

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

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. Henk Mathot
Gardinier, Inc.
P. O. Box 3269
Tampa, FL 33601

February 3, 1989

Enclosed is construction permit No. AC 29-156206 to construct a phosphoric acid clarifier/storage tank at your facility near Tampa. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this 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 permit is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

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

Copy furnished to:

D. Buff, P.E.
B. Thomas, SW District
J. Campbell, EPCHC
E. O. Morris, Gardinier

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on February 6, 1989.

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 Wise February 6, 1989
Clerk Date

Final Determination

Gardinier, Inc.
Hillsborough County

Phosphoric Acid Clarifier/Storage Tank
Permit No. AC 29-156206

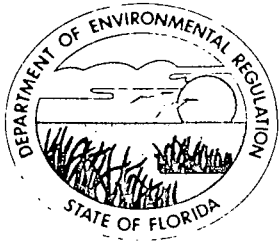
Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting

January 31, 1989

Final Determination

The construction permit application has been reviewed by the Department. Public Notice of the Department's Intent to Issue was published in the Tampa Tribune on January 12, 1989. The Technical Evaluation and Preliminary Determination were available for public inspection at the DER's Southwest District office in Tampa, the Environmental Protection Commission of Hillsborough County, and the Bureau of Air Quality Management office in Tallahassee.

No comments were received during the public notice period. The final action of the Department will be to issue the construction permit as drafted.



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

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

Permit Number: AC 29-156206
Expiration Date: 08/31/90
County: Hillsborough
Latitude/Longitude: 27°51'30"N
82°23'57"W
Project: Phosphoric Acid
Clarifier/Storage Tank

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 construction of a phosphoric acid clarifier/storage tank 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°51'30"N by 82°23'57"W and 362.6 km E and 3082.5 km N, respectively.

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

Attachment:

1. Application to Construct Air Pollution Sources, DER form 17-1.202(1), received on October 7, 1988.

PERMITTEE: Gardinier, Inc.

Permit Number: AC 29-156206

Expiration Date: 08/31/90

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 therefor 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 29-156206

Expiration Date: 08/31/90

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 non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE: Gardinier, Inc.

Permit Number: AC 29-156206
Expiration Date: 08/31/90

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 29-156206

Expiration Date: 08/31/90

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. No specific limit for fluoride shall be required due to the low level of potential emissions and the impracticality of sampling combined exhaust streams.

2. As a substitute for a compliance test, an inspection shall be conducted by the Environmental Protection Commission of Hillsborough County (EPCHC) to confirm that the clarifier/storage tank and washbox are enclosed and ducted to the No. 4 phosphoric acid plant scrubber. The inspection shall be conducted within 30 days after the clarifier/storage tank is placed in operation.

PERMITTEE: Gardinier, Inc.

Permit Number: AC 29-156206
Expiration Date: 08/31/90

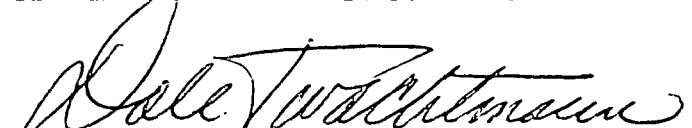
SPECIFIC CONDITIONS:

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

4. An application for an operation permit must be submitted to the DER's Southwest District office and the EPCHC at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit an application, the appropriate 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. 17-4.220).

Issued this 2 day
of February, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary

Final Determination

I. Applicant

Gardinier, Inc.
Tampa Chemical Plant
Post Office Box 3269
Tampa, Florida 33601

II. Location

The proposed modification is located approximately 8 km south of the city of Tampa at the intersection of U.S. Highway 41 and Riverview Drive. The UTM coordinates are: Zone 17, 362.9 km East and 3082.5 km North.

III. Project Description

The applicant proposes to modify its existing phosphate processing plant to increase production capacity of P_2O_5 approximately 20 percent (600,000 to 720,000 tons per year). Modification of its existing sulfuric acid plant will increase capacity from 1380 tons/day to 1750 tons/day of sulfuric acid.

Further, the applicant proposes to construct a new 50 ton/hour diammonium phosphate production unit.

In addition, conversion of the process from dry rock to wet rock and shut down of some existing facilities will accompany the modification.

These changes are summarized in Table 1.

