

# AFFIDAVIT OF PUBLICATION

## THE LEDGER

### Lakeland, Polk County, Florida

Case No .....

STATE OF FLORIDA)  
COUNTY OF POLK)

Before the undersigned authority personally appeared Robert Lee, who on oath says that he is Retail Advertising Manager of The Ledger, a daily newspaper published at Lakeland in Polk County, Florida; that the attached copy of advertisement, being a

**Public Notice Of Intent**

in the matter of .....

1050048-002-AC-(PSD-FL-238)

in the .....

Court, was published in said newspaper in the issues of .....

June 19;

1997

Affiant further says that said The Ledger is a newspaper published at Lakeland, in said Polk County, Florida, and that the said newspaper has heretofore been continuously published in said Polk County, Florida, daily, and has been entered as second class matter at the post office in Lakeland, in said Polk County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

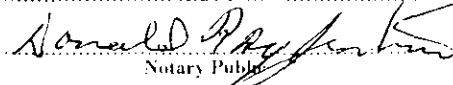
Signed 

Robert Lee  
Retail Advertising Manager  
By Robert Lee who is  
personally known to me

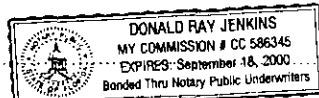
Sworn to and subscribed before me this 20th

day of June A.D. 19 97

(Seal)

  
Notary Public

My Commission Expires .....



Order#632193  
L

A382

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

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Permit Modification No. -- 1050048-002-AC-(PSD-FL-238)  
Mulberry Phosphate, Inc. Mulberry Plant  
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Mulberry Phosphates for an increase in annual hours of operation of its Sulfuric Acid Plant located at the Mulberry Plant on SR 40, 1 mile East of Mulberry in Polk County. A Best Available Control Technology (BACT) determination was required for sulfur dioxide (SO2) and sulfuric acid mist (SAM) pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The applicant's name and address are: Mulberry Phosphates, Inc. Post Office Drawer 797, Mulberry, Florida 33668.

The modification will allow Mulberry Phosphates Inc., to increase the annual hours of operation of its existing 1700 ton per day Sulfuric Acid Plant located at its Mulberry facility from 8400 hours per year to continuous operation or 8760 hours per year. Sulfur dioxide emissions are controlled by use of the double absorption process with periodic change outs of reaction catalyst. SAM emissions are controlled by a mist eliminator. The maximum increases are calculated assuming that in the future, the plant will continuously emit pollutants at its permitted limits. The expected increases reflect controlled emissions increases based only on the additional hours of operation. All impacts were conservatively computed based on the maximum emission.

Total emissions of pollutants shall not exceed the following limits:	Maximum Emissions		Net Increase		Expected Increase	
	SO <sub>2</sub>	Tons Per Year (TPY)	Tons Per Year (TPY)	Tons Per Year (TPY)	Tons Per Year (TPY)	Tons Per Year (TPY)
SAM	124		268		42	
	46.5		32.1		1	

An air quality impact analysis was conducted. The maximum SO2 emissions increase is predicted to result in a less than significant impact in both the PSD Class II area in the vicinity of the plant and the Chassahowitzka National Wilderness PSD Class I Area located 105 kilometers to the northwest of the facility.

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, 2400 Blair Stone Road, Mail Station #505, 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 and administrative hearing is filed pursuant to Section 120.573 before the deadline for filing a petition. Choosing mediation over Sections 120.569 and 120.573 before the deadline for filing a petition does not result in a settlement. The procedures for petitioning for a hearing or mediation are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.573 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9370, fax: 904/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative hearing or mediation (hearing) under Sections 120.569 and 120.573 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; and (f) 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 a final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A person whose substantial interests are affected by the Department's proposed permitting decision may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department the request and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

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

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

As provided in Section 120.573 F.S., the timely agreement of all parties to mediate will toll the time limitations imposed by Sections 120.569 and 120.573 F.S. for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement to mediate. If no settlement or agreement is reached during the mediation, the Department must enter a final order incorporating the agreement of the parties. Person whose substantial interests will be affected by such modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under Sections 120.59 and 120.573 F.S. remain available for disposition of the dispute, and the notice will specify the deadline that then will apply for challenging the agency action and selecting remedies under those two statutes.

