

Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

February 6, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Enclosed is Permit Number AC 29-186726 to Gardinier, Inc. to construct a 1800 ft² phosphoric acid filter with fume scrubber at the facility in Riverview, Hillsborough County, Florida.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on 2-7-91 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.

Hopi Baker
(Clerk)

2-7-91
(Date)

copies furnished to:

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

Final 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

February 1, 1991

Final Determination

The Technical Evaluation and Preliminary Determination for Gardinier, Inc. to construct a 1800 ft² phosphoric acid filter with fume scrubber at the facility in Riverview, Hillsborough County, Florida, was distributed on January 4, 1991.

Copies of the evaluation were available for public inspection at the Department's offices in Tampa and Tallahassee, and at the Environmental Protection Commission of Hillsborough County (EPCHC). Public notice of the Department's intent to issue a construction permit in accordance with Section 403.815, F.S., and DER Rule 17-103:150, F.A.C., was published in a newspaper of general circulation in the Riverview area (The Tampa Tribune) on January 11, 1991. No petitions for an administrative hearing pursuant to Section 120.57, F.S., were received. On January 18, 1991, comments were received from the EPCHC. They are as follows:

1. Comment: This facility is subject to the New Source Performance Standards of 40 CFR 60 Subpart T as well as the proposed modification. As such the project is subject to the notification and record keeping requirements of 40 CFR 60.7, the performance test requirements of 40 CFR 60.8 and the monitoring requirements of 40 CFR 60.13. These requirements should be spelled out in the construction permit's specific conditions.

Response: These requirements have been added as suggested, and replace draft Specific Condition No. 7.

2. Comment: Specific Conditions 1 and 2 set a hollow emission limit. They should read:
 1. Pursuant to 40 CFR 60.202, the permittee shall not allow fluoride emissions in excess of 0.02 pounds per ton of equivalent P₂O₅ feed up to a maximum of 2.35 pounds per hour.
 2. Pursuant to Section 17-2.520, F.A.C., the maximum allowable increase in fluoride emissions associated with this modification shall not be equal to or greater than 3 tons per year. This modification sets a fluoride emission cap on the facility of 10.29 tons per year. Compliance with this limitation shall be ensured, in part, by limiting the P₂O₅ input to 12.18 million tons for any twelve month period (139 tons per hour x 8760 hours per year).

Response: 1. Technically, if for example, this source of fluoride was to shut down for six months during a year due to economic conditions and Gardinier wanted to emit 2.78 pounds of fluoride per hour during the remaining six months, they would still be in compliance with the 0.02 pounds of fluoride per ton of P₂O₅ input limitation and the 10.29 tons F per year limitation (139 tons P₂O₅ input/hr x 0.02 lb F/ton = 2.78 lbs F/hr; 2.78 lbs F x 4380 hrs/yr x 1/2000 ton/lbs = 6.09 tons/year) However, it is understandable that EPCHC would like

to have an hourly limitation on fluoride emissions in order to determine if the required fluoride stack tests, which are one-hour in length, show the source to be in compliance with the annual limitation as projected from the hourly emission rate during the test conditions. For this reason, the 2.35 pounds fluoride per hour limitation has been added to the permit conditions.

2. Specific Condition No. 2 of the draft permit already states that, to prevent the necessity of a PSD review, the annual phosphoric acid plant fluoride emissions shall not exceed 10.29 tons per year. Specific Condition No. 3 of the draft permit already limits the maximum process input rate to 139.0 TPH of P_2O_5 , therefore it would be redundant to list an annual limitation on P_2O_5 input as there is no limitation on annual operating hours.

3. Comment: Specific Condition No. 3 sets a maximum P_2O_5 input rate of 139.0 tons per hour for the entire system. We would prefer to see rates set on each reactor (which total 139.0) to insure that the reactor scrubbers are not taxed beyond their limit of operation.