IV. Source Impact Analysis

Table 2 summarizes the total potential to emit (uncontrolled) from the proposed modification. The proposed modification has the potential to emit greater than 100 tons per year of particulates (TSP), sulfur dioxide (SO_2), acid mist, and fluorides (F). Therefore, in accordance with the provisions of Title 40 Code of Federal Regulations Part 52.21 (40 CFR 52.21) promulgated June 19, 1978, a Prevention of Significant Deterioration (PSD) review is required for each of these pollutants. Nitrogen oxides (NO_x) and other regulated pollutants are not subject to PSD review because potential emissions increase

by less than 100 tons per year. Full PSD review consists of:

- 1) Control Technology Review
- 2) Air Quality Review
 - a) Impact upon Ambient Air Quality
 - b) Impact upon Increment
 - c) Impact upon soils, visibility and vegetation
 - d) Impact upon class I areas
- 3) Growth Analysis

Table 3 summarizes allowable emissions and the various categories of changes that determine the level of PSD review required under the regulations. Each type of facility and each pollutant is classified.

Line E of Table 3 shows that each pollutant has an increased allowable emissions (without credit for reduction elsewhere at the source) of less than 50 tons per year. With no limits placed upon operating time, 50 tons per year is more restrictive than the additional 100 pounds per hour or 1000 pounds per day criteria. Therefore, consistent with the provisions of 40 CFR 52.21(j) and (k), PSD review is limited to:

- 1) Ensuring compliance with State Implementation Plans (SIP) and Federal Regulations (40 CFR Parts 60 and 61), and
- 2) Impacts upon Class I areas and upon areas of known increment violation.

It should be noted that the application was reviewed under the Partial Stay of PSD Regulation, published February 5, 1980 and the proposed revisions of the PSD regulations referenced in that partial stay. It was determined that the exemption outlined in the partial stay does not apply and that the proposed modification is subject to review under existing PSD regulations because:

- 1) An existing oil fired standby boiler with a rated capacity of 100,000 pounds of steam per hour (=133 million Btu per hour) establishes the existing source as a major stationary source of nitrogen oxides as defined (greater than 100 tons per year potential to emit) in the September 5, 1979 proposed revised PSD regulations, and
- 2) The proposed modification would significantly (greater than 10 tons/year) increase allowable emissions of nitrogen oxides.

The proposed modification therefore is subject to review under the provisions and requirements of the existing PSD regulations (promulgated 6/19/78).

TABLE 1
PROJECT DESCRIPTION
SUMMARY

Facility	Operating Capacity Pounds/Hour
A. New or Reconstructed	
1. No. 4 Phosphoric Acid Plant	120,000 ^a
2. No. 5 Ammonium Phosphate Plant	46,000 ^a
3. New Wet Rock Mill	
B. Modified (After)	
1. No. 3 Phosphoric Acid Plant	93,000 ^a
2. No. 7 Sulfuric Acid Plant	145,833 ^b
3. No. 10 Wet Rock Mill	
4. No. 11 Wet Rock Mill	
5. No. 12 Wet Rock Mill	
6. Gypsum/Cooling/Recycle Ponds	207 acres ^d
C. Modified (Before)	
1. No. 3 Phosphoric Acid Plant	93,000 ^a
2. No. 7 Sulfuric Acid Plant	115,000 ^b
3. No. 10 Dry Rock Mill	87,150 ^c
4. No. 11 Dry Rock Mill	73,000 ^c
5. No. 12 Dry Rock Mill	114,800 ^c
6. Gypsum/Cooling and Surge Ponds	94 and 163 acres
D. Existing (To Be Shut Down)	
1. No. 6, 7, 8 Rock Mill	261,450 ^c
2. 68 PBL Rock Unloading and Storage	568,000 ^c
3. Rock Transfer Airslider	
a. South No. 2	27,420 ^c
b. North No. 2	27,420 ^c
c. South No. 3	9,860 ^c
d. Center No. 3	9,860 ^c
e. North No. 3	9,860 ^c
f. No. 3 Bin	9,860 ^c
4. Normal Superphosphate Plant	30,400 ^c
5. No. 2 Phosphoric Acid Plant	68,421 ^a
6. No. 2 Filter Building	
7. No. 3 Filter Building	
8. Spray Cooling	effective 37 acres

^a Equivalent P_2O_5 feed.

^b 100% H_2SO_4 Product.

^c Input Process Weight.

^d Surge pond is to be bermed (reducing area by ~13 acres) and connected to the gypsum/cooling ponds for continuous recycle. Spray cooling discontinued (item D.8.)

TABLE 2
APPLICABILITