

Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

January 4, 1991

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. E. O. Morris
Environmental Manager
Gardinier, Inc.
8813 Highway 41 South
Riverview, FL 33569

Dear Mr. Morris:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed construction permit to Gardinier, Inc. for a 1800 ft² phosphoric acid filter with fume scrubber at the facility in Riverview, Hillsborough County, Florida.

Please publish the attached "Notice of Intent to Issue" in the legal ad section of a newspaper of general circulation in the area affected and submit the proof of publication to the Department within seven days of publication, along with any written comments you wish to have considered concerning the Department's proposed action, to Mr. Barry Andrews of the Bureau of Air Regulation.

Sincerely,

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

CHF/CP
Attachments

c: B. Thomas, SW District
J. Campbell, EPCHC
D. Buff, KBN

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of an application
for a Permit by:

DER File No. AC 29-186726
Hillsborough County

Gardinier, Inc.
8813 Highway 41 South
Riverview, FL 33569

INTENT TO ISSUE

The Department of Environmental Regulation gives notice of its intent to issue a construction permit for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Gardinier, Inc., applied on September 19, 1990, to the Department of Environmental Regulation for a permit to construct a 1800 square foot phosphoric acid filter with fume scrubber to improve production efficiency and increase the process rate to 139 tons per hour of feed input expressed as P₂O₅.

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

Pursuant to Section 403.815, F.S., and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed NOTICE OF INTENT TO ISSUE.

The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "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. The applicant shall provide proof of publication to the Department, at 2600 Blair Stone Road, Tallahassee, FL 32399-2400, within 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 amendment.

The Department will issue the attached permit unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by this permit amendment may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of receipt of this intent. Petitions filed by other

persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the permit have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice in the office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any such right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on September 6, 1990 to the listed persons.

Clerk Stamp

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.

Agnes Baker 1-9-91
(Clerk) (Date)

copies furnished to:

B. Thomas, SW District
J. Campbell, EPCHC
D. Buff, P.E., KBN

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF INTENT TO ISSUE

The Department of Environmental Regulation gives notice of its intent to issue a construction permit (No. AC 29-186726) for a 1800 square foot phosphoric acid filter with fume scrubber to Gardinier, Inc., 8813 Highway 41 South, Riverview, Florida 33569. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by this proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the permit have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this notice in the office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any such right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

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:

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

Department of Environmental Regulation
Southwest District Office
4520 Oak Fair Boulevard
Tampa, Florida 33610-7347

Environmental Protection Commission of Hillsborough County
Air Program
1410 N. 21st Street
Tampa, Florida 33605

Any person may send written comments on the proposed action to Mr. Barry Andrews 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.

Technical Evaluation
and
Preliminary Determination

Gardinier, Inc.
Riverview, Hillsborough County
Florida

Phosphoric Acid Plant Filter Addition

Permit No. AC 29-186726

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

January 4, 1990

I. Application

A. Applicant

Gardinier, Inc.
8813 Highway 41 South
Riverview, FL 33569

B. Project and Location

The Department received an application on September 19, 1990 for a permit to construct a new filter to improve the efficiency and increase the capacity of the phosphoric acid plant to 139 tons per hour P_2O_5 input. A new scrubber will also be added. The application was deemed complete on December 10, 1990. The facility is located in Riverview, Florida at U.S. Hwy. 41 South and Riverview Drive.

C. Facility Category

The SIC Code is 2874 and

the SCC Codes are:

3-01-016-01	(Reactors)
3-01-016-02	(Gypsum Pond)
3-01-870-07	(Tank Breathing Losses)
3-01-870-08	(Tank Working Losses).

II. Project Description

The Gardinier, Inc. phosphoric acid plant currently consists of the No. 3 Prayon and No. 4 Dorrco phosphoric acid reactors. Dry phosphate rock and sulfuric acid are fed to the reactors. Each reactor discharges to a separate filter. The filters separate the phosphoric acid from the solids (gypsum). The phosphoric acid, approximately 30 percent strength at this point, is pumped to the filter tanks, to a clarifier, and then to the 30 percent storage tanks. The gypsum waste is pumped to the gypsum pond.

Gardinier plans to construct a third filter with a 1800 ft² surface area. The Dorrco reactor will feed to the existing 1800 ft² filter and the existing 950 ft² filter. The Prayon reactor will feed to the new 1800 ft² filter. The maximum process input rate for the system will be 139.0 tons per hour (TPH) of P_2O_5 , or 450 TPH dry rock. The resulting phosphoric acid production rate is 129.8 TPH P_2O_5 . Improved recovery of P_2O_5 will be realized by the reduction of loading on the existing filters. During maintenance periods for the new 1800 ft² filter, the Prayon reactor may discharge to the existing 950 ft² filter. However, during such periods, the process input rate for the entire system will be limited to 126 TPH P_2O_5 .

During Phase I of the proposed project, the new scrubber will be added and will control fluoride emissions from the new third filter only. All other scrubbers will continue to operate under current conditions.

During Phase II, the No. 3 Prayon and No. 4 Dorrco scrubbers will control emissions only from their respective phosphoric acid reactors. All other sources currently controlled by these two scrubbers will be shifted to the filter scrubber. The filter scrubber will therefore control these other sources as well as emissions from the three phosphoric acid filters.

The scrubbers which control the Nos. 9 and 10 evaporators, the clarifier, and the 30 percent storage tank will not be affected by this project.

