cargill Fertilizer, Inc. 8813 US Highway 41 South Riverview, Florida 34221

Re: Amendment of DEP File No. 0570008-010-AC, PSD-FL-209 Riverview Nos. 8 & 9 Sulfuric Acid Plants

Dear Mr. Jellerson:

The Department has reviewed your October 19, 1998 letter requesting an extension of the expiration date of the above referenced permit. A larger blower drive was installed on the No. 8 Sulfuric Acid Plant as part of a project to increase production. This drive subsequently failed and was replaced by a smaller drive. The purpose of the extension is to allow more time to replace the smaller unit with one equivalent to the original capacity at the next plant turnaround. This request is acceptable and the expiration date is hereby extended from October 30, 1998 to October 31, 1999.

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

Mr. David B. Jellerson Page 2 October 22, 1998

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'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.

Mediation is not available in this proceeding.

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

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

Mr. David B. Jellerson Page 3 October 22, 1998

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

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

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Sincerely,

Howard L. Rhodes. Director Division of Air Resources

Management

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this AMENDMENT was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 10-33-98 to the person(s) listed:

Mr. David Jellerson, Cargill Fertilizer, Inc.\*

Mr. Bill Thomas, SWD

Mr. David Buff, Golder Associates

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.

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#### Golder Associates Inc.

6241 NW 23rd Street, Suite 500 Gainesville, FL 32653-1500 Telephone (352) 336-5600 Fax (352) 336-6603

October 19, 1998

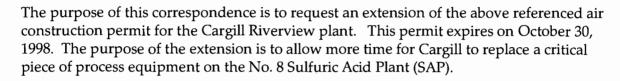
Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2400

Attention: A.A. Linero, New Source Review Section

RE: Cargill Fertilizer, Inc.

Permit No. AC29-241660; PSD-FL-209 Riverview Nos. 8 & 9 Sulfuric Acid Plants

Dear Mr. Linero:



Cargill had previously installed a new "blower drive" on the No. 8 SAP. This piece of equipment experienced problems and subsequently failed. In order to achieve a quick fix to this problem, a readily available blower drive replacement was installed. However, this replacement unit was of smaller capacity than the original drive. Cargill plans on replacing this smaller capacity unit with one equivalent to the original equipment capacity.

Due to the time needed for this replacement, the replacement cannot be performed until the next plant turnaround. As a result, Cargill requests an extension of the construction permit for one year, until October 30, 1999.

A permit amendment fee of \$50 is attached. If you require anything further, please do not hesitate to call. Thank you for consideration of this request.

Sincerely,

David A. Buff David A. Buff, P.E.

wPrincipal Engineer Florida∕P.E. #19011

SEAL

DB/arz S

CC: David Jellerson, Cargill
Kathy Edgemon, Cargill
Mill Thomas, FDEP-SWD

File (2)

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GOLDER ASSOCIATES GAINESVILLE 3730 SHAMBLEE TUCKER ROAD ATLANTA, GA 30341

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FOR



## Department of Environmental Protection

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

Virginia B. Wetherell Secretary

July 22, 1998

#### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David B. Jellerson, P.E. Environmental Superintendent Cargill Fertilizer, Inc. 8813 US Highway 41 South Riverview, Florida 34221

Re: DEP File No. 0570008-022-AC (PSD-FL-209)

Sulfuric Acid Plants Nos. 8 & 9

Dear Mr. Jellerson:

The Department reviewed your request to revise certain specific conditions in the air construction permit for Sulfuric Acid Plants Nos. 8 and 9 as described in comments received on January 26 and April 20, 1998. The request is to allow the shifting of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9 plant. The two plants were expanded between 1995 and 1998 through a single air construction (PSD) permit which is still in effect. The revised production breakdown between the two plants could have been proposed earlier under the permit to increase production. However, the company only determined after completing the project that the revised breakdown is more efficient. The Department's analysis was discussed in the technical evaluation distributed with the Intent to Issue Air Construction Permit Modification. The Public Notice of Intent to Issue Air Construction Permit Modification was published in the Tampa Tribune on June 17, 1998. Comments were not submitted in response to the public notice. The permit is hereby modified as follows:

#### SPECIFIC CONDITION NO. 1

1. The maximum production rate of the No. 8 sulfuric acid plant shall not exceed  $\frac{2900}{2700}$  tons per day (TPD) based on 100% sulfuric acid (H<sub>2</sub>SO<sub>4</sub>).

#### SPECIFIC CONDITION NO. 2

The maximum production rate of the No. 9 sulfuric acid plant shall not exceed  $\frac{3200}{3400}$  tons per day (TPD) based on 100% sulfuric acid (H<sub>2</sub>SO<sub>4</sub>).

#### SPECIFIC CONDITION NO. 6

6. Sulfur dioxide (SO<sub>2</sub>) emissions from each sulfuric acid production unit shall be as follows, [Rule 62-296.800, F.A.C.; 40 CFR 60.82(a)]:

Plants	TPD	lb/ton	lb/hr	TPY
H <sub>2</sub> SO <sub>4</sub> No. 8	<del>2900</del> <u>2.700</u>	4.0	<del>483.3</del> <u>450.0</u>	<del>2,117</del> <u>1.971</u>
H <sub>2</sub> SO <sub>4</sub> No. 9	<del>3200</del> <u>3,400</u>	4.0	<del>533.3</del> <u>566.7</u>	<del>2,336</del> <u>2,482</u>
Total (combined)	5,700	4.0	950	4,161

Mr. David Jellerson, P.E. Page 2 of 2 July 22, 1998

#### SPECIFIC CONDITION NO. 7

7. Acid mist emissions, expressed as H<sub>2</sub>SO<sub>4</sub>, from each sulfuric acid production unit shall be as follows, [Rule 62-296.800, F.A.C.; 40 CFR 60.83(a)(1)]:

	Production			
Plants	TPD	lb/ton	lb/hr	TPY
H <sub>2</sub> SO <sub>4</sub> No. 8	<del>2900</del> <u>2,700</u>	0.15	<del>18.1</del> <u>16.9</u>	<del>79.3</del> <u>73.9</u>
H <sub>2</sub> SO <sub>4</sub> No. 9	<del>3200</del> <u>3,400</u>	0.15	<del>20.0</del> <u>21.3</u>	<del>87.6</del> <u>93.1</u>
No. 8 & No. 9 combined	5,700	0.15	35.6	156.0

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes. Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director Division of Air Resources Management

#### **CERTIFICATE OF SERVICE**

Mr. David B. Jellerson, Cargill \*

Ms. Kathy Edgemon, Cargill

Mr. Brian Beals, EPA

Mr. John Bunyak, NPS

Mr. David Buff, P.E., Golder Assoc.

Mr. Bill Thomas, SWD

Mr. Jerry Campbell, HCEPC

Clerk Stamp

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

(Clerk)

(Date)

on the reverse side?	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 card to you.  Attach this form to the front of the mailpiece, or on the back if space permit. Write *Return Receipt Requested* on the mailpiece below the article. The Return Receipt will show to whom the article was delivered and delivered.	e does not e number.	i also wish to rectollowing service extra fee):  1.	es (for an see's Address ed Delivery	elpi service.
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_	PS Form <b>3811</b> , December <b>1994</b>	595-97-B-0179	Domestic Ret	um Receipt	

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

## STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0570008-022-AC (PSD-FL-209)

Cargill Fertilizer Sulfuric Acid Plants Nos. 8 & 9 Hillsborough County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Cargill Fertilizer, Inc. to shift 200 tons per day (TPD) of sulfuric acid production capacity from the existing No. 8 Sulfuric Acid Plant to the No. 9 Sulfuric Acid Plant. The plants are located at on U.S. Highway 41 South in Riverview, Hillsborough County. The applicant's name and address are: Cargill Fertilizer, Inc., 8813 U.S. Highway 41 South, Riverview, Florida 33569.

The sulfuric acid plant produces the reagent used to acidulate phosphate rock to make fertilizers. Molten sulfur is the necessary raw material for sulfuric acid production. The modification will decrease the permitted capacity of Plant No. 8 from 2,900 to 2,700 tons per day of 100% sulfuric acid and increase the permitted capacity of Plant No. 9 from 3,200 to 3,400 tons per day of 100% sulfuric acid, maintaining the existing 5,700 tons per day of 100% sulfuric acid cap for the two plants combined.

The two plants were expanded between 1995 and 1998 through a single air construction (PSD) permit which is still in effect. The revised production breakdown between the two plants could have been proposed earlier under the permit to increase production. However, the company only determined after completing the project that the revised breakdown is more efficient. The Department concludes that emissions are not likely to increase as a result of the transfer of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9 plant.

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

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

The Department will issue FINAL Permit Modification with the conditions of the DRAFT Permit Modification unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. The procedures for petitioning for a hearing are set forth below. Mediation is not available for this action.

# Technical Evaluation Sulfuric Acid Plants Nos. 8 & 9 Modification of PSD-FL-209/0570008-022-AC Cargill Fertilizer, Inc. Riverview, Hillsborough County

The applicant, Cargill Fertilizer, Inc., proposes to decrease the capacity of its existing 2,900 tons per day (TPD) sulfuric acid plant (SAP No. 8) to 2,700 TPD and increase the capacity of its existing 3,200 TPD sulfuric acid plant (SAP No. 9) to 3,400 TPD. The plants serve Cargill's fertilizer manufacturing facility located at US Highway 41 South, Riverview, Hillsborough County. Based on recent test data shown below, it is not likely that the change will result in an increase in emissions of sulfur dioxide (SO<sub>2</sub>) and sulfuric acid mist (SAM) from the two plants combined.

The two plants were expanded between 1995 and 1998 through a single air construction (PSD) permit which is still in effect. The revised production breakdown between the two plants could have been proposed earlier under the permit to increase production. However, the company only determined after completing the project that the revised breakdown is more efficient. The Department concludes that emissions are not likely to increase. Therefore, the modification is not subject to review for the Prevention of Significant Deterioration (PSD) and a determination of Best Available Control Technology (BACT) is not required in accordance with Rule 62-212.400, F.A.C.

#### Sulfur Dioxide Emissions Test Results: (lb per ton 100% acid)

H <sub>2</sub> SO <sub>4</sub> I	Plant No. 8	H <sub>2</sub> SO <sub>4</sub> Pl	ant No. 9
Test Date	SO <sub>2</sub> Emissions	Test Date	SO <sub>2</sub> Emissions
1/08/90	2.99 lb/ton		
2/18/91	1.56 lb/ton	1/13/94	3.80 lb/ton
1/07/94	2.69 lb/ton	7/28/94	2.70 lb/ton
3/02/95	3.3 lb/ton	7/26/95	3.03 lb/ton
8/21/97	3.8 lb/ton	12/97	3.7 lb/ton



## Department of Environmental Protection

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

Virginia B. Wetherell Secretary

June 12, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David B. Jellerson, P.E. Environmental Superintendent Cargill Fertilizer, Inc. 8813 US Highway 41 South Riverview, Florida 34221

Re: DEP File No. 0570008-022-AC (PSD-FL-209)

Sulfuric Acid Plants Nos. 8 & 9

Dear Mr. Jellerson:

Enclosed is one copy of the Draft Air Construction Permit Modification to shift 200 tons per day of production between the existing Sulfuric Acid Plants Nos. 8 and 9 located at US Highway 41 South, in Riverview, Hillsborough County. The Department's Intent to Issue Air Construction Permit Modification and the "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION" must be published within 30 (thirty) days of receipt of this letter. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit modification.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please call Susan DeVore-Fillmore at 850/921-9537 or John Reynolds at 850/921-9536.

Sincerely,

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

Bureau of Air Regulation

CHF/aal/sdf

Enclosures

In the Matter of an Application for Permit by:

Mr. David B. Jellerson, P.E. Cargill Fertilizer, Inc. 8813 U.S. Highway 41 South Riverview, Florida 33569 DEP File No. 0570008-022-AC
Draft PSD Permit Modification No. PSD-FL-209
Sulfuric Acid Plants Nos. 8 & 9
Hillsborough County

#### INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification (copy of DRAFT Permit Modification attached) for the proposed change, as detailed in the request specified above and attached modification letter, for the reasons stated below.

The applicant, Cargill Fertilizer, Inc. requested on January 23, 1998 that the Department issue an air construction permit modification for two sulfuric acid plants at its phosphate fertilizer facility located at US Highway 41 South, Riverview, Hillsborough County. At the Department's request, the applicant submitted additional information that was deemed sufficient on April 17, 1998. The applicant proposes to increase production of the No. 9 Sulfuric Acid Plant from 3,200 to 3,400 tons per day of 100% sulfuric acid and to decrease production of the No. 8 Sulfuric Acid Plant from 2,900 to 2,700 tons per day of 100% sulfuric acid, while maintaining the existing total limit of 5,700 tons per day of 100% sulfuric acid for both plants.

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

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

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION." The notice shall be published one time only within 30 (thirty) days in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit modification. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/922-6979) within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit modification pursuant to Rule 62-103.150 (6), F.A.C.

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

The Department will accept written comments and requests for public meetings concerning the proposed DRAFT Permit Modification issuance action for a period of 30 (thirty) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION." Written comments [and requests for public meetings] should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this

DRAFT Permit Modification, the Department shall issue a Revised DRAFT Permit Modification and require, if applicable, another Public Notice.

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

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9730, fax: 850/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

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

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

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

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

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in

DEP File No.0570008-022-AC (PSD-FL-209) Page 3 of 3

Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

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

Executed in Tallahassee, Florida.

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

60 Lin, 2.6. 6/12

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION (including the PUBLIC NOTICE, and DRAFT permit modification) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 4-12-98 to the person(s) listed:

Mr. David B. Jellerson, Cargill\*

Mr. Brian Beals, EPA

Mr. John Bunyak, NPS

Mr. David Buff, P.E., Golder Assoc.

Mr. Bill Thomas, SWD

Mr. Joe King, Polk Co.

Mr. Jerry Campbell, EPCHC

Clerk Stamp

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

(Clerk)

(Date)



## Department of Environmental Protection

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

Virginia B. Wetherell Secretary

June 12, 1998

#### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David B. Jellerson, P.E. Environmental Superintendent Cargill Fertilizer, Inc. 8813 US Highway 41 South Riverview, Florida 34221

Re: DEP File No. 0570008-022-AC (PSD-FL-209)

Sulfuric Acid Plants Nos. 8 & 9

Dear Mr. Jellerson:

The Department reviewed your request to revise certain specific conditions in the air construction permit for Sulfuric Acid Plants Nos. 8 and 9 as described in comments received on January 26 and April 20, 1998. The request is to allow the shifting of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9 plant. The Department's analysis was discussed in the technical evaluation distributed with the Intent to Issue Air Construction Permit Modification. The permit is hereby modified as follows:

#### SPECIFIC CONDITION NO. 1

1. The maximum production rate of the No. 8 sulfuric acid plant shall not exceed 2900 2700 tons per day (TPD) based on 100% sulfuric acid (H<sub>2</sub>SO<sub>4</sub>).

#### SPECIFIC CONDITION NO. 2

2. The maximum production rate of the No.9 sulfuric acid plant shall not exceed 3200 3400 tons per day (TPD) based on 100% sulfuric acid (H<sub>2</sub>SO<sub>4</sub>).

#### SPECIFIC CONDITION NO. 6

6. Sulfur dioxide (SO<sub>2</sub>) emissions from each sulfuric acid production unit shall be as follows, [Rule 62-296.800, F.A.C.; 40 CFR 60.82(a)]:

Plants	TPD	lb/ton	lbs/hr	TPY
H <sub>2</sub> SO <sub>4</sub> No. 8	<del>2900</del> <u>2,700</u>	4.0	4 <del>83.3</del> 450.0	<del>2,117</del> <u>1,971</u>
H <sub>2</sub> SO <sub>4</sub> No. 9	<del>3200</del> <u>3,400</u>	4.0	<del>533.3</del> <u>566.7</u>	<del>2,336</del> <u>2,482</u>
Total (combined)	5,700	4.0	950	4,161

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9370, fax: 850/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

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

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

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

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

Department. of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100 Fax: 813/744-6084 Hillsborough Co. Environmental Protection Commission 1410 North 21 Street Tampa, Florida 33605 Telephone: 813/272-5530 Fax: 813/272-5605

The complete project file includes the Draft Permit Modification, 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 Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

SPECIFIC CONDITION NO. 7

SPECIFIC CONDITION NO. 7

7. Acid mist emissions, expressed as H<sub>2</sub>SO<sub>4</sub>, from each sulfuric acid production unit shall be as follows, [Rule 62-296.800, F.A.C.; 40 CFR 60.83(a)(1)]:

可以 机连基环流线 化硫酸铁铁磷

	Production			
Plants	TPD	lb/ton	lbs/hr	TPY
H <sub>2</sub> SO <sub>4</sub> No. 8	<del>2900</del> 2,700	0.15	<del>18.1</del> <u>16.9</u>	<del>79.3</del> <u>73.9</u>
H <sub>2</sub> SO <sub>4</sub> No. 9	<del>3200</del> <u>3.400</u>	0.15	<del>20.0</del> <u>21.3</u>	<del>87.6</del> <u>93.1</u>
No. 8 & No. 9 combined	5,700	0.15	35.6	156.0

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes. Any party to this order (permit modification) 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 in the Legal Office; 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.

Howard L. Rhodes, Director Division of Air Resources Management

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT AMENDMENT w	vas
sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on	to the
person(s) listed:	

Ms. Melody Russo, Cargill Fertilizer \*

Mr. Bill Thomas, SWD

Mr. Jerry Campbell, HCEPC

Clerk Stamp

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

(Clerk)	(Date)

## Fold at line over top of envelope to the return address

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 card to you. Attach this form to the front of the mailpiece, or on the back if space permit. Write "Return Receipt Requested" on the mailpiece below the article. The Return Receipt will show to whom the article was delivered and delivered.	e does not	I also wish to rectifollowing service extra fee):  1.  Addresse 2.  Restricte Consult postmas	s (for an ee's Address	eipt Service.
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PS Form <b>3800</b>	Postmark or Date 0570008-022-A PSD-F1-209	e 6-12-98	
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JUN 25 1998

C. BUREAU OF AND REGULATION

### RECEIVED

JUN 25 1998

8813 Highway 41 South - Riverview, Florida 33569 - Telephone 813-677-9111 - TWX 810-876-0648 R REGULATION CERTIFIED MAIL: P 204 942 240

June 18, 1998

Florida
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Mail Station #5505
Tallahassee, FL 32399-2400

Subject: Proof of Publication - Notice of Intent to Issue an Air Construction Permit Modification, DRAFT Permit Modification No.: 0570008-022-AC, (PSD-FL-209) to Cargill Fertilizer, Inc. for the Nos. 8 & 9 Sulfuric Acid Plants located at 8813 U.S. Highway 41 South, Riverview, Hillsborough County, FL 33569.

#### Gentlemen:

You will find attached Proof of Publication of the Notice of Intent to Issue subject permit modification 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

cc: Susan Devore-Johnson

x.c. Rick Kirby - HCEPC
Jerry Kissel - FDEP
Don Clark
Ozzie Morris
Kathy Edgemon
File P-10-10



Date:

06/12/1998 1:39:37 PM

From:

Súsan DeVore TAL

Subject: To:

Cargill Fertilizer, SAPs Nos. 8 & 9, 0570008-022-AC (PSD-FL-209)

Gerald Kissel TPA

To: CC: Richard Kirby TPA kathy edgemon@cargill.com@in

CC:

dave\_buff@golder.com@in

Attached is the public notice package for the SAP 8/9 production shift. The original was sent of Cargill today and copies were also sent to you by mail.

#### THE TAMPA TRIBUNE **Published Daily**

#### Tampa, Hillsborough County, Florida

State of Florida County of Hillsborough } ss.

(SEAL)

OFFICIAL NOTARY SEAL SUSIE LEE SLATON COMMISSION NUMBER

CC639424 Y COMMISSION EXP. APPIL 16, 2001

in the matter of _	·
	PUBLIC NOTICE OF INTENT .
was published in s	aid newspaper in the issues of
	JUNE 17, 1998
County, Florida, a County, Florida, e Hillsborough Cou	is that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough and that the said newspaper has heretofore been continuously published in said Hillsborough ach day and has been entered as second class mail matter at the post office in Tampa. in said newspaper has period of one year next preceding the first publication of the attached copy of diaffiant further says that she has neither paid nor promised any person, this advertisement for said newspaper.
Sworn to and subs	cribed before me, thisday

Iusie Lea Ilat

PUBLIC NOTICE OF INTENT
TO ISSUE AIR
CONSTRUCTION PERMIT
MODIFICATION
STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL
PROTECTION
DEP File No. 0570008-022-AC
(PSD-FL-209)
Cargilli Fertillizer Sulfuric Acic
Plants Nos. 8 & 9
Hillsborough County
The Department of Environmental Protection (Department) gives notice of its intent
to issue an air construction.
permit modification to Cargilli
Fertilizer, inc. to shift 200 tons
per day (TPD) of sulfuric acid
production capacity from the
existing No. 8 Sulfuric Acid
Plant to file No. 9 Sulfuric Acid
Plant to file No. 9 Sulfuric Acid
Plant to file No. 9 Sulfuric acid
production capacity from the
existing No. 8 Sulfuric Acid
Plant to file No. 9 Sulfuric Acid
Plant to file No.

South, Riverview, Fiorida 33569.

The sulfuric acid plant produces the reagent used to acidulate phosphate rock to make fertilizers. Molten sulfur is the necessary raw material for sulfuric acid production. The modification will decrease the permitted capacity of Plant No. 8 from 2,900 to 2,700 tons per day of 100% sulfuric acid and increase the permitted capacity of Plant No. 9 from 3,200 to 3,400 tons per day of 100% sulfuric acid, maintaining the existing 5,700 tons per day of 100% sulfuric acid cap for the two plants combined.

The two plants were expanded between 1995 and 1998 through a single air construction (PSD) permit which is still in effect. The revised production breakdown between the two plants could have been proposed ecriller under the permit to increase production. However, the company only determined after completing the project that the revised breakdown is more efficient.

The Department concludes that emissions are not likely to increase as a result of the transfer of 200 tons per day of the transfer t

Increase as a result of the transfer of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9

sulfuric acid capacity from the No. 8 plant to the No. 9 plant.

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

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

DRAFT Permit Modification and require, if applicable, another Public Notice.

The Department will issue FINAL Permit Modification with the conditions of the DRAFT Permit Modification unless a timely petition for an administrative hearing is filled pursuant to Sections 120.559 and 120.57 F.S. The procedures for petitioning for a hearing are set forth below. Mediation is not available for this action. A person whose this action. A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an adminisCARGIII Jert. 05 70008-022-AC PSD-F1-709

irative hearing in accordance with? Sections, 120,599, and 120,57. F.S. The petition must contain, the information set forth below and must be filled (received). In: the Office of General Counsel of, the Department; 3900° Commonwealth Boulevard; Mail Station, #35, Tallahassee, Florida 23399-3000; s. telephone: 850/488-7970; fax: 850/487-4938. Petitions must be filled within fourteen days of publication of the public notice or 4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a walver 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 parity to it. Any subsequent intervention will be only at the approved of the presiding officer upon the filling of a motion in compliance with Rule 28-207 of the Florida Administrative Code, has a petition must contain the following information; (a) The proceedings and telephone

trative Code. Many A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are offected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement dentifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or or statutes that the petitioner contends require reversal or modification of the Department's action or statutes that the petitioner contends recipied to the petitioner wants the Department to take with respect to the tioner wants the Department to take with respect to the Department's action or pro-posed action addressed in this notice of intent, 7 % 3.2.2.

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

A complete project file is available for public hispection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at 10 pepartment of Environmental Protection Bureau of Air Regulation.

111 S. Magnolio Drive, Suite 4. Taliahassee, Florida 32016.

Telephone: 850/922-6979.
Department of Environmental Protection Southwest District Office 3804 Cocount Padm Drive. Suite 4. Taliahassee, Florida 32018.
Telephone: 813/744-6084.
Hillsborough Co.
Environmental Protection Commission Street
Tampa, Florida 3369-8218.
Telephone: 813/744-6084.
Hillsborough Co.
Environmental Protection Commission Street
Tampa, Florida 3369-8218.
Telephone: 813/727-5530
Telephone: 813/727-5530
The complete project file includes the Draft Permit, Modification, Permit, the application of the Information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact, the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Taliahassee, Florida 22301, or call 850/488-0114, for additional information.

: 1.14

6/17/98

tion. 2554

Date:

06/03/1998 11:00:40 AM

From: Subject:

Alvaro Linero TAL Cargill SAPs 8&9

Susan. As we discussed, please initiate production of a permit modification for Cargill, Riverview SAPs Nos. 8 and 9. The rough draft package for SAP 7 is in NSRS/Linero/Cargill250. Run a find/replace on each document to replace "permit" with "permit modification." I would say the Intent, Public Notice, Cover Letter, might be of interest. I see a short one page discussion in lieu of a full-blown Technical Evaluation and Preliminary Determination. No need for a BACT.

Ask Kim for a fairly recent example of a modification by letter and use the standard language at the end of a similar letter. In this case, the modification letter will be in draft form and go out with the public notic package in lieu of a draft permit.

As I mentioned, they are trying to jockey 200 TPD of production from one plant to the other. John and I have reasonable assurance that it does not trigger PSD. See if you can put together a table of recent tests and production from the reports that they sent John. We can do a short write-up around that information.

Thanks Al.

p: tober: permits to ff: Stollan

Date: From: 5/13/98 6:14:00 PM

John Reynolds TAL

Subject:

13

FWD: Test Data for Cargill's No. 8 & 9 Sulfuric Acid Plants

To: Gerald Kissel TPA CC: Alvaro Linero TAL

JK, any chance of having someone check Cargill's No. 8 SAP SO2 numbers to see if they've ever been less than the single test on No 9?

John-here are our compliance files on these units for bon),
We don't have, recent tests on file,
record of, or more

JX 5/18/98

L' SWD compliance fila

John - Lets discuss.

(10)

Date: 4/21/98 11:37:05 AM From: John Reynolds TAL

Subject: Test Data for Cargill's No. 8 & 9 Sulfuric Acid Plants To: Gerald Kissel TPA

To: Gerald Kissel TPA CC: Alvaro Linero TAL

Cargill has applied for a modification of PSD-FL-209 to shift 200 TPD of production from SAP No. 8 to No. 9 at their Riverview facility. Our main concern is that actual emissions aren't going to increase by switching production from a "lower" emitting plant to a "higher" emitting plant. A letter just received from Cargill states that the most recent compliance test results for the two plants show that No. 8 is the "higher" emitter of SO2. Could you have someone check past tests for the No. 8 plant to see if the SO2 results have been less than the single test performed to date on No. 9? Thanks.

#### Golder Associates Inc.

6241 NW 23rd Street, Suite 500 Gainesville, FL 32653-1500 Telephone (352) 336-5600 Fax (352) 336-6603

April 17, 1998

## RECEIVED

APR 20 1998





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

Cargill Fertilizer, Inc. - Riverview Nos. 8 & 9 Sulfuric Acid Plants

AC29-241660 PSD-FL-209

Request to Shift Sulfuric Acid Capacity

Dear Mr. Linero:

RE:

The purpose of this correspondence is to respond to the Department's letter dated February 3, 1998, concerning the above referenced request, and in follow up to our recent conversations. As I explained in our conversation, both the No. 8 and No. 9 Sulfuric Acid Plants are currently under a construction permit for the increase in their permitted production rates. The No. 9 Sulfuric Acid Plant has only recently completed actual construction in regards to its permitted increase to 3,200 TPD of sulfuric acid. This construction was completed in November of 1997, during a planned plant turnaround. Therefore, there is no long term (i.e., 2-year) operational record upon which to establish its "actual" emissions. The potential (allowable) emissions for the No. 9 Sulfuric Acid plant is 4.0 lb/ton of 100% sulfuric acid produced.

The allowable emission rate for the No. 8 Sulfuric Acid plant is also 4.0 lb/ton; therefore, Cargill believes that shifting 200 TPD of acid production from the No. 8 to the No. 9 plant, while maintaining the 5,700 TPD cap for the two plants combined, would not constitute a modification since this entire modification of the No. 8 and No. 9 plants is still under a construction permit.

In regards to your questions at to whether the real SO<sub>2</sub> emissions to the atmosphere would increase due to the shift, I refer to the latest compliance tests conducted on the No. 8 and No. 9 Sulfuric Acid plants. The latest test on No. 8 Sulfuric Acid Plant was conducted on 8/21/97 and resulted in SO<sub>2</sub> emissions of 3.8 lb/ton at a production rate of 2,530 TPD. Since the modifications were completed on No. 9 Sulfuric Acid Plant in November, 1997, a compliance test was conducted in December, 1997, and resulted in SO<sub>2</sub> emissions of 3.7 lb/ton at a production rate of 3,154 TPD. Therefore, on the basis of the official compliance tests, emissions would decrease by shifting 200 TPD to No. 9 plant, since emissions from the No. 8 plant are higher.

Since the two plants are already under a construction permit and underwent PSD review at the time, the total allowable emissions have already been scrutinized and approved. There would be nothing

3/2/95 1/8/90 2/18/91 1/7/94 John Ruguald's or conversation or conversation Kissell.

A.A. Linero Page 2 April 17, 1998

gained by requiring another construction permit. Cargill has already submitted the required permit amendment fee of \$250.

This information should provide the Department with the information needed to process the permit amendment. If you require anything further, please do not hesitate to call.

Sincerely,

David a Buff

David A. Buff, P.E. Principal Engineer

David Jellerson, Cargill

Kathy Edgemon, Cargill

Bill Thomas, FDEP-SWD

File (2)

cc. J. Reynolds, BAR



## Department of Environmental Protection

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

Virginia B. Wetherell Secretary

May 22, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David B. Jellerson, P.E. Environmental Superintendent Cargill Fertilizer, Inc. Post Office Box 9002 Bartow, Florida 33831

Dear Mr. Jellerson:

Re: Permit No. AC29-241660, PSD-FL-209, Time Extension

The Department received your request to extend the expiration date of the construction permit referenced below. The permit is amended as shown:

Permit No. AC 29-241660, PSD-FL-209, SAP Plants Nos. 8 & 9

Current Expiration Date: December 31, 1996

New Expiration Date: October 30, 1998

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3900. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; Mr. David B. Jellerson, P.E. Page Two May 22, 1996

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

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

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

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

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

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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 60Q-2.010, F.A.C.

This letter shall become an attachment to construction Permit No. AC 29-241660, PSD-FL-209.

Sincerely,

Howard L. Rhodes, Director Division of Air Resources

Management

cc: W. Thomas, SWD

R. Harwood, Polk County

J. Harper, EPA

J. Bunyak, NPS

D. Buff, P.E., KBN

Mr. David B. Jellerson, P.E. Page Three
May 22, 1996

#### CERTIFICATE OF SERVICE

This is to certify that this Permit Amendment and all copies were mailed to the listed persons before the close of business on 5-33-96 to the listed persons.

FILING AND ACKNOWLEDGEMENT FILED, on this date, pursuant to Chapter 120.52(11), Florida Statutes, with with the designated Deputy Clerk, receipt of which is hereby acknowledged.

Clerk)

(Date)

## RECEIVED



APR 18 1996

BUREAU OF AIR REGULATION

P.O. Box 9002 • Barrow, Florida 33831 • Telephone 941-534-9610 • FAX 941-534-9680

April 9, 1996

Certified Mail: P 013 142 536

Mr. Al Linero, P.E.
Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blairstone Rd.
Tallahassee, FL 32399-2400

Dear Mr. Linero:

SUBJECT: Permit AC29-241660 and PSD-FL-209 Time Extension

The purpose of this letter is to request an extension of the expiration date of the above-referenced permit until October 30, 1998. This extension is requested to accommodate long engineering and delivery times for the upgraded equipment and to coincide with plant turn-around schedules. Please find enclosed a check in the amount of \$50 to cover the processing fee.

Should you have any questions, or require additional information, please feel free to contact me at (941) 534-9613.

Sincerely.

David B. Jellerson, P.E.,

Environmental Superintendent

cc:

Daigle

Morris

Fernandez

Buff (KBN)

File (2-15-10

CC: D. An-

EDA

NPS



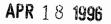
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P.O. Box 9002 • Bartow, Florida 33831 • Telephone 941-534-9610 • FAX 941-534-9680

April 9, 1996

Certified Mail: P 013 142 536

Mr. Al Linero, P.E. Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blairstone Rd. Tallahassee, FL 32399-2400

Dear Mr. Linero:

SUBJECT: Permit AC29-241660 and PSD-FL-209 Time Extension

The purpose of this letter is to request an extension of the expiration date of the above-referenced permit until October 30, 1998. This extension is requested to accommodate long engineering and delivery times for the upgraded equipment and to coincide with plant turn-around schedules. Please find enclosed a check in the amount of \$50 to cover the processing fee.

Should you have any questions, or require additional information, please feel free to contact me at (941) 534-9613.

Sincerely,

David B. Jellerson, P.E.,

**Environmental Superintendent** 

cc:

Daigle

**Morris** 

Fernandez

Buff (KBN)

File P-10-10

cc: S. Arif



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### **CARGILL**

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FERTILIZER, INC.

DATE	VENDOR NUMBER	
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AMOUNT

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Fifty and NO/100 Dollars

PAY

FLORIDA DEPT, OF ENVIRONMENTAL PROTECTION

TO THE

2600 BLAIR STONE ROAD TALLAHASSEE

ORDER OF

FL 32399-2400 C

**AUTHORIZED SIGNATURE** 

#577235797# CO92905168C 21m274m0#

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## Florida Department of **Environmental Protection**

#### Memorandum

TO:

Virginia B. Wetherell

FROM:

Howard L. Rhodes

DATE:

February 23, 1995

SUBJECT: Approval of a PSD Permit (PSD-FL-209)

Cargill Fertilizer, Inc., Hillsborough County

Attached for your approval is a PSD permit and Determination of the Best Available Control Technology for the modifications to two existing sulfuric acid plants at Cargill Fertilizer, Inc. in Riverview, Hillsborough County, Florida.

This permit is to increase total production at sulfuric acid plants Nos. 8 and 9 from 5,300 to 5,700 tons per day. The sulfur dioxide and acid mist emissions are minimized by a control technology consisting of double absorption and high efficiency mist elimination.

Cargill published notice of our earlier Intent to Issue. One comment was received in response to the Notice from the applicant.

HLR/kt

Attachments



# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

February 3, 1998

#### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David B. Jellerson, P.E. Environmental Superintendent Cargill Fertilizer, Inc. P.O. Box 9002 Bartow, Florida 33831

Dear Mr. Jellerson:

The Department received a letter from Golder Associates, Inc., on January 26 requesting modification of Permit AC29-241660 (PSD-FL-209) to allow the shifting of 200 tons per day of sulfuric acid capacity from the No. 8 plant to the No. 9 plant at the Riverview facility. To establish reasonable assurance that there will be no increase in actual emissions from the proposed change, please provide continuous emission monitoring and production data from both plants for 1997 and for other periods over the last three years during which the respective units were operated at or near the proposed rates. If there is a recognizable difference in actual emissions, please indicate whether Cargill would be willing to accept a reduction in total production sufficient to offset the increase in actual emissions in lieu of a new permit application.

The Department will resume processing this request (0570008-022-AC) after receipt of the information specified above. If you have any questions on this matter, please call John Reynolds at 850/921-9536.

Sincerely,

A. A. Linero, P.E. Administrator New Source Review Section

AAL/jr

cc: Bill Thomas, SWD
David Buff, Golder Assoc.
John Bunyak, NPS
Jerry Campbell, EPCHC
Brian Beals, EPA Regon IV

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#### Golder Associates Inc.

6241 NW 23rd Street, Suite 500 Gainesville, FL 32653-1500 Telephone (352) 336-5600 Fax (352) 336-6603



January 23, 1998

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

RECEIVED

JAN 26 1998

BUREAU OF AIR REGULATION

RE: Cargill Fertilizer, Inc.

AC29-241660 PSD-FL-209

Riverview Nos. 8 & 9 Sulfuric Acid Plants

Dear Mr. Linero:

05 70008-022-AC

In March of 1995, Cargill Fertilizer, Inc., was issued the above-referenced construction permit to increase the production rate of the Nos. 8 and 9 Sulfuric Acid plants. The maximum production rate of the No. 8 Sulfuric Acid Plant was increased to 2,900 TPD 100 percent H<sub>2</sub>SO<sub>4</sub>, while the No. 9 Sulfuric Acid Plant was increased to 3,200 TPD 100 percent H<sub>2</sub>SO<sub>4</sub>. The total combined production rate of the Nos. 8 and 9 H<sub>2</sub>SO<sub>4</sub> plants was limited to 5,700 TPD.

Cargill is nearing completion of the modifications to the sulfuric acid plants, and has found that the No. 9 Sulfuric Acid Plant is capable of achieving a production rate up to 3,400 TPD. As a result, Cargill desires to revise the construction permit to allow this higher production rate for the No. 9 plant. In order to assure no emissions increase on a short-term basis, the No. 8 plant maximum production rate will be decreased to 2,700 TPD. The combined maximum production rate of the two plants will remain at 5,700 TPD. This change will afford Cargill more flexibility in operating their sulfuric acid plants without increasing total emissions.

Based on our review of the current construction Permit, Specific Conditions 1, 2, 6, and 7 would need to be revised. The allowable emissions tables contained in Specific Conditions 6 and 7 should be revised as follows:

Standard for Sulfur Dioxide	Production			
Plants	TPD	lb/ton	lb/hr	TPY
H <sub>2</sub> SO <sub>4</sub> No. 8	2,700	4.0	450.0	1,971
$H_2SO_4$ No. 9	3,400	4.0	566.7	2,482
No. 8 & No. 9 Combined	5,700	4.0	950.0	4,161
Standard for Acid Mist				
H <sub>2</sub> SO <sub>4</sub> No. 8	2,700	0.15	16.9	73.9
$H_2SO_4$ No. 9	3,400	0.15	21.3	93.1
No. 8 & No. 9 Combined	5,700	0.15	35.6	156.0

Mr. A. A. Linero, P.E. Page 2 January 23, 1998

Enclosed is a check for \$250 to cover the permit modification fee. Please call if you have any questions concerning this request.

Sincerely,

David A. Buff, P.E. Principal Engineer

DB/lcb

cc: David Jellerson, Cargill
Bill Thomas, FDEP-SWD
File (2)

CC: G. Reynolds, BAR CPA NPS

9737605A/02

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#### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT

In the matter of an Application for Permit by:

1 .

DEP File No. AC 29-241660 PSD-FL-209 Hillsborough Co.

Mr. David B. Jellerson Cargill Fertilizer, Inc. P. O. Box 9002 Bartow, Florida 33830

Enclosed is Permit Number AC 29-241660 (PSD-FL-209) for modifications to the sulfuric acid plants at Cargill Fertilizer's facility located in Riverview, Hillsborough County, Florida, issued pursuant to Section (s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit 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 this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief Bureau of Air Regulation , P.E., 2600 Blair Stone Road Tallahassee, FL 32399-2400 904-488-1344

#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 3-7-95 to the listed persons.

Clerk Stamp

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

Copies furnished to: Bill Thomas, SWD
Jewell Harper, EPA
David A. Buff, P.E., KBN
Chris Shaver, NPS

#### Final Determination

Cargill Fertilizer, Inc. Hillsborough County Riverview, Florida

Sulfuric Acid Plant Production Modifications

Permit Numbers: AC 29-241660 PSD-FL-209

•

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

#### Final Determination

The Technical Evaluation and Preliminary Determination for the permit to increase production of the sulfuric acid plants at Cargill Fertilizer in Riverview, Hillsborough County, Florida, was distributed on November 14, 1994. The Notice of Intent to Issue was published in the Tampa Tribune on December 3, 1994. Copies of the evaluation were available for public inspection at the Department offices in Tampa and Tallahassee.

Comments on the evaluation and proposed permits were submitted by the applicant. No comments were submitted by the National Park Service and the U.S. Environmental Protection Agency.

#### Applicant's Comment

The applicant requested DEP to consider deleting the  $\rm NO_X$  emission limit proposed for the sulfuric acid plants in terms of lb/ton 100 percent sulfuric acid produced, lb/hr and tons/yr.

#### DEP Response

DEP concurs with the applicant in deleting Specific Condition 4 of the permit that places an emission limit for  $NO_X$ . The estimated  $NO_X$  emissions are low, i.e., less than 100 ton per year from each plant. PSD review was not triggered for  $NO_X$  due to the modifications, and there are no state or federal emission limiting standards for  $NO_X$  emissions from sulfuric acid plants.

The final action of the Department will be to issue the PSD permit (PSD-FL-209) with the change noted above.



# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

PERMITTEE: Cargill Fertilizer, Inc. 8813 Highway 41 South Riverview, Florida 33569 Permit Number: AC 29-241660

PSD-FL-209

Expiration Date: Dec. 31, 1996

County: Hillsborough

Latitude/Longitude: 27°51'28"N

82°23'15"W

Project: Sulfuric Acid Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes; Chapters 62-210, 212, 272, 296 and 297, Florida Administrative Code (F.A.C.); and, Chapter 62-4, F.A.C. The above named permittee is hereby authorized to perform the work or operate the emission unit/source shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department of Environmental Protection (Department) and specifically described as follows:

For the modifications to increase the No. 8 sulfuric acid plant production to 2,900 TPD 100% sulfuric acid and No. 9 sulfuric acid plant production to 3,200 TPD 100% sulfuric acid. The modifications involves physical change to these plants. The sources are located at the Cargill Fertilizer's facility on Highway 41 South in Riverview, Hillsborough County, Florida. The UTM coordinates of this facility are Zone 17, 363.3 km E and 3082.4 km N.

If construction has not commenced within 18 months of issuance of this permit, then the permittee shall obtain from the Department a review and, if necessary, a revision of the BACT determination and allowable emissions for the emission unit/source on which construction has not commenced.

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

#### Attachments are listed below:

- 1. Cargill Fertilizer's application received November 24, 1993.
- 2. Department's letter dated December 20, 1993.
- 3. Cargill Fertilizer's letter dated June 10, 1994.
- 4. Department's letter dated July 11, 1994.
- 5. Cargill Fertilizer's letter dated August 10, 1994.

Permit Number: AC29-241660 PSD-FL-209

Expiration Date: December 31, 1996

#### GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, 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.

- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or

Permit Number: AC29-241660 PSD-FL-209

Expiration Date: December 31, 1996

#### GENERAL CONDITIONS:

auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. a description of and cause of non-compliance; and,
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source

Permit Number: AC29-241660 PSD-FL-209

Expiration Date: December 31, 1996

#### GENERAL CONDITIONS:

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.

- 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.
- 11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
  - (x) Determination of Best Available Control Technology (BACT)
  - (x) Determination of Prevention of Significant Deterioration (PSD)
  - (x) Compliance with New Source Performance Standards (NSPS)
- 14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application

Permit Number: AC29-241660

PSD-FL-209 Expiration Date: December 31, 1996

#### GENERAL CONDITIONS:

for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

- c. Records of monitoring information shall include:
  - the date, exact place, and time of sampling or measurements;
  - the person responsible for performing the sampling or measurements;
  - the dates analyses were performed;
  - the person responsible for performing the analyses;
  - the analytical techniques or methods used; and,
  - the results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

#### SPECIFIC CONDITIONS:

- 1. The maximum production rate of the No. 8 sulfuric acid plant shall not exceed 2900 tons per day (TPD) based on 100% sulfuric acid ( $H_2SO_4$ ).
- 2. The maximum production rate of the No. 9 sulfuric acid plant shall not exceed 3200 TPD based on 100%  $\rm H_2SO_4$ .
- 3. The combined maximum production rate of the No. 8 and No. 9 sulfuric acid plants shall not exceed 5700 TPD based on 100% H<sub>2</sub>SO<sub>4</sub>.
- 4. Testing of emissions shall be conducted with the emission unit operating at permitted capacity. Permitted capacity is defined as 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then emission units may be tested at less than 90% of the maximum operating rate allowed by the permit. In this case, subsequent emission unit operation is limited to 110% of the test load until a new test is

Permit Number: AC29-241660 PSD-FL-209

Expiration Date: December 31, 1996

#### SPECIFIC CONDITIONS:

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, with prior notification to the Department. The Department's Southwest District office shall be notified in writing 15 days prior to emission unit testing. Written reports of the tests shall be submitted to that office within 45 days of test completion.