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

Department of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida 32301 Telephone: 904/488-1344 Fax: 904/922-6979	Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Lampas, Florida 33619 Telephone: 813/744-6100 Fax: 813/744-6458
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The complete project file includes the Draft Permit Modification, 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 904/488-1344, for additional information. A382-6-19 1997



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

June 11, 1997

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Mr. Robert Stewart  
Vice President, Operations & Administration  
Mulberry Phosphates, Incorporated  
Post Office Drawer 797  
Mulberry, FL 33860

Re: DRAFT Permit Modification No. 1050048-002-AC (PSD-FL-238)  
Mulberry Plant Sulfuric Acid Plant Increase in Annual Hours of Operation

Dear Mr. Stewart:

Enclosed is one copy of the Draft Air Construction Permit Modification for the Mulberry Phosphates Sulfuric Acid Plant located at the Mulberry Plant on SR 60, 1 mile East of Mulberry, Polk 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 contact Cleve Holladay or Mr. Linero at 904/488-1344.

Sincerely,

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

CHF/ch

Enclosures

Is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: Robert Stewart, VP Operations & Administ. Mulberry Phosphates P O Drawer 797 Mulberry, FL 33860	4a. Article Number P 265 659 222	
	4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
	7. Date of Delivery	
5. Received By: (Print Name)	8. Addressee's Address (Only if requested and fee is paid)	
6.		

Thank you for using Return Receipt Service.

PS.

Receipt

P 265 659 222

US Postal Service  
**Receipt for Certified Mail**  
 No Insurance Coverage Provided.  
 Do not use for International Mail (See reverse)

Sent to	Robert Stewart
Street & Number	Mulberry Prosp.
Post Office, State, & ZIP Code	Mulberry FL
Postage	
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	6-10-97
	1050048-002-AC
	PSD-FI-238

PS Form 3800, April 1995

In the Matter of an  
Application for Permit Modification by:

Mulberry Phosphates, Inc.  
Post Office Drawer 797  
Mulberry, Florida 33860.

DRAFT Permit No.:1050048-002-AC  
PSD-FL-238  
Mulberry Plant  
Polk 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 project, as detailed in the application specified above and the attached Technical Evaluation and Preliminary Determination, for the reasons stated below.

The applicant, Mulberry Phosphates, Inc., applied on January 31, 1997, to the Department for an air construction permit modification for its Sulfuric Acid Plant located at the Mulberry Plant on SR 60, 1 mile East of Mulberry in Polk County. The modification will allow the applicant to increase the annual hours of operation of this plant from 8400 hours per year to continuous operation or 8760 hours per year.

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 reissuance of the original construction permit incorporating subsequent amendments and modifications, including the present one, is required for the proposed action.

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. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 904/488-1344; Fax 904/ 922-6979) within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit 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

# **NOTICE TO BE PUBLISHED IN THE NEWSPAPER**

The complete project file includes the Draft Permit Modification, 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 904/488-1344, for additional information.

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 modification with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., or a party requests mediation as an alternative remedy under Section 120.573 F.S. before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9730, fax: 904/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

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

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

A person whose substantial interests are affected by the Department's proposed permitting decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

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

The agreement to mediate must include the following: (a) The names, addresses, and telephone numbers of any persons who may attend the mediation; (b) The name, address, and telephone number of the mediator selected

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

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


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

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

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

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

Executed in Tallahassee, Florida.

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

**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, Technical Evaluation and Preliminary Determination, Draft BACT Determination and DRAFT permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 6-10-97 to the person(s) listed:

Robert Stewart, Mulberry Phosphates, Inc. \*  
Steven C. Cullen, P.E.  
Brian Beals, EPA  
John Bunyak, NPS  
Roy Harwood, PCNRD  
Bill Thomas, SWD  
Tom Ellison, SWD

Clerk Stamp

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

Kuni Zuber      6-10-97  
(Clerk)                      (Date)



# NOTICE TO BE PUBLISHED IN THE NEWSPAPER

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

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Permit Modification No.: 1050048-002-AC (PSD-FL-238)  
Mulberry Phosphates, Inc. Mulberry Plant  
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit modification to Mulberry Phosphates for an increase in annual hours of operation of its Sulfuric Acid Plant located at the Mulberry Plant on SR 60, 1 mile East of Mulberry in Polk County. A Best Available Control Technology (BACT) determination was required for sulfur dioxide (SO<sub>2</sub>) and sulfuric acid mist (SAM) pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The applicant's name and address are: Mulberry Phosphates, Inc. Post Office Drawer 797, Mulberry, Florida 33860.

