

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

August 12, 1987

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Rudy J. Cabina, Vice President
Gardinier, Inc.
Post Office Box 3269
Tampa, Florida 33601

Dear Mr. Cabina:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit to modify the No. 5 DAP Plant of your Tampa facility.

Please submit, in writing, any comments which you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/bm

Attachments

cc: W. Thomas, SW Dist.
D. Buff, KBN
W. Aronson, EPA
M. Flores, NPS
J. Campbell, HCEPC
E. Morris, Gardinier, Inc.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

Gardinier, Inc.
P. O. Box 3269
Tampa, Florida 33601

DER File No. AC 29-135083

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue a permit (copy attached) for the proposed project as detailed in the application specified above (copy attached). The Department is issuing this Intent to Issue for the reasons in the attached Technical Evaluation and Preliminary Determination.

The applicant, Gardinier, Inc., applied May 29, 1987, to the Department of Environmental Regulation for a permit to modify the No. 5 DAP plant located at their existing facility in Tampa, Florida.

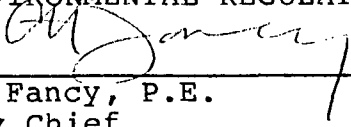
The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit was needed for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit application. The notice must be published one time only in a section of a major local newspaper of general circulation in the county in which the project is located and within thirty (30) days from receipt of this intent. Proof of publication must be provided to the Department within seven days of publication of the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, Florida Statutes. 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, Florida Statutes. Petitions must comply with the requirement of Florida Administrative Code Rules 17-103.155 and 28-5.201 (copies enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. 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, Florida Statutes, concerning the subject permit application. Petitions which are not filed in accordance with the above provisions will be dismissed.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management

Copies furnished to:

W. Thomas, SW District
D. Buff, KBN
W. Aronson, EPA
M. Flores, NPS
J. Campbell, HCEPC
E. Morris, Gardinier, Inc.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on August 12, 1987.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Martha Janelle 8-12-87
Clerk Date

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to Gardinier, Inc., to modify the No. 5 Diammonium Phosphate plant (DAP) at its East Tampa plant located six and one-half miles southeast of Tampa on U.S. Highway 41 in Hillsborough County. The project involves shutting down the existing run-of-pile triplesuperphosphate units and shifting that production capacity over to the No. 5 DAP plant. As a result of the transfer of production and the contemporaneous shutdowns, emissions of all affected criteria air pollutants will be reduced. Consequently, the modification is exempted from the new source review requirements under FAC Rules 17-2.500 and 17-2.510. The Department has determined that the proposed modifications will not interfere with reasonable further progress toward attaining the ambient air quality standards.

Persons 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, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a request for hearing 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, Florida Statutes.

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 preliminary statement. Therefore, persons who may not object to the proposed agency action may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida 32399-2400. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application 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:

Dept. of Environmental Regulation
SW District
4520 Live Oak Fair Blvd.
Tampa, Florida 33610-7349

Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Hillsborough County Environmental
Protection Commission
1410 North 21st Street
Tampa, Florida 33605

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

Technical Evaluation
and
Preliminary Determination

Gardinier, Inc.
Hillsborough County

Modification of No. 5 DAP Plant
Proposed State Permit No. AC 29-135083

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

August 12, 1987

I. Application Information

A. Applicant

Gardinier, Inc.
P. O. Box 3269
Tampa, Florida 33601

B. Request

The Department received an application on May 29, 1987, for a permit to increase the production and emission rates from the No. 5 DAP (Diammonium Phosphate) plant in Gardinier's phosphate facility near Tampa. Gardinier also requested that, in conjunction with the contemporaneous shutdown of several existing units, they be allowed to retain all of their existing emission allowance for fluoride and receive emission reduction credit for particulate that could be banked for future use. Gardinier's request was followed by a letter of incompleteness dated June 8, 1987. Additional data was provided by letter received on June 25, 1987, and the application was deemed complete on July 9, 1987.

C. Project and Location

Permit No. AC 29-27760 was issued on May 6, 1980, for construction of the No. 5 DAP plant. It is located south of Tampa, Florida, at U.S. 41 South and Riverview Drive. The UTM coordinates of the site are: Zone 17, 362.9 km E and 3082.5 km N. Latitude of the site is 27°51'28" N while longitude is 82°23'15" W.

II. Project Description

The project involves increasing the production rate of the No. 5 DAP plant from the original design rate of 23 tons per hour of P₂O₅ to a new rate of 55.2 tons per hour of P₂O₅ by fine tuning and without making capital expenditures for new equipment. The shift toward production of more DAP was necessitated by the discontinued production of run-of-pile triplesuperphosphate. The emissions that will result from these changes are shown in the following table:

| | No. 5 DAP Present (TPY) | No. 5 DAP Requested (TPY) | Increase (TPY) | Contempor- aneous Reduc- tion (TPY) | Net Change (TPY) |
|-------------------|----------------------------------|------------------------------------|-------------------|---|---------------------|
| Fluoride | 6.1 | 14.5 | 8.4 | 37.2 | (28.8) |
| Particulate | 43.8 | 87.6 | 43.8 | 56.9 | (13.1) |
| *SO ₂ | 70.1 | 139.4 | 69.3 | 168.2 | (98.9) |
| ----- | | | | | |
| **NO _x | - | 19.5 | - | 44.6 | (25.1) |
| **CO | - | 1.8 | - | 4.0 | (2.2) |
| **VOC | - | .14 | - | .3 | (.16) |

* Based on firing fuel oil containing 2.5% sulfur (Natural gas has been the primary fuel since 1982)

**There are no specific limits for these pollutants in the permit.

Gardinier plans to shut down the following equipment on the dates indicated:

No. 3 and No. 4 TSP Reactor Belts - August 1987
 No. 3 and No. 4 TSP Dryers - August 1987
 ROP/TSP Sizing Unit - October 1987

III. Rule Applicability

Gardinier's proposed permit modification is subject to review under provisions of Chapter 403, Florida Statutes, and Chapters 17-2 and 17-4, Florida Administrative Code (FAC). The Gardinier facility is located in an area designated as nonattainment for particulate matter and ozone, and attainment for other criteria pollutants except SO₂ for which the location is designated as unclassifiable (FAC Rules 17-2.410(1) & (2); 17-2.420; and, 17-2.430(2)).

The modified No. 5 DAP plant will be classified as a major source of SO₂ within a major facility since the emissions of SO₂ can potentially exceed 100 TPY if fuel oil is fired. However, since Gardinier will contemporaneously shut down their run-of-pile triplesuperphosphate sources, there will be a net decrease in emissions of each affected pollutant from the facility. The modification is therefore exempted from new source review for either PSD or nonattainment areas (FAC Rules 17-2.500(2)(d)4.a.ii. and 17-2.510(2)(d)4.a.). FAC Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, is applicable for this overall change in production. The Department has determined that the proposed modification, in view of the contemporaneous shutdowns, will not interfere with reasonable further progress toward attaining the ambient air quality standards.

Since the proposed modification will alter the conditions set forth in the former EPA PSD permit (PSD-FL-026), a change in that permit must be requested also from the U.S. EPA Region IV.

IV. Conclusion

The Department finds no reason to deny the request to increase the permitted production rate and emissions from the No. 5 DAP plant as long as the contemporaneous shutdowns are carried out before the DAP plant begins its modified operation. The shutdowns will be stated as specific conditions of the modified permit.

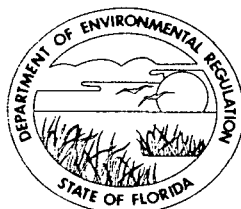
In regard to the request for retention of the total fluoride allowance of 24.7 lbs/hr for the facility, FAC Rule 17-2.600(3)(b) limits the fluoride emissions from existing sources (pre-1972) within the complex based on the P_2O_5 input to the existing (pre-1972) phosphoric acid section. This input is 46.5 tons per hour of P_2O_5 which gives a maximum fluoride (F) emission from all existing sources of 18.6 lbs F per hour ($46.5 \times 0.4 = 18.6$). Added to the allowance for existing sources is the limit for new sources (1.2 lbs/hr for the No. 4 Phos Acid Plant and 3.3 lbs/hr for the modified No. 5 DAP plant) which is 4.5 lbs F/hr giving a total allowance of 23.1 lbs F/hr. This is 1.6 lbs F/hr less than the total requested by Gardinier for the complex.

Concerning the requested banking of excess particulate emissions, current Department rules do not provide for banking. However, Gardinier may apply the 13.1 TPY of excess particulate emissions to another project as a contemporaneous emission change as long as it is done in accordance with the time constraints of FAC Rule 17-2.510(2)(e)3.

In summary, the revised allowable emission rate for particulate from the No. 5 DAP plant will be more restrictive on a per ton input basis than the former construction permit limit (0.36 vs 0.5 lb/T P_2O_5 input). The revised emission rate for SO_2 (0.58 lb/T P_2O_5) is higher than the EPA PSD permit limit (0.43 lb/T P_2O_5) but lower than the former construction permit limit (0.7 lb/T P_2O_5). The revised fluoride emission rate will be the same as currently allowed on a per ton input basis under the new source standards.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

PERMITTEE:
Gardinier, Inc.
P. O. Box 3269
Tampa, Florida 33601

Permit Number: AC 29-135083
Expiration Date: August 31, 1988
County: Hillsborough
Latitude/Longitude: 27° 51' 28" N
82° 23' 15" W
Project: Modification of No. 5
Diammonium Phosphate Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the modification of a diammonium phosphate plant located at the permittee's phosphate fertilizer complex near the intersection on U.S. Highway 41 and Riverview Drive in Hillsborough County, Florida. The latitude, and longitude and UTM coordinates are 27°51'28"N by 82°23'15"W and 362.9 km E and 3082.5 km N, respectively.