5. The No. 8 and No. 9 sulfuric acid plants shall be allowed to operate continuously (i.e., 8760 hours/year).

#### Standard for sulfur dioxide.

6. Sulfur dioxide ( $SO_2$ ) emissions from each sulfuric acid production unit shall be as follows, [Rule 62-296.800, F.A.C.; 40 CFR 60.82(a)]:

	Production			
Plants	TPD	lb/ton	lbs/hr	TPY
H <sub>2</sub> SO <sub>4</sub> No. 8	2900	4	483.3	2,117
H <sub>2</sub> SO <sub>4</sub> No. 9	3200	4	533.3	2,336
No. 8 & No. 9 Combined	5700	4	950	4,161

#### Standard for acid mist.

7. Acid mist emissions, expressed as  $H_2SO_4$ , from each sulfuric acid production unit shall be as follows; [Rule 62-296.800, F.A.C.; 40 CFR 60.83(a)(1)]

	Production			
Plants	TPD	lb/ton	lbs/hr	TPY
H <sub>2</sub> SO <sub>4</sub> No. 8	2900	0.15	18.1	79.3
H <sub>2</sub> SO <sub>4</sub> No. 9	3200	0.15	20.0	87.6
No. 8 & No. 9 Combined	5700	0.15	35.6	156.0

8. Visible emissions from each sulfuric acid production unit shall not be greater than 10 percent opacity.
[Rule 62-296.800, F.A.C.; 40 CFR 60.83(a)(2)]

Permit Number: AC29-241660

PSD-FL-209
Expiration Date: December 31, 1996

#### SPECIFIC CONDITIONS:

#### Emission monitoring

9. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d) shall be sulfur dioxide (SO<sub>2</sub>). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide. [Rule 62-296.800, F.A.C.; 40 CFR 60.84(a)]

10. A conversion factor shall be established by the owner or operator for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lbs/ton). The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the covertor using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999-AP-13) and calculating the appropriate conversion factor for each eight-hour period as follows:

CF=k[(1,000-0.015r)/(r-s)]

where:

CF=conversion factor (kg/metric ton per ppm, lb/ton per ppm). k=constant derived from material balance. For determining CF in metric units, k=0.0653.

For determining CF in English units, k=0.1306.

r=percentage of sulfur dioxide by volume entering the gas effection. Appropriate corrections must be made for air injection plants subject to the Administrator's approval. s=percentage of sulfur dioxide by volume in the emissions to

s=percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under 40 CFR 60.84(a).

[Rule 62-296.800, F.A.C.; 40 CFR 60.84(b)]

11. The owner or operator shall record all conversion factors and values under 40 CFR 60.84(b) from which they were computed (i.e., CF, r, and s).

[Rule 62-296.800, F.A.C.; 40 CFR 60.84(c)]

12. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining  $\rm SO_2$  emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the

Permit Number: AC29-241660 PSD-FL-209

Expiration Date: December 31, 1996

#### SPECIFIC CONDITIONS:

measurement of gas velocities or production rate. Continuous emission monitoring of SO2, O2, and CO2 (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for this  $SO_2$  monitor shall be as specified in 40 CFR 60.84(b). The span value for  $CO_2$  (if required) shall be 10 percent and for  $O_2$  shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary.

Calculate the SO2 emission rate as follows:  $Es=(csS)/[0.265-(0.126\%O_2)-(A \%CO_2)]$ 

Es=emission rate of SO2, kg/metric ton (lb/ton) of 100 percent of H<sub>2</sub>SO<sub>4</sub> producted.

Cs=concentration of SO2, kg/dscm (lb/dscf).

production rate factor, dscm/metric ton 368 dscf/ton) of 100 percent H2SO4 produced.

%O2=oxygen concentration, percent dry basis.

A=auxiliary fuel factor,

=0.00 for no fuel.

=0.0226 for methane.

=0.0217 for natural gas.

=0.0196 for propane. =0.0172 for No 2 oil.

=0.0161 for No 6 oil.

=0.0148 for coal.

=0.0126 for coke.

%CO2=carbon dioxide concentration, percent dry basis.

Note: Ιt is necessary in some cases to convert concentration units to other units for these calculations: Use the following table for such conversions:

From-	To-	Multiply by-
g/scm	kg/scm	10-3
		2.660x10-6
		1.660x10-7
	00, F.A.C.; 40 C	

#### Test methods and procedures.

13. Testing shall be conducted in accordance with the test methods in 40 CFR 60, Appendix A, or other methods and procedures as specified in 40 CFR 60.85, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.85(b).

[Rule 62-296.800, F.A.C.; 40 CFR 60.85(a)]

Permit Number: AC29-241660 PSD-FL-209

Expiration Date: December 31, 1996

#### SPECIFIC CONDITIONS:

14. Compliance with the  $SO_2$ , acid mist, and visible emission standards in 40 CFR 60.82(a), 40 CFR 60.833(a)(1), and 40 CFR 60.83(a)(2) shall be determined as follows:

a. The emission rate (E) of acid mist or  $SO_2$  shall be computed for each run using the following equation:

E=(CQsd)/(PK)

where:

E=emission rate of acid mist or  $SO_2$  kg/metric ton (lb/ton) of 100 percent  $H_2SO_4$  produced.

C=concentration of acid mist or SO2, g/dscm (lb/dscf).

Qsd=volumetric flow rate of the effluent gas, dscm/hr (dscf/hr). P=production rate of 100 percent  $H_2SO_4$ , metric ton/hr (ton/hr). K=conversion factor, 1000 g/kg (1.0 lb/lb).

- b. Method 8 shall be used to determine the acid mist and  $SO_2$  concentrations (C's) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
- c. Suitable methods shall be used to determine the production rate (P) of 100 percent  $\rm H_2SO_4$  for each run. Material balance over the production system shall be used to confirm the production rate.
- d. Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity. [Rules 62-296.800 and 62-297.401, F.A.C.; 40 CFR 60.85(b)]
- 15. The owner or operator may use the following as alternatives to the reference methods and procedures otherwise specified in this permit:
- a. If an emission unit processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:
- (1) The integrated technique of Method 3 is used to determine the  $O_2$  concentration and, if required,  $CO_2$  concentration.
- (2) The  $SO_2$  or acid mist emission rate is calculated as described in 40 CFR 60.84(d), substituting the acid mist concentration for Cs as appropriate.
- [Rules 62-296.800 and 62-297.401, F.A.C.; 40 CFR 60.85(c)]
- 16. No objectionable odors shall be allowed in accordance with Rule 62-296.200(123), F.A.C., [Objectionable Odor Prohibited].
- 17. Any change in the method of operation, equipment or operating hours which would reasonably be expected to result in an increase in emissions shall be submitted to the Department's Southwest District office for approval.

Permit Number: AC29-241660 PSD-FL-209

Expiration Date: December 31, 1996

#### SPECIFIC CONDITIONS:

18. Excess emissions from the sulfuric acid plant resulting from startup, shutdown, malfunction, or load change shall be acceptable 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 three hours in any 24-hour period unless specifically authorized by the Department for a longer duration. Best operating practices shall be as follows:

- a. Except as follows, only one sulfuric acid plant at a facility shall be started up and burning sulfur at a time. There are times when it will be acceptable for more than one sulfuric acid plant to be in the start-up mode at the same time, provided the following condition is met. It is not acceptable to initiate sulfur burning at one sulfuric acid plant when another plant at the same facility is emitting  $SO_2$  at a rate in excess of the emission limits imposed by the permit or rule, as determined by the CEMs emission rates for the 20 minutes immediately preceeding the initiation of sulfur burning.
- b. A plant start-up must be at the lowest practicable operation rate, not to exceed 70 percent of the designated operation rate, until the SO<sub>2</sub> monitor indicates compliance. Because production rate is difficult to measure during start-up, if a more appropriate indicator (such as blower pressure, furnace temperature, gas strength, blower speed, number of sulfur guns operating, etc.) can be documented, tested and validated, the Department will accept this in lieu of directly documenting the operation rate. Implementation requires the development of a suitable list of surrogate parameters to demonstrate and document the reduced operating rate on a plant-by-plant basis. Documentation that the plant is conducting start-up at the reduced rate is the responsibility of the owner or operator
- c. Sulfuric acid plants are authorized to emit excess emissions from start-up for a period of three consecutive hours provided best operational practices, in accordance with this agreement, to minimize emissions are followed. No plant shall be operated (with sulfur as fuel) out of compliance for more than three consecutive hours. Thereafter, the plant shall be shut down. The plant shall be shut down (cease burning sulfur) if, as indicated by the continuous emission monitoring system, the plant is not in compliance within three hours of start-up. Restart may occur as soon as practicable following any needed repairs or adjustments, provided the corrective action is taken and properly documented.

Permit Number: AC29-241660 PSD-FL-209

Expiration Date: December 31, 1996

#### SPECIFIC CONDITIONS:

d. Cold Start-Up Procedures.

- (1) Converter.
- (i) The inlet and outlet temperature at the first two masses of catalyst shall be sufficiently high to provide immediate ignition when SO<sub>2</sub> enters the masses. In no event shall the inlet temperature to the first mass be less than 800°F or the outlet temperature to the first two masses be less than 700°F.

These temperatures are the desired temperatures at the time the use of auxiliary fuel is terminated.

- (ii) The gas stream entering the converter shall contain  $SO_2$  at a level less than normal, and sufficiently low to promote catalytic conversion to  $SO_3$ .
  - (2) Absorbing Towers.

The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent  $\rm H_2SO_4$ .

- e. Warm Restart.
- (1) Converter.

The inlet and outlet temperatures of the first two catalyst masses should be sufficiently high to ensure conversion. One of the following three conditions must be met:

- (i) The first two catalyst masses inlet and outlet temperatures must be at a minimum of 700°F; or
- (ii) Two of the four inlet and outlet temperatures must be greater than or equal to 800°F; or
- (iii) The inlet temperature of the first catalyst must be greater than or equal to 600°F and the outlet temperature greater than or equal to 800°F. Also, the inlet and outlet temperatures of the second catalyst must be greater than or equal to 700°F.

Failure to meet one of the above conditions, requires use of cold start-up procedures.

To allow for technological improvements or individual plant conditions, alternative conditions will be considered by the Department in appropriate cases.

Permit Number: AC29-241660

PSD-FL-209

Expiration Date: December 31, 1996

#### SPECIFIC CONDITIONS:

(2) Absorbing Towers.

The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent  $\rm H_2SO_4$ .

- 19. Stack sampling facilities shall be provided by the permittee in accordance with Rule 62-297.345, F.A.C.
- 20. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit (Rule 62-4.090, F.A.C.).
- 21. An application for an operation permit must be submitted to the Department's Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. The operation permit application shall include a set of conditions acceptable to the Department for startup/shutdown of the permittee's sulfuric acid plant. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (Rules 62-4.055 and 62-4.220, F.A.C.).

Issued this 2md day of March , 1995

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell, Secretary

#### Best Available Control Technology (BACT) Determination Cargill Fertilizer, Inc. Hillsborough County Permit Number AC 29-241660 PSD-FL-209

The applicant proposes to increase No. 8 sulfuric acid plant production from 2500 tons per day (TPD) to 2,900 TPD and No. 9 sulfuric acid plant from 2,800 TPD to 3,200 TPD at the Cargill's phosphate fertilizer manufacturing facility on Highway 41 South in Riverview, Hillsborough County, Florida.

The proposed project will increase emissions of sulfur dioxide  $(SO_2)$  and sulfuric acid mist by more than the applicable significant emission rates. The project is therefore subject to Prevention of Significant Deterioration (PSD) review in accordance with Rule 62-212.400, Florida Administrative Code (F.A.C.).

The BACT review is part of the PSD review requirements in accordance with Rule 62-212.410, F.A.C.

Date of Receipt of a BACT Application: November 24, 1993.

Date Application Complete: August 29, 1994.