The modification will allow Mulberry Phosphates Inc., to increase the annual hours of operation of its existing 1700 ton per day Sulfuric Acid Plant located at its Mulberry facility from 8400 hours per year to continuous operation or 8760 hours per year. Sulfur dioxide emissions are controlled by use of the double absorption process coupled with periodic change outs of the reaction catalyst. SAM emissions are controlled by a mist eliminator. The maximum increases are calculated assuming that in the future, the plant will continuously emit pollutants at its permitted limits. The expected increases reflect prorated emissions increases based only on the additional hours of operation. All impacts were conservatively computed based on the maximum emissions.

Total emissions of pollutants shall not exceed the following limits:

<u>Pollutant</u>	<u>Maximum Emissions</u> Tons Per Year (TPY)	<u>Net Increase</u> Tons Per Year (TPY)	<u>Expected Increase</u> Tons Per Year (TPY)
SO <sub>2</sub>	1241	268	42
SAM	46.5	32.1	1

An air quality impact analysis was conducted. The maximum SO<sub>2</sub> emissions increase is predicted to result in a less than significant impact in both the PSD Class II area in the vicinity of the plant and the Chassahowitzka National Wilderness PSD Class I area located 105 kilometers to the northwest of the facility.

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. or a party requests mediation as an alternative remedy under Section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9370, fax: 904/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period

# NOTICE TO BE PUBLISHED IN THE NEWSPAPER

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 person whose substantial interests are affected by the Department's proposed permitting decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

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

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

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

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

Department of Environmental Protection  
Bureau of Air Regulation  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida, 32301  
Telephone: 904/488-1344  
Fax: 904/922-6979

Department of Environmental Protection  
Southwest District Office  
3804 Coconut Palm Drive  
Tampa, Florida 33619  
Telephone: 813/744-6100  
Fax: 813/744-6458

**DIVISION OF AIR RESOURCES MANAGEMENT  
BUREAU OF AIR REGULATION  
NEW SOURCE REVIEW SECTION  
Telephone (904) 488-1344  
Fax (904) 922-6979**

**TECHNICAL EVALUATION  
AND  
PRELIMINARY DETERMINATION**

**Mulberry Phosphates, Inc.  
Mulberry Plant  
Facility ID No. :1050048  
Sulfuric Acid Plant  
Mulberry  
Polk County**

**Air Construction Permit No. 1050048-002-AC  
PSD-FL-238**

June 11, 1997

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## 1. APPLICATION INFORMATION

### 1.1 *Applicant Name and Address*

**Mulberry Phosphates, Inc.**  
SR 60, 1 Mile E. of Mulberry, Post Office Drawer 797  
Mulberry, Florida 33860

*Authorized Representative*  
Mr. Robert Stewart, Vice President, Operations & Administration

### 1.2 *Reviewing and Process Schedule*

01-31-97: Date of Receipt of Application  
02-28-97: Department's Preliminary Incompleteness Letter  
03-14-97: Mulberry's Response to Department's letter of February 28, 1997  
03-14-97: Application considered complete

## 2. FACILITY INFORMATION

### 2.1 *Facility Location*

**Mulberry Phosphates** plans to increase the annual hours of operation of its existing double absorption sulfuric acid plant from 8400 hours per year to continuous operation (8760 hours per year).

This site is approximately 105 kilometers southeast of the Chassahowitzka National Wilderness Area Class I PSD Area. The UTM coordinates of this facility are Zone 17: 406.8 km E; 3085.1 km N.

### 2.2 *Standard Industrial Classification Code (SIC)*

Major Group No.	28	Chemicals and Allied Products
Group No.	287	Agricultural Chemicals
Industry No.	2874	Phosphatic Fertilizers

### 2.3 *Facility Category*

This facility includes a sulfuric acid plant, a phosphoric acid plant, an ammonium phosphate (MAP/DAP) plant, and storage, handling, grinding and shipping facilities for phosphate rock, ammonia, sulfur, and fertilizer products. Mulberry Phosphates is classified as a major air pollutant emitting facility. Air pollutant emissions are over 100 TPY for sulfur dioxide (SO<sub>2</sub>).