Response: Specific Condition No. 3 has been amended to include an initial limitation of 100.8 tons per hour P_2O_5 input for the Dorrco reactor (91.6 TPH + 10%), and an initial limitation of 52.1 tons per hour P_2O_5 input for the Prayon reactor (47.4 TPH + 10%) as long as the total P_2O_5 input for the two reactors does not exceed 139.0 tons per hour after construction is completed. Gardinier may request permission to test an individual reactor at a higher input rate (as long as the other reactor input rate is reduced so that the combined input total does not exceed 139.0 TPH) to prove that the associated scrubber can handle the increased loading.

4. Comment: Specific Condition No. 7 does not specify the testing methods or procedures outlined in 40 CFR 60.204. This should be corrected.

Response: The testing methods and procedures outlined in 40 CFR 60.204 are already outlined in Specific Condition No. 9 of the still valid operating permit No. AO29-146224.

In addition, Specific Condition No. 4 was revised to clarify that during such periods when either one of the two 1800 ft² filters is shut down, the process input rate for the entire system will be limited to 126 TPH P_2O_5 .

The Final Action of the Department will be to issue the permit to construct as proposed in the Technical Evaluation and Determination except for the changes discussed above.



Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, 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.
10. EPCHC's comments received January 18, 1991.

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

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.

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. This permit also constitutes compliance with New Source Performance Standards.

14. The permittee shall comply with the following:

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

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.

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

SPECIFIC CONDITIONS:

1. 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 , up to a maximum of 2.35 pounds of fluoride per hour.

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 shall 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%). The initial limitation of feed into the Dorrco reactor shall be 100.8 TPH P_2O_5 input (91.6 TPH +10%), and the initial limitation of feed into the Prayon reactor shall be 52.1 TPH P_2O_5 input (47.4 TPH +10%), as long as the total combined P_2O_5 input for the two reactors does not exceed 139.0 tons per hour. After construction is completed, the permittee may request permission to test an individual reactor at a higher input rate (as long as the other reactor input rate is reduced so that the combined total does not exceed 139.0 TPH) to prove that the associated scrubber can handle the increased loading. Until the construction of the new filter and scrubber are completed, the maximum process input rate for present two-filter system with existing scrubbers shall be 126 TPH P_2O_5 .

PERMITTEE:
Gardinier, Inc.

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

SPECIFIC CONDITIONS:

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 when either one of the two 1800 ft² filters is shut down, the process input rate for the entire system will be limited to 126 TPH P₂O₅.

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

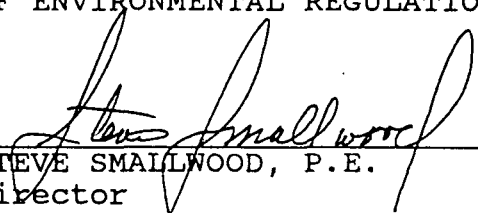
6. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

7. The facility is subject to the New Source Performance Standards of 40 CFR 60 Subpart T as well as the proposed construction modification. As such, the project is subject to the notification and record keeping requirements of 40 CFR 60.7, the performance test requirements of 40 CFR 60.8, and the monitoring requirements of 40 CFR 60.13.

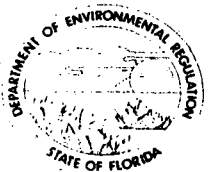
8. An application for an operation permit must be submitted to the EPCHC office and the Southwest District office at least 90 days prior to the expiration date of the construction permit, or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation 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 6th day
of February, 1991

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



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



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Steve Smallwood
FROM: Clair Fancy *CF*
SUBJECT: Gardinier, Inc. Phosphoric Acid Filter and Fume Scrubber
DATE: February 5, 1991

Attached, for your review and signature, is final construction permit no. AC 29-186726 for Gardinier's third phosphoric acid filter with fume scrubber. Comments were received by EPCHC but there were no requests for an administrative hearing.

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CAF -

OK

who did the one?

He
2-6-91