The BACT determination requested by the applicant is presented below:

Control Technology

Double Absorption/Fiber Mist Eliminators

#### Pollutant

#### Emission Limits

SO<sub>2</sub> Sulfuric Acid Mist Visible Emissions 4 lbs/ton of 100% H<sub>2</sub>SO<sub>4</sub> produced 0.15 lb/ton of 100% H<sub>2</sub>SO<sub>4</sub> produced 10% opacity

#### Basis of Review:

This determination was based upon input from the applicant, EPA Region IV, and the Department's Bureau of Air Regulation.

#### BACT Determination Procedure:

In accordance with Chapter 62-212, F.A.C., Air Pollution, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the 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:

BACT-Cargill Fertilizer, Inc. Page 2

- (a) Any Environmental Protection Agency determination of Best Available Control Technology 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 determinations 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 source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source 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.

#### BACT Determined by the Department:

Control Technology	Double Absorption/Fiber Mist Eliminators
Pollutant	Emission Limits
SO <sub>2</sub> Sulfuric Acid Mist Visible Emissions	4.0 lbs/ton of 100% H <sub>2</sub> SO <sub>4</sub> produced 0.15 lb/ton of 100% H <sub>2</sub> SO <sub>4</sub> produced 10% opacity

#### BACT Determination Rationale

The Department's BACT determination is the same as that proposed by the applicant, determination completed by other states, and Standards of Performance for Sulfuric Acid Plants, 40 CFR 60 Subpart H, (double absorption process). The process in itself is the control technology for  $SO_2$ . The emission limits reflect conversion efficiency of around 99.7% of  $SO_2$  to  $H_2SO_4$ . High efficiency mist eliminators are considered BACT for sulfuric acid mist. A review of BACT/LAER Clearinghouse indicates that the double absorption technology and the use of high efficiency mist eliminators is representative of BACT using the top-down approach.

BACT-Cargill Fertilizer, Inc. Page 3

#### Environmental Impact Analysis

The impact analysis for the BACT determination is based on 8,760 hours/year operation. The increment impact analysis and the ambient air quality analysis resulted in the following for  $SO_2$  emissions:

	Increment Impact	Increment	Predicted Ambient Air Quality Impact	Fla. AAQS
Avq Time	(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> )	(uq/m <sup>3</sup> )	(ug/m <sup>3</sup> )
		_		
24-hr	26	91	239	260
3-hr	100	512	685	1300

#### Conclusion

The incremental impact and the ambient air quality impact from  $\rm SO_2$  emissions due to the proposed modification is in compliance with all air pollution regulations. The impacts associated with the proposed increase in production support the Department's determination that the emission limits established herein represent BACT.

#### Details of the Analysis May be Obtained by Contacting:

Syed Arif, Permit Engineer Department of Environmental Protection Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Recommended by:	Approved by:
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C. H. Fancy, P.E., Chief Bureau of Air Regulation	Virginia B. Wetherell, Secretary Dept. of Environmental Protection
<u> </u>	2 March, 1995
Date ' '	Date

#### Best Available Control Technology (BACT) Determination Cargill Fertilizer, Inc. Hillsborough County Permit Number AC 29-241660 PSD-FL-209

The applicant proposes to increase No. 8 sulfuric acid plant production from 2500 tons per day (TPD) to 2,900 TPD and No. 9 sulfuric acid plant from 2,800 TPD to 3,200 TPD at the Cargill's phosphate fertilizer manufacturing facility on Highway 41 South in Riverview, Hillsborough County, Florida.

The proposed project will increase emissions of sulfur dioxide (SO<sub>2</sub>) and sulfuric acid mist by more than the applicable significant emission rates. The project is therefore subject to Prevention of Significant Deterioration (PSD) review in accordance with Rule 62-212.400, Florida Administrative Code (F.A.C.).

The BACT review is part of the PSD review requirements in accordance with Rule 62-212.410, F.A.C.

Date of Receipt of a BACT Application: November 24, 1993.

<u>Date Application Complete</u>: August 29, 1994.

The BACT determination requested by the applicant is presented below:

<u>Control Technology</u> Double Absorption/Fiber Mist Eliminators

#### Pollutant

#### Emission Limits

SO<sub>2</sub>
Sulfuric Acid Mist
Visible Emissions

4 lbs/ton of 100% H<sub>2</sub>SO<sub>4</sub> produced 0.15 lb/ton of 100% H<sub>2</sub>SO<sub>4</sub> produced 10% opacity

#### Basis of Review:

This determination was based upon input from the applicant, EPA Region IV, and the Department's Bureau of Air Regulation.

#### BACT Determination Procedure:

In accordance with Chapter 62-212, F.A.C., Air Pollution, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the 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:

BACT-Cargill Fertilizer, Inc. Page 2

- (a) Any Environmental Protection Agency determination of Best Available Control Technology 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 determinations 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 source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source 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.

#### BACT Determined by the Department:

Control Technology	Double Absorption/Fiber Mist Eliminators		
Pollutant	Emission Limits		
SO <sub>2</sub> Sulfuric Acid Mist Visible Emissions	4.0 lbs/ton of 100% $\rm H_2SO_4$ produced 0.15 lb/ton of 100% $\rm H_2SO_4$ produced 10% opacity		

#### BACT Determination Rationale

The Department's BACT determination is the same as that proposed by the applicant, determination completed by other states, and Standards of Performance for Sulfuric Acid Plants, 40 CFR 60 Subpart H, (double absorption process). The process in itself is the control technology for SO<sub>2</sub>. The emission limits reflect conversion efficiency of around 99.7% of SO<sub>2</sub> to H<sub>2</sub>SO<sub>4</sub>. High efficiency mist eliminators are considered BACT for sulfuric acid mist. A review of BACT/LAER Clearinghouse indicates that the double absorption technology and the use of high efficiency mist eliminators is representative of BACT using the top-down approach.

BACT-Cargill Fertilizer, Inc. Page 3

#### Environmental Impact Analysis

The impact analysis for the BACT determination is based on 8,760 hours/year operation. The increment impact analysis and the ambient air quality analysis resulted in the following for SO<sub>2</sub> emissions:

Avg Time	Increment Impact (ug/m <sup>3</sup> )	Increment (ug/m³)	Predicted Ambient Air Quality Impact (ug/m³)	Fla. AAQS (ug/m <sup>3</sup> )
24-hr	26	91	239	260
3-hr	100	512	685	1300

#### Conclusion

The incremental impact and the ambient air quality impact from SO<sub>2</sub> emissions due to the proposed modification is in compliance with all air pollution regulations. The impacts associated with the proposed increase in production support the Department's determination that the emission limits established herein represent BACT.

#### Details of the Analysis May be Obtained by Contacting:

Syed Arif, Permit Engineer
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee Florida 32399-2400

Tallahassee, Florida 32399-2400

Recommended by:

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

Date

Date

Approved by:

Virginia B. Wetherell, Secretary
Dept. of Environmental Protection

2/24, 1995

Date

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December 19, 1994

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JAN 0 6 1995

Bureau of Air Regulation

Mr. John Brown, P.E. Air Permitting and Standards Florida Department of Environmental Protection 111 South Magnolia, Suite 4 Tallahassee, FL 32301

Re: Cargill Fertilizer, Inc.
AC29-241660
PSD-FL-209
Riverview Nos. 8 & 9 Sulfuric Acid Plants

Dear, Mr. Brown:

On behalf of Cargill Fertilizer, I am commenting on the Technical Evaluation and Preliminary Determination (TE&PD) and draft permit issued by the Department on November 14, 1994, in regards to the above referenced permit application. The sole comment I have is in regards to Specific Condition 4 of the draft permit.

Specific Condition 4 of the draft permit places a limit upon  $NO_x$  emissions from the sulfuric acid plants, in terms of lb/ton 100 percent sulfuric acid produced, lb/hr and tons/year. It is requested that this condition be deleted since there is no regulatory basis for any limit for  $NO_x$ . The estimated  $NO_x$  emissions are low, i.e., less than 100 TPY from each plant. PSD review was not triggered for  $NO_x$  the modification, nor was any synthetic limitation taken in order to avoid PSD review for  $NO_x$ . There are no state or federal emission limiting standards for  $NO_x$  emissions from sulfuric acid plants.

During the application preparation process, a meeting was held with FDEP, and it was requested that  $NO_x$  emission estimates be provided in the application. Emission estimates were provided based on very limited test data from one sulfuric acid plant operated by another company. However, it was certainly not anticipated that  $NO_x$  limits would be imposed on the facility based on the limited information available, and without any regulatory basis for imposing such limit.

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KBN ENGINEERING AND APPLIED SCIENCES, INC.

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To reiterate, Cargill requests that the  $NO_x$  emission limits contained in the draft permit be deleted. Please call if you have any questions concerning this information.

Sincerely,

David a Buff

David A. Buff, P.E. Principal Engineer

cc: David Jellerson, Cargill
Bill Thomas, FDEP-SWD
File (2)

DB/mlb

#### **BEST AVAILABLE COPY**



RECEIVED

Air Regulation

August 10, 1994

John C. Brown
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

AC29-241660, PSD-FL-209

Dear Mr. Brown:

Cargill has received the Department's letter dated July 11, 1994 requesting additional information for the above referenced application. KBN Engineering and Applied Sciences (KBN) has assisted Cargill in developing responses to these questions. On behalf of Cargill, responses to each of the Department's comments are provided below in the same order as they appear in the July 11 letter.

Re: Requested information for Cargill Fertilizer Inc, Sulfuric Acid Plant No.8 & 9, Permit File No.

- 1. The two most recent compliance tests for sulfuric acid plant No. 9 were performed on December 15, 1992 and January 13, 1994. Although no testing was completed in the calendar year of 1993, the interval between testing was kept as close to 12 months as possible.
- 2. From information presented in the June 10 letter, SO<sub>2</sub> stack test data presented values up to 3.9 lb/ton. In the near future, enhanced monitoring will require continuous compliance. Therefore, to allow for the fluctuating nature of emissions and increased production, the 4.0 lb/ton limit is necessary. FDEP should consider in its evaluation the expected annual SO<sub>2</sub> emissions based on historical operation. Estimated annual emissions were presented in the BACT information submitted in the June 10 letter. The average annual emissions from No. 8 and No. 9 were 64 percent of the allowables on a TPY basis.
- 3. Additional modeling has been performed to provide further assurances that the amended project does not significantly contribute to any predicted SO<sub>2</sub> AAQS exceedances. The methodology has been previously discussed with Cleve Holladay, and results are presented in Table 1. These impacts include the background levels presented in the original submittal for this project. The amended project does not have a significant contribution to any predicted 24-hour or 3-hour SO<sub>2</sub> exceedance. Further, the amended project does not have a significant impact for the annual averaging time. The maximum predicted SO<sub>2</sub> impacts to which the amended project does have a significant contribution are 258 μg/m³ and 608 μg/m³, for the 24-hour and 3-hour averaging times, respectively.
- 4. The facility operates three sulfuric acid plants (No. 7, 8, & 9) from one control room with a Texas Instruments D3 system. Each plant has its own totalizer system. The totalizers consist of a magnetic flow meter installed on the product line exiting each plant. Without piping modifications, Cargill Fertilizer Inc, does not have the ability to physically meter the flow from both the No. 8 and No. 9 plant through a single meter. However, the data can be combined



using the two meters already installed to feed information to the control room. The D3 system receives data from the production totalizers and converts the value to a 100 percent H<sub>2</sub>SO<sub>4</sub> basis. The operators receive the plant production totals already as a 100 percent H<sub>2</sub>SO<sub>4</sub> basis. This would provide a total TPH production rate for No. 8 and No. 9 combined.

If you have any questions concerning this information, please call me at (904) 331-9000.

Sincerely,

David A. Buff

Florida Registration 19011

MJA/lcb

Attachment

cc: David Jellerson, Cargill Fertilizer

Mark A. agrilar for David Buff

File (2)

Mark Aguilar, KBN

J. Kessel, Sw Dist J. Campbell, EPCHC J. Tarper, EPA J. Durysel, NPS

Table 1. Maximum Predicted SO<sub>2</sub> Concentrations Compared With AAQS

				Receptor 1	Locations	Period	Florida
Averaging	Concentration (µg/m³)		Direction Distance	Ending	AAQS		
Time	Total	Modeled	Background	(degrees)	(m)	(YYMMDDHH)	$(\mu g/m^3)$
24-Hour <sup>b</sup>	204	170	34	70	2,000	82082724	260
	185	151	34	100	1,100	83090824	
	258	224	34	360	1,100	84060224	
	182	148	34	360	1,100	85060224	
	191	157	34	360	1,100	86081824	
3-Hour <sup>b,c</sup>	608	555	103	360	1,100	83082918	1,300

Note: YY=Year, MM=Month, DD=Day, HH=Hour

<sup>&</sup>lt;sup>a</sup> Receptors locations are relative to the No. 9 stack location.

<sup>&</sup>lt;sup>b</sup> All short-term concentrations are highest, second-highest concentrations.

<sup>°</sup> Proposed project only has a significant 3-hour impact in 1983 meteorology.

### Memorandum



## Florida Department of Environmental Protection

TO:

Jerry Kissel, SWD

FROM:

Clair Fancy, Chief

Bureau of Air Regulation

DATE:

July 15, 1994

. . .

SUBJECT: Cargill Fertilizer, Inc. Operating without a Valid

Department Permit

I have reviewed the letter from Mr. David B. Jellerson regarding the ongoing activities at the Cargill Fertilizer, Inc. facility. Based on the contents and described events, it is my and OGC's (Pat Comer's) opinion that the operating permits have expired and the affected sources/emission units are currently operating without valid permits. To initiate an associated modification activity for a source/emission unit does not automatically extend a permit's expiration date...this has to be done through a required request/application, not by assumption or inference, as specified in Rule 17-4.090(1), F.A.C. Therefore, the company should be placed on notice of the fact that there are sources/emissions units operating without valid permits. Since the facility is a Title V Source, there are no associated fees for operating permits; however, the company is required to maintain valid permits for its operations and affected sources/emissions units.

CHF/BM/rbm

Enclosure

cc: P. Comer, Esq.

D. Beason, Esq.





RECEIVED

P.O. Box 9002 - Bartow, Florida 33830 - Telephone 813-534-9610 - FAX 813-534-9680

July 7, 1994

CERTIFIED MAIL: P 013 142 204

Mr. Jerry Kissel, P.E. Florida Department of Environmental Protection 3804 Coconut Palm Dr. Tampa, FL 33619

Subject: No. 9 Sulfuric Acid Plant Operation/Construction

A029-157890, AC29-241660, PSD-FL-209

Dear Mr. Kissel,

As per our conversation today, this letter is to confirm that the construction permit application submitted on 11/18/93, in fact, also constitutes an application for renewal of the operating permit which expired on 1/21/94.

Cargill submitted the construction application on 11/18/93 with the specific intent of meeting the requirement of Specific Condition #12 of the operating permit AO29-157890 requiring submission of a renewal application at least 60 days prior to expiration of the permit. In accordance with Chapter 17-4.090, this timely application should automatically extend the existing operating permit until the Department takes final action.

It was our intent, and remains our expectation that the construction permit, when issued, will contain appropriate conditions governing the operation of the emission unit during the construction project. Past Department practice has been to accept construction permit applications as sufficient for operation permit renewals. As an example, on July 15, 1993 Cargill submitted a construction permit application for upgrades to our product handling/conveying system. The subsequent permit (AC29-234652) was issued to replace the existing operating permits. We would also like to point out that there would be no material difference between an application for construction and one for operation except that significantly greater detail is provided in the construction permit application. The Department Form 17-1.202(1) is used for both operation and construction permit applications with more information generally provided for construction projects.



Page 2 Mr. Kissel July 7, 1994

I trust that the above information is sufficient to assure that the construction permit application submitted on November 18, 1993 constitutes a sufficient and timely application and that the operating permit AO29-157890 remains in effect until final agency action.

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

cc: Syed Arif, FDEP - Tallahassee

Jerry Campbell, EPCHC

David Buff, KBN

Daigle, Morris, Curran, Boyd

P-10-9



## Department of Environmental Protection

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

Virginia B. Wetherell Secretary

July 11, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David A. Buff KBN Engineering & Applied Sciences, Inc. 1034 N.W. 57th Street Gainesville, Florida 32605

Re: Cargill Fertilizer, Inc.

No. 8 & 9 Sulfuric Acid Plant Expansion Permit File No. AC29-241660, PSD-FL-209

Dear Mr. Buff:

The Department has received the application for an increase in the No. 8 (2500 to 2900 tons per day) and No. 9 (2800 to 3200 tons per day) sulfuric acid plant production rates of the existing facility at the Cargill's Riverview Plant in Hillsborough County. Based on our initial review of the proposed project, we have determined that additional information is needed in order to continue processing this application package. Please submit the information requested below to the Department's Bureau of Air Regulation:

- 1. Please explain the reasons for not conducting an annual compliance test for the No. 9 sulfuric acid plant in 1993. If the test was conducted, please submit the results for the same.
- 2. Based on the compliance test results submitted for the No. 8 and 9 sulfuric acid plants, the weighted averages of the sulfur dioxide emissions in lb/ton are 2.72 and 3.11 respectively. Please explain the reasons for not being able to comply with an emission limit of 3.71 lb/ton after actual modifications to the plant are performed to achieve the higher production rates?
- 3. Even though the emissions increase from the No. 8 and No.9 H<sub>2</sub>SO<sub>4</sub> plants combined is the same as the emissions increase modeled for the No. 9 H<sub>2</sub>SO<sub>4</sub> plant in the original application, this does not necessarily mean that the air quality analysis presented in this application remains unchanged. There are slight differences in the stack parameters of the No. 8 and No. 9 H<sub>2</sub>SO<sub>4</sub> plants. Screening modeling of the existing and

Mr. David A. Buff July 11, 1994 Page Two

future conditions of these two plants combined shows predicted impacts from the proposed new combination (No. 8 at 2900 TPD and No. 9 at 2800 TPD) are greater than those modeled in the original application (No.8 at 2500 TPD and No. 9 at 3200 TPD). Since the original analysis shows predicted exceedances of the 24-hour and 3-hour SO<sub>2</sub> ambient air quality standards within Cargill's significant impact area, please provide more assurance that Cargill's amended project will not significantly contribute to any predicted SO<sub>2</sub> exceedances.

4. Please explain the procedures for monitoring sulfuric acid production at Cargill. The response to this incompleteness should include, but not be limited to, providing information on the number of control rooms the facility has for sulfuric acid plants, whether each plant has its own totalizer system, and whether a combined totalizer system can be set up to monitor No. 8 and 9 H<sub>2</sub>SO<sub>4</sub> plants. Also, explain if the totalizer reading is corrected to 100 percent H<sub>2</sub>SO<sub>4</sub> reading by the operator in the control room, or if some other procedure is followed. If the latter, please describe the procedure.

The Department will resume processing this application after we receive the requested information. Should you have any questions, please contact Syed Arif (engineering) or Cleve Holladay (modeling) at 904-488-1344 or write to me at the above address.

Sincerely,

John C. Brown, Jr., F.E.

Administrator

Air Permitting & Standards

cc: B. Thomas, SWD

J. Campbell, HCEPC

E. Curran, Cargill

J. Harper, EPA

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# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

June 16, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David A. Buff KBN Engineering & Applied Sciences, Inc. 1034 N.W. 57th Street Gainesville, Florida 32605

Re: Cargill Fertilizer, Inc.

No. 8 & 9 Sulfuric Acid Plant Expansion Permit File No. AC 29-241660, PSD-FL-209

Dear Mr. Buff:

The Department has received the incompleteness response for the No. 9 sulfuric acid plant expansion, along with an amended PSD application to include modifications to No. 8 sulfuric acid plant. The Department concurs that no additional fee is required if both the No. 8 & 9 sulfuric acid plant expansions are considered as one PSD project. The permitting time clock for both modifications started on the day the No. 8 sulfuric acid plant application was received. Therefore, the 30 day initial review period for both modifications will end July 13, 1994.

Additional information can be requested on either modification during the initial 30-day review period. If there is no additional information required for either the No. 8 or 9 sulfuric acid plant expansion, then a single PSD permit will be written with the same BACT determination applicable to both the projects.

If there are any questions on the above, please call Syed Arif at (904) 488-1344, or write to me at the letter head address.

Sincerely,

John C. Brown, Jr., I

Administrator

Air Permitting and Standards

JCB/SA/bjb

cc: B. Thomas, SWD

J. Campbell, HCEPC

E. Curran, Cargill

J. Harper, EPA

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### United States Department of the Interior

FISH AND WILDLIFE SERVICE

1875 Century Boulevard Atlanta, Georgia 30345

RECEIVED

December 30, 1993

JAN 0 7 1994

Bureau of Air Regulation

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

Dear Mr. Fancy:

We have reviewed the air quality impact analysis in the Prevention of Significant Deterioration Application for the proposed sulfuric acid  $(H_2SO_4)$  plant expansion at Cargill Fertilizer, Inc., Riverview, Florida. The facility is located approximately 85 km southeast of the Chassahowitzka Wilderness Area (WA), a Class I air quality area administered by the Fish and Wildlife Service (FWS).

#### Air Quality Impact Analysis

The air quality impact analysis performed by Cargill is complete. The applicant's modeling predicts that the proposed expansion of the No. 9 sulfuric acid plant will not significantly contribute to the numerous sulfur dioxide (SO<sub>2</sub>) Class I increment violations modeled in the cumulative analysis. However, the proposed expansion does impact Chassahowitzka WA significantly during 3-hour and 24-hour averaging periods when the cumulative analysis does not indicate increment violations.

Maximum predicted impacts at Chassahowitzka WA from the expansion exceed FWS recommended  $SO_2$  Class I significant impact levels for the 3-hour and 24-hour time periods. The maximum predicted 3-hour  $SO_2$  impact is 1.31  $\mu$ g/m³: the recommended Class I 3-hour  $SO_2$  significance level is 0.48  $\mu$ g/m³. The maximum predicted 24-hour  $SO_2$  impact is 0.27  $\mu$ g/m³: the recommended Class I 24-hour  $SO_2$  significance level is 0.07  $\mu$ g/m³. Cargill's modeling analysis predicted 58 violations of the Class I 3-hour  $SO_2$  increment and 158 violations of the Class I 24-hour  $SO_2$  increment.

We are concerned about these predicted increment violations. In order to identify sources that are major contributors to these violations, a cumulative  $SO_2$  increment analysis must be performed

in the near future with a more appropriate long range transport model such as recommended in the EPA document, <u>Interagency</u> <u>Workgroup on Air Quality Modeling (IWAQM) Phase 1 Modeling Report: Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility</u>. Once these major impacting sources are identified, FDER should develop a strategy to better control them, so that Class I increments are not violated.

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. Please note that the above comments address the completeness of the Cargill application, and we may submit additional comments during the formal 30-day comment period for this project. If you have questions, please contact Ms. Ellen Porter of our Air Quality Branch in Denver at 303/969-2071.

Sincerely yours,

allos welliamb

James W. Pulliam, Jr. Regional Director

cc:

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

S. Arif C. Holladay B. Shomas, Sw Dist. Q. Camptell, EPERC D. Buff, RE, KBN



# Florida Department of Environmental Protection

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

Virginia B. Wetherell Secretary

January 6, 1994

### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David A. Buff KBN Engineering & Applied Sciences, Inc. 1034 N.W. 57th Street Gainesville, Florida 32605

Re: Cargill Fertilizer, Inc., No. 9 Sulfuric Acid Plant Expansion, PSD-FL-209

Dear Mr. Buff:

The Department has reviewed the modeling data received on December 10, 1993. Based on our initial review of this data and on comments received from the U.S. Fish and Wildlife Service, we have determined that additional information is needed in order to continue processing this application:

- 1. Please extend the PSD Class I impact analysis to include an air quality related values (AQRV) analysis for all PSD significant pollutants. The AQRV analysis evaluates potential effects of the project on vegetation, wildlife, soils, and aquatic resources. This analysis must be performed regardless of whether the project's impacts are less than the National Park Service's recommended significance levels. For determining impacts on PSD Class I areas, the department follows the recommendations of the Interagency Workgroup on Air Quality Modeling (IWAQM) Phase I Report: "Interim Recommendation for Modeling Long Range Transport and Impacts on Regional Visibility" (EPA-454/R-93-0150).
- 2. Cargill's modeling analysis predicts that the proposed expansion of the No. 9 sulfuric acid plant will not significantly contribute to the numerous sulfur dioxide (SO<sub>2</sub>) Class I increment violations modeled in the cumulative Class I area analysis for the Chassahowitzka Wilderness Area. The proposed expansion, however, is predicted to impact this Class I area significantly during 3-hour and 24-hour averaging periods when the cumulative analysis does not indicate increment violations. Since there is a predicted significant impact to SO<sub>2</sub> increment consumption, the U.S. Fish and Wildlife Service has additionally requested Cargill to investigate, in cooperation with them, the sensitivity of upland organic soils to acidity in the wilderness area. They request that

Mr. David A. Buff January 6, 1994 Page Two

soils should be analyzed for pH, sulfur content, oxidation/reduction potential, and soil depth and color (see attached letter). The U.S. Fish and Wildlife Service has indicated to the Department that they will do the actual sampling; however, they request that Cargill pay for the cost of the analysis. They estimate the cost to be \$500 to \$2000. Please coordinate this request with Ellen Porter in Denver, Colorado at 303-969-2071 and inform us when it is completed.

Please advise us if problems arise that could result in an abnormally long processing time. If you have questions about this letter, please contact Cleve Holladay at 904-488-1344.

Sincerely,

Administrator

Air Permitting and Standards

JB/ch

Attachment

cc:

B. Thomas, SWD

J.Campbell, HCEPC

E. Curran, Cargill

J. Harper, EPA

J. Bunyak, NPS

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## United States Department of the Interior

FISH AND WILDLIFE SERVICE 1875 Century Boulevard Atlanta, Georgia 30345

December 27, 1993

RECEIVED

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

JAN 0 3 1992 Bureau of Air Regulation

Dear Mr. Fancy:

We have reviewed the Prevention of Significant Deterioration Application for the proposed sulfuric acid (H2SO4) plant expansion at Cargill Fertilizer, Inc., Riverview, Florida. The facility is located approximately 85 km southeast of the Chassahowitzka Wilderness Area (WA), a Class I air quality area administered by the U.S. Fish and Wildlife Service.

We find the application to be incomplete. Our comments on the Best Available Control Technology (BACT) analysis and the Air Quality Related Values (AQRVs) analysis are below. Our comments on the air quality modeling analysis will be submitted the first week of January, per our December 16 conversation with Mr. Cleve Holladay of your Bureau of Air Regulation.

#### Control Technology Analysis

analysis performed by Cargill The BACT is incomplete. application should list the available control technologies and their associated control efficiencies. Documentation, including actual cost data, should be provided for control technologies that Cargill considers to be economically infeasible. Cargill should conduct a top-down BACT analysis, with supporting documentation to demonstrate that better controls than the New Source Performance Standards (NSPS) would be economically infeasible, when compared to control costs at other acid plants.

The analysis cites the EPA's 1979 NSPS study and uses the study as justification for eliminating control technologies. The study is over a decade old, and should not be used as justification for eliminating technologies, since technologies and costs change over The NSPS is to be used as a baseline for BACT, and BACT is often more stringent than the NSPS.

Cargill justifies their failure to consider control options by citing the predicted low ambient air quality impacts of the proposed project. The EPA's New Source Review Workshop Manual (1990) cautions against confusing the environmental impact analysis with the air quality impact analysis. The Manual states that the fact that a given control alternative would result in only a slight decrease in ambient concentrations of the pollutant, when compared to a less stringent control alternative, should not be viewed as an adverse environmental impact, thus justifying rejection of the more stringent control alternative (page B.46). It is inappropriate to consider ambient impacts in the BACT analysis.

#### <u>Air Quality Related Values Analysis</u>

Cargill did not analyze potential impacts to AQRVs, other than visibility, at Chassahowitzka WA. Maximum predicted impacts from the expansion exceeded recommended sulfur dioxide (SO<sub>2</sub>) Class I significant impact levels for the 3-hr and 24-hour time periods. The maximum predicted 3-hr SO<sub>2</sub> impact is 1.31  $\mu$ g/m³; the recommended Class I 3-hr SO<sub>2</sub> significance level is 0.48  $\mu$ g/m³. The maximum predicted 24-hr SO<sub>2</sub> impact is 0.27  $\mu$ g/m³; the recommended Class I 24-hr SO<sub>2</sub> significance level is 0.07  $\mu$ g/m³. Cargill's modeling analysis predicted 58 violations of the Class I 3-hr SO<sub>2</sub> increment and 158 violations of the Class I 24-hr SO<sub>2</sub> increment. Although Cargill's modeling analysis predicted that the proposed project would not contribute significantly to a SO<sub>2</sub> increment violation, it would contribute significantly to increment consumption.

We are concerned that Cargill's significant contribution to  $SO_2$  increment consumption is also significantly contributing to impacts on AQRVs. Chassahowitzka WA contains upland freshwater wetlands that in certain areas have a thin veneer of organic soil over a porous limestone base. Acidic deposition, before it is neutralized by the underlying limestone, may oxidize and erode this soil with subsequent effects to vegetation and invertebrates living on or in the soil. Loss of this soil would seriously alter and impair the function of the wetland ecosystem.

We remind FDER that EPA has deferred to the Federal Land Manager (FLM) to determine the need for full assessment of impacts on AQRVs in a Class I area. We have determined that such an assessment is necessary because of the significant consumption of  $SO_2$  Class I increment at Chassahowitzka WA.

We ask that FDER require Cargill to investigate, in cooperation with the U.S. Fish and Wildlife Service, the sensitivity to acidity of upland organic soils in the wilderness area. Soils should be analyzed for pH, sulfur content, oxidation/reduction potential, and soil depth and color. If this information indicates that the soils are susceptible to oxidation and erosion by sulfate, then further investigation should determine the level of acidic loading to the

system at which the soils are protected. This information is necessary if the FLM is to make an informed decision regarding PSD permit applications, which may affect Chassahowitzka WA.

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. Regional Director

cc:

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



# Florida Department of Environmental Protection

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

Virginia B. Wetherell Secretary

December 20, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David A. Buff KBN Engineering & Applied Sciences, Inc. 1034 N.W. 57th Street Gainesville, Florida 32605

Re: Cargill Fertilizer, Inc.

No. 9 Sulfuric Acid Plant Expansion

Permit File No. AC 29-241660, PSD-FL-209

Dear Mr. Buff:

The Department has received the application for an increase in the No. 9 sulfuric acid plant production rates (2800 to 3200 tons per day) of the existing facility at the Cargill's Riverview Plant in Hillsborough County. Based on our initial review of the proposed project, we have determined that additional information is needed in order to continue processing this application package. Please submit the information requested below to the Department's Bureau of Air Regulation.

- Provide storage tank capacities, throughput rate increases, etc. of molten sulfur and sulfuric acid for the facility to handle increased production rates.
- What facilities will use the additional sulfuric acid produced by the modified plants? Where are these facilities located?
- 3. What physical modifications, if any, will be required to the sulfuric acid plant to achieve the higher production rates?
- 4. Please explain the reasons for the permitted production rate varying between 2600 tons per day (TPD) and 2800 TPD between 1974 and 1989 as shown in the application.
- 5. The application states that the sulfuric acid plant now has a permitted production rate of 2,800 TPD. The present allowable SO<sub>2</sub> emission rate of 433.2 lb/hr is based on a 2,600 TPD production rate and 4.0 lb/ton of acid produced (2,600 ton/day \* 4 lb/ton \* 1 day/24 hr = 433.2 lb/hr). With a permitted production rate of 2800 TPD and an allowable emission rate of 433.2 lb/hr results in 3.71 lb/ton of acid

Mr. David A. Buff December 20, 1993 Page Two

produced (433.2 lb/hr \* 24 hr/day/2800 ton/day = 3.71 lb/ton). Therefore, the emission factor for  $SO_2$  was already established at 3.71 lb/ton of acid produced for this facility. Likewise, the  $H_2SO_4$  mist emissions using the above criteria results in an emission factor of 0.14 lb/ton. Please explain, if this assessment is incorrect.

- 6. Please provide the available control technologies for sulfuric acid plants and their associated control efficiencies. Documentation, including actual cost data, should be provided for control technologies that are economically infeasible for this project.
- 7. Please provide the Department with reasonable assurance that the efficiency of the converters will not be degraded while operating at the proposed new process conditions and higher process rates. The answer to this question must:
  - a. completely describe the process streams that each converter was <u>originally</u> designed to handle,
  - b. completely describe the process streams that each converter will handle in the <u>proposed</u> modified facility, and
  - explain why the differences between (a) and (b) will not degrade converter efficiency.
- 8. Please provide the Department with reasonable assurance that the efficiency of the absorbers will not be degraded while operating at the proposed new process conditions and higher process rates. The answer to this question must:
  - a. completely describe the process streams that each absorber was <u>originally</u> designed to handle,
  - completely describe the process streams that each absorber will handle in the <u>proposed</u> modified facility, and
  - c. explain why the differences between (a) and (b) will not degrade absorber efficiency.
- 9. Please provide the Department with reasonable assurance that the efficiency of the mist eliminators will not be degraded while operating at the proposed new process conditions and higher process rates. The answer to this question must:
  - a. completely describe the process streams that each mist eliminator was <u>originally</u> designed to handle,

Mr. David A. Buff December 20, 1993 Page Three

- completely describe the process streams that each mist eliminator will handle in the proposed modified facility, and
- explain why the differences between (a) and (b) will not degrade mist eliminator efficiency.
- 10. Modeling data was received on December 10, 1993. Therefore, after it is reviewed DEP may have additional questions.

We will resume processing this application after we receive the requested information. Should you have any questions, please contact Syed Arif (engineering) or Cleve Holladay (modeling) at 904-488-1344.

Sincerely,

Administrator

Air Permitting and Standards

JB/SA/bjb

B. Thomas, SWD cc:

J. Campbell, HCEPC E. Curran, Cargill

J. Harper, EPA

J. Bunyak, NPS

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