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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This facility is on the list of the 28 Major Facility Categories, Table 62-212.400-1. This facility is also classified as a Title V facility.

### 3. PROJECT DESCRIPTION

3.1 *This permit addresses the following emissions units:*

EMISSION UNIT NO.	EMISSION UNIT DESCRIPTION
ARMS No.002	Sulfuric Acid Plant

The applicant proposes to modify the sulfuric acid plant operation by increasing the hours of operation from 8400 per year to continuous operation or 8760 per year. The annual hours of operation were previously limited to correspond to a typical, facility-wide two week annual shut down. Over the years on-line reliability of all chemical plants has improved from increased operator experience and technological improvements in process control. The additional sulfuric acid produced annually will reduce the amount of sulfuric acid that has to be purchased. The proposed project will not affect the operation of any other plant in the Mulberry complex.

The proposed increase in annual hours of operation will result in PSD significant net emissions increases for SO<sub>2</sub> and sulfuric acid emissions (SAM) and less than significant net emissions increases for NO<sub>x</sub>, when comparing past actual with future potential emissions.

3.2 *Background Information*

The initial construction permit for the sulfuric acid plant was issued in 1974. The construction permit for converting the plant to double absorption was issued in 1978. In 1985 a construction permit was issued to increase the production rate of the sulfuric acid plant from 1400 tons per day (TPD) to 1700 TPD of 100 percent sulfuric acid. In addition the modifications allowed the sulfuric acid plant to cogenerate electrical power.

### 4. PROCESS DESCRIPTION

There is one sulfuric acid plant at Mulberry Phosphates. The plant is presently permitted to produce 1700 TPD of 100 percent sulfuric acid. Molten sulfur is received by truck and rail, unloaded into molten sulfur pits, and stored in the molten sulfur storage tank. The sulfuric acid plant uses the double absorption process which produces sulfuric acid by burning sulfur to produce SO<sub>2</sub>, converting the SO<sub>2</sub> to sulfur trioxide using a catalyst, and then contacting the sulfur trioxide with sulfuric acid in primary and secondary absorption towers. This project would increase the number of hours the sulfuric acid plant can operate from 8400 per year to 8760 hours per year.

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## 5. RULE APPLICABILITY

The proposed project is subject to preconstruction review requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.).

This facility is located in Polk County, an area designated as attainment for all criteria pollutants in accordance with Rule 62-204.360, F.A.C. The proposed project is subject to review under Rule 62-212.400., F.A.C., Prevention of Significant Deterioration (PSD), because the potential emission increases for SO<sub>2</sub> and SAM exceed the significance emission rates given in Chapter 62-212, Table 62-212.400-2, F.A.C.

This PSD review consists of a determination of Best Available Control Technology (BACT) and unless otherwise exempted, an analysis of the air quality impact of the proposed project's impacts on soils, vegetation and visibility; along with air quality impacts resulting from associated commercial, residential and industrial growth.

The emission units affected by this modification shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein) and, specifically, the following Chapters and Rules:

Chapter 62-4	Permits.
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.260	Prevention of Significant Deterioration Increments
Rule 62-204.360	Designation of Prevention of Significant Deterioration Areas
Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-212.400	Prevention of Significant Deterioration
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-296.402	Sulfuric Acid Plants
Rule 62-297.310	General Test Requirements
Rule 62-297.400	EPA Methods Adopted by Reference
Rule 62-297.401	EPA Test Procedures
Rule 62-297.520	EPA Performance Specifications

# TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The modification is subject to 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants.

## 6. SOURCE IMPACT ANALYSIS

### 6.1 *Emission Summary*

**SULFURIC ACID PLANT (Emission Unit ID 002)**

Pollutants	Current Allowable		Current Actual		New Allowable		Net Increase ton/yr	PSD Significant Level ton/yr
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr		
SO <sub>2</sub>	283.3	1190	231.7	973	283.3	1241	268	40
SAM	10.6	44.6	3.4	14.4	10.6	46.5	32.1	7
NO <sub>x</sub>	8.5	35.7	8.2	34.6	8.5	37.2	2.6	40

#### Footnote:

Actual operation data based on the most recent representative 2-year compliance test data and annual operating hours information submitted to FDEP and currently in FDEP files.

### 6.2 *Emission Limitations*

The sulfuric acid plant emits the following PSD regulated pollutants (Table 212.400-2): SO<sub>2</sub>, NO<sub>x</sub> and SAM. The sulfuric acid plant was originally permitted under air construction permit AC53-2584 issued in 1974. The plant was converted to a double absorption plant in 1978 through air construction permit AC53-6458A. The present production limitation of 1700 TPD of 100 percent sulfuric acid was established by AC53-85261 in 1985. The plant currently operates under air operation permit AO53-198769. The purpose of this modification, which is subject to a new PSD review (PSD-FL-238), is to increase the hours of operation to continuous operation throughout the whole year.

### 6.3 *Control Technology Review*

The BACT document is included as a separate document (see Appendix BD)

### 6.4 *Air Quality Analysis*

#### 6.4.1 *Introduction*

The proposed project will increase emissions of two pollutants at levels in excess of PSD significant amounts: SO<sub>2</sub>, and SAM. SO<sub>2</sub>, which is a criteria pollutant, has national and state ambient air quality standards (AAQS), PSD increments, and significant impact levels defined for

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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it. SAM, which is a non-criteria pollutant has no AAQS, PSD increments or significant impact levels defined for it; therefore, no air quality dispersion modeling was done for SAM. Instead, SAM emissions for this project will be controlled by the BACT. For SO<sub>2</sub> there will only be an annual increase in emissions due to the increase in hours of operation. The applicant's initial annual SO<sub>2</sub> air quality impact analysis predicted no significant impact; therefore, further AAQS and PSD increment impact analyses for SO<sub>2</sub> were not required. Based on the preceding discussion the air quality analyses required by the PSD regulations for this project are the following:

- \* A significant impact analysis for SO<sub>2</sub> for the annual averaging time;
- \* An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality modeling impacts.

Based on these required analyses, the Department has reasonable assurance that the proposed project, as described in this report and subject to the conditions of approval proposed herein, will not cause or significantly contribute to a violation of any AAQS or PSD increment. However, the following EPA-directed stack height language is included: "In approving this permit, the Department has determined that the application complies with the applicable provisions of the stack height regulations as revised by EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in *NRDC v. Thomas*, 838 F. 2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when EPA revises the regulation in response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators." A more detailed discussion of the required analyses follows.

### 6.4.2 Models and Meteorological Data Used in the Significant Impact Analysis

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

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



## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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stations to the study area and are most representative of the project site. The surface observations included wind direction, wind speed, temperature, cloud cover, and cloud ceiling.

For determining the project's annual significant impact area in the vicinity of the facility and if there are annual significant impacts from the project on any PSD Class I area, the highest predicted annual averages were compared to their respective significant impact levels.

### 6.4.3 Significant Impact Analysis

Initially, the applicant conducts modeling using only the proposed project's emissions. If this modeling shows significant impacts, further modeling is required to determine the project's impacts on the AAQS or PSD increments. Receptors were placed within 20 km of the facility, which is located in a PSD Class II area, and the Chassahowitzka National Wilderness Area (CNWA) which is a PSD Class I area located approximately 105 km to the northwest of the project at its closest point. For each pollutant subject to PSD and also subject to PSD increment and/or AAQS analyses, this modeling compares maximum predicted impacts due to the project with PSD significant impact levels to determine whether significant impacts due to the project are predicted in the vicinity of the facility or in the CNWA. The tables below show the results of this modeling.

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

Pollutant	Avg. Time	Max Predicted Impact (ug/m <sup>3</sup> )	Significant Impact Level (ug/m <sup>3</sup> )	Significant Impact?
SO <sub>2</sub>	Annual	0.6	1	NO

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

Pollutant	Averaging Time	Max. Predicted Impact at Class I Area (ug/m <sup>3</sup> )	National Park Service (NPS) Significant Impact Level (ug/m <sup>3</sup> )	Significant Impact?
SO <sub>2</sub>	Annual	0.007	0.03	NO

### 6.4.4 Additional Impacts Analysis

#### 6.4.4.a. Impact Analysis Impacts On Soils, Vegetation, And Wildlife

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The maximum ground-level concentrations predicted to occur for SO<sub>2</sub> as a result of the proposed project, including background concentrations and all other nearby sources, will be below the associated AAQS. The AAQS are designed to protect both the public health and welfare. As such, this project is not expected to have a harmful impact on soils and vegetation in the PSD Class II area. An air quality related values (AQRV) analysis was done by the applicant for the Class I area. No significant impacts on this area are expected.

### *6.4.4.b Impact On Visibility*

The proposed project will not result in adverse impacts on visibility since there will be no change in hourly air emissions.

### *6.4.4.c Growth-Related Air Quality Impacts*

The proposed modification will require no increase in personnel to operate the sulfuric acid plant. Also the increase in annual hours of sulfuric acid production may cause a slight increase in delivery truck tanker traffic but will have a negligible impact on traffic in the area as compared with traffic levels that presently exist. Therefore, no additional growth impacts are expected as a result of the proposed project.

## 7. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by Mulberry Phosphates, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations provided the Department's Best Available Control Technology Determination is implemented and certain conditions are met. The General and Specific Conditions are listed in the attached draft conditions of approval.

*Permit Engineer: Cleve Holladay*

*Meteorologist: Cleve Holladay*

*Reviewed and Approved by A. A. Linero, P.E.*

# DRAFT

**PERMITTEE:**

**Mulberry Phosphates, Inc.**  
**Mulberry Plant**  
Post Office Drawer 797  
Mulberry, Florida 33860

<b>FID No.</b>	1050048
<b>PSD No.</b>	PSD-FL-238
<b>Permit No.</b>	1050048-002-AC
<b>SIC No.</b>	2874
<b>Expires:</b>	June 30, 1998

*Authorized Representative:*

Robert Stewart  
Vice President, Operations & Administration

**LOCATED AT:**

**Mulberry Phosphates, Inc., Mulberry Plant, Polk County**  
Project: Sulfuric Acid Plant Increase in Hours of Operation

UTM: Zone 17; 406.8 km E ; 3085.1 km N  
Directions: *Located on SR 60, 1 mile East of Mulberry, Polk County*

**STATEMENT OF BASIS:**

The applicant requested a modification to permit AC53-85261 which expired on 7/1/86. The following permit supersedes the permit AC53-85261 dated 7/2/85. The provisions of permit AC53-85261 are incorporated into this permit except for the changes that follow in Section II Specific Conditions. This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

**Attached appendix made a part of this permit:**

Appendix BD

BACT Determination

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Howard L. Rhodes, Director  
Division of Air Resources  
Management

# DRAFT

## SECTION I. FACILITY INFORMATION

### SUBSECTION A. FACILITY DESCRIPTION

This existing facility consists of a sulfuric acid plant, a phosphoric acid plant, an ammonium phosphate (MAP/DAP) plant, and storage, handling, grinding and shipping facilities for phosphate rock, ammonia, sulfur, and fertilizer products. This modification will increase the hours of operation from 8400 hours per year to 8760 hours per year or continuous operation.

### EMISSION UNIT

This permit addresses the following emission units:

EMISSIONS UNIT No.	EMISSIONS UNIT DESCRIPTION
002	Sulfuric Acid Plant

### SUBSECTION B. REGULATORY CLASSIFICATION

This industry is listed in Table 62-212.400-1 of Chapter 62-212, F.A.C., "Major Facility Categories." Therefore, stack and fugitive emissions of over 100 tons per year of carbon monoxide, sulfur dioxide, nitrogen oxides, or particulate matter characterize the installation as a major facility subject to the requirements of Rule 62-204.800, F.A.C. This facility is a Title V source because it emits over 100 tons per year of sulfur dioxide. [Rule 62-210.200 (Title V Source), F.A.C.]

### SUBSECTION C. PERMIT SCHEDULE:

- (DATE) Petition for an administrative hearing
- (DATE) Notice of Intent published in (DATE) issue of Newspaper
- 06-11-97 Issued Notice of Intent to issue Permit
- 03-14-97 Application deemed complete

### SUBSECTION D. RELEVANT DOCUMENTS:

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

1. Original construction permit (AC53-85261/PSD-FL-106) issued to Royster Company 7/2/85 by DER
2. Request for hour increase modification received on January 31, 1997
3. Department's letter dated February 28, 1997
4. Company letter dated March 12, 1997; received on March 14, 1997

**DRAFT**

APPENDIX BD  
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION

Mulberry Phosphates, Inc.  
Mulberry Plant  
PSD-FL-238 and 1050048-002-AC  
Polk County

The applicant proposes to increase the annual hours of operation of its sulfuric acid plant production from 8400 hours per year to 8760 hours per year. The sulfuric acid plant is permitted to produce 1700 tons per day (TPD) of 100 percent sulfuric acid. The plant is located at Mulberry Phosphate's Mulberry fertilizer manufacturing facility on SR 60, 1 mile east of Mulberry in Polk County, Florida.