Modification shall be in accordance with the attached permit application except as otherwise noted under the Specific Conditions set forth in this permit.

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER form 17-1.202(1), received on May 29, 1987.
2. Incompleteness letter dated June 8, 1987.
3. Response to incompleteness letter received June 25, 1987.
4. Response by EPA to Gardinier's letter dated June 22, 1987.

PERMITTEE:
Gardinier, Inc.

Permit Number: AC 29-135083
Expiration Date: August 31, 1988

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.
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. Nor 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 does not constitute 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, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, 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.

PERMITTEE:
Gardinier, Inc.

Permit Number: AC 29-135083
Expiration Date: August 31, 1988

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

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, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

- a. Having access to and copying any records that must be kept under the conditions of the permit;
- b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sampling or monitoring 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 notify and provide the Department with the following information:

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

PERMITTEE:
Gardinier, Inc.

Permit Number: AC 29-135083
Expiration Date: August 31, 1988

GENERAL CONDITIONS:

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 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 arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

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 Florida Administrative Code Rules 17-4.12 and 17-30.30, 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 is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Compliance with New Source Performance Standards.

14. The permittee shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

PERMITTEE:
Gardinier, Inc.

Permit Number: AC 29-135083
Expiration Date: August 31, 1988

GENERAL CONDITIONS:

- b. The permittee shall retain 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), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be 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 date(s) 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 submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. Maximum permitted production rate for this plant will be 55.2 TPH P₂O₅ input. If the production rate exceeds the maximum permitted rate by 10% at any time, a compliance test must be conducted after notifying the Department and the results of this test, along with other information listed in Specific Condition No. 9 must be submitted to the Department within 10 working days. Any emissions in excess of those listed in Specific Condition No. 2 will constitute a violation of this permit. The plant may operate 8,760 hours per year if permitted emissions are not exceeded.

PERMITTEE:
Gardinier, Inc.

Permit Number: AC 29-135083
Expiration Date: August 31, 1988

SPECIFIC CONDITIONS:

2. The emissions from the 7 foot diameter, 132.5 foot high stack for the No. 5 plant will not exceed:

| Pollutant | Standard | Maximum Allowable Emissions | |
|-----------------|---|-----------------------------|-------|
| | | lb/hr | T/yr |
| Particulate | 0.36 lb/T P ₂ O ₅ | 20 | 87.6 |
| SO ₂ | 0.58 lb/T P ₂ O ₅ | 31.8 | 139.4 |
| Fluoride | 0.06 lb/T P ₂ O ₅ | 3.3 | 14.5 |

3. Fugitive emissions from the process, conveying and storage equipment will be controlled by sealing and/or venting all particulate and fumes from the equipment to pollution abatement equipment.

4. No. 6 fuel oil used by the dryer shall contain no more than 2.5% sulfur.

5. The permittee will install, calibrate, maintain, operate and record data from flow monitoring devices used to determine total P₂O₅ input to the plant. A daily record on the P₂O₅ input to the plant will be maintained.

6. The permittee will measure and record the total pressure drop across each scrubber system. Pressure drop across the venturi scrubbers must be at least 12 inches of water during plant operations. These records will be maintained for 2 years and available for inspection by regulatory agency personnel on request.

7. Modification should commence and be completed within a reasonable time based on the projections in the application.

8. Reasonable precautions to prevent fugitive particulate emissions during modification such as coating or spraying roads and construction sites used by contractors, will be taken by the permittee.

9. Before the construction permit expires, the DAP plant will be sampled for particulate, sulfur dioxide and fluoride emissions. Test procedures will be in accordance with EPA reference methods 1, 2, 3, 5, 6, and 13A and 13B as published in 40 CFR 60, dated July 1, 1986. DER will be notified at least 30 days prior to the compliance test. The test will be conducted at permitted production capacity or no less than 90% thereof. P₂O₅ input, pH of scrubber solution, and pressure drop across the scrubbers will be reported to DER along with the test data and results.

PERMITTEE:
Gardinier, Inc.

Permit Number: AC 29-135083
Expiration Date: August 31, 1988

SPECIFIC CONDITIONS:

10. The No. 3 and No. 4 Triple Superphosphate Reactor Belts and Dryers, and the ROP/TSP Sizing Unit sources will permanently cease operation prior to the startup of the DAP plant under the modified conditions of this permit.

Issued this _____ day of _____, 19__

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

Dale Twachtman, Secretary