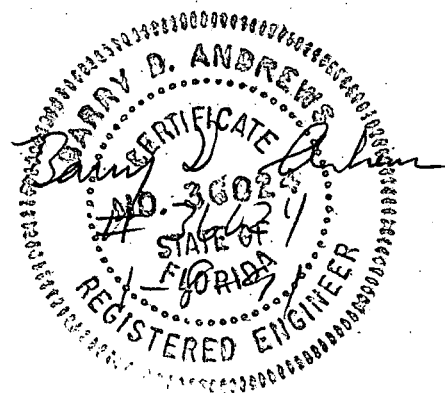
III. Rule Applicability

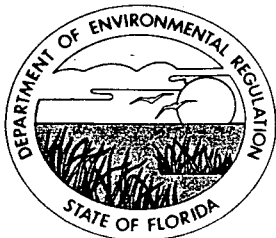
The project is subject to F.A.C. rule 17-2.520, Sources Not Subject to PSD or Nonattainment Requirements.

The phosphoric acid plant is subject to the requirements of 40 CFR 60, Subpart T - Standards of Performance for New Stationary Sources and F.A.C. Rule 17-2.600(3), Phosphate Processing. The maximum fluoride emissions from the phosphoric acid plant will be limited to 0.02 lb/ton P_2O_5 input, or 2.35 lb/hr, whichever is less. By limiting the hourly emissions to 2.35 lb/hr, PSD review will not be required, as the resulting maximum annual fluoride emission limitation of 10.29 tons per year (TPY) from the phosphoric acid plant is not 3.0 TPY or more greater than the historic actual emissions of 7.51 TPY. The significant emission rate increase for fluorides, as defined in Table 500-2, F.A.C., is 3 tons per year.

IV. Conclusion

Based on the information provided by the applicant, the Department has reasonable assurance that the proposed project, as described in this evaluation and subject to the proposed attached permit conditions, will not cause or contribute to a violation of an ambient air quality standard, PSD increment, or any other technical provisions of Chapter 17-2 of the Florida Administrative Code.





Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

John Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
Gardinier, Inc.
8813 Highway 41 South
Riverview, FL 33569

Permit Number: AC 29-186726
Expiration Date: June 30, 1993
County: Hillsborough
Latitude/Longitude: 27°51'30"N
82°23'57"W
Project: Phosphoric Acid Plant -
Third Filter w/scrubber

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 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 construction of a 1800 ft² phosphoric acid filter, and a scrubber manufactured similar to a VESCOR model No. 2155RL with a design pressure drop of 4.0" WC.

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

This construction permit will modify operating permit No. A029-146224.

Exhibits are listed below:

1. Gardinier's application received September 19, 1990.
2. DER's letter dated October 18, 1990.
3. Gardinier's response received October 31, 1990.
4. Gardinier's revision received November 15, 1990.
5. Gardinier's revision received November 21, 1990.
6. DER's letter dated November 30, 1990.
7. Gardinier's additional information received December 3, 1990.
8. Gardinier's additional information received December 6, 1990.
9. KBN's response received December 10, 1990.

PERMITTEE:
Gardinier, Inc.

Permit Number: AC 29-186726
Expiration Date: June 30, 1993

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocations and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

PERMITTEE:
Gardinier, Inc.

Permit Number: AC 29-186726
Expiration Date: June 30, 1993

DRAFT

GENERAL CONDITIONS:

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

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

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

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

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

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

PERMITTEE:
Gardinier, Inc.

DRAFT

Permit Number: AC 29-186726
Expiration Date: June 30, 1993

GENERAL CONDITIONS:

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and approximate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C. as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

PERMITTEE:
Gardinier, Inc.

Permit Number: AC 29-186726
Expiration Date: June 30, 1993

DRAFT

GENERAL CONDITIONS:

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. In accordance with Rule 17-2.600(3)1., F.A.C., the phosphoric acid plant shall not discharge into the atmosphere fluoride emissions greater than 0.02 pounds of fluoride per ton of phosphate material into the system expressed as tons of P_2O_5 .

2. To prevent the necessity of a PSD review, the phosphoric acid plant fluoride emissions shall not exceed 10.29 tons per year.

3. Upon completion of construction of the additional 1800 ft² filter and additional scrubber, the maximum process input rate for the system will be 139.0 tons per hour (TPH) of P_2O_5 (or 450 TPH dry rock with a P_2O_5 content of 30.9%). Until that time, the maximum process input rate for present two-filter system with existing scrubbers shall be 126 TPH P_2O_5 .

4. After construction is completed, during maintenance periods for the new 1800 ft² filter the Prayon reactor may discharge to the existing 950 ft² filter. However, during such periods, the process input rate for the entire system will be limited to 126 TPH P_2O_5 .

5. The permittee shall install a monitoring device for the new scrubber which will continuously measure and permanently record the total pressure drop across scrubber system. The monitoring device shall have an accuracy of $\pm 5\%$ over its operating range.

PERMITTEE:
Gardinier, Inc.

DRAFT

Permit Number: AC 29-186726
Expiration Date: June 30, 1993

SPECIFIC CONDITIONS:

6. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

7. Within 30 days after completion of construction, compliance testing for the phosphoric acid plant must be performed.

8. An application for an operation permit must be submitted to the EPCHC office and the Southwest District office at least 90 days prior to the expiration date of the construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this _____ day
of _____, 1990

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management