The proposed project will increase emissions of sulfur dioxide (SO<sub>2</sub>) and sulfuric acid mist (SAM) by more than the applicable Prevention of Significant (PSD) significant emission rates. The project is therefore subject to 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:** January 31, 1997.

**Date Application Complete:** March 14, 1997.

The BACT determination requested by the applicant is presented below:

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

- (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

**DRAFT****SECTION II. SPECIFIC CONDITIONS**

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**SUBSECTION A. SPECIFIC CONDITIONS**

- A.1 The following permit supersedes the permit AC53-85261 dated 7/2/85
- A.2 The provisions of permit AC53-85261 are incorporated into this permit except for the following modifications:

**Specific Conditions:**

8. This plant may operate continuously, i.e., 8,760 hours per year.
11. Mulberry Phosphates, Inc. shall take precautionary measures to prevent gas leaks and promptly repair any gas leaks that occur at this plant. A portable industrial vacuum unit equipped with classification and air filtering equipment shall be used to rejuvenate the existing catalyst. Spent catalyst shall be disposed of in an environmentally sound manner.
12. Mulberry Phosphates, Inc. shall submit a complete application for permit to operate the sulfuric acid plant, which must include an emissions test report, to the Southwest District at least 90 days prior to the expiration date of this construction permit. If the compliance tests are conducted at a plant operating rate of less than 90 percent of the permitted capacity (1,700 TPD), then any permit to operate issued for the plant shall restrict maximum production to not more than 10 percent above the production rate that existed during the compliance tests. Mulberry Phosphates may continue to operate this sulfuric acid plant, if it is in compliance with all conditions of this construction permit, until its expiration date or until the expiration date of any permit to operate that is issued for this source.
13. Upon obtaining a permit to operate, Mulberry Phosphates, Inc. will be required to submit quarterly excess emissions reports (40 CFR 60.7) and annual operation reports which shall include, as a minimum, the annual production and a recent emissions test report, to the Southwest District. A copy of the excess emissions report shall be sent to the Bureau of Air Regulation.

**DRAFT**

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

increase in annual hours of operation support the Department's determination that the emission limits established herein represent BACT.

Details of the Analysis May be Obtained by Contacting:

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

Recommended By:

Approved By:

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

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

\_\_\_\_\_  
Date:

\_\_\_\_\_  
Date:

APPENDIX BD

BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

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:**

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

**Environmental Impact Analysis**

The impact analysis for the BACT determination is based on the request for continuous operation (8,760 hours/year). The increase in annual hours of operation results in a less than significant increase in annual SO<sub>2</sub> impacts in both the PSD Class II and Class I areas. There will be no increase in short-term SO<sub>2</sub> emission rates.

**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



Florida Department of  
Environmental Protection

Memorandum

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TO: Clair Fancy

THRU: Al Linero *Al Linero* 6/10

FROM: Cleve Holladay *CH*

DATE: June 10, 1997

SUBJECT: Mulberry Phosphates, Inc./Mulberry Plant  
Modification No: 1050048-002-AC/PSD-FL-238

Attached is the public notice package, technical evaluation and preliminary determination, and draft permit conditions for Mulberry Phosphate's requested annual increase in hours of operation of its existing sulfuric acid plant. The proposed modification would increase the hours of operation from 8400 per year to 8760 per year. The annual hours of operation for this plant had previously been limited to correspond to a typical facility-wide two week annual shut down. A well-operated plant typically operates for more than one year after its periodic maintenance shutdowns. This request for continuous operation of the sulfuric acid plant is similar in nature to other industry wide practices, and will result in a less than significant air quality impact. Because past actual to future potential SO<sub>2</sub> emissions increase by 268 TPY, PSD review was required. The expected increase, however, is only about 42 TPY.

I recommend your approval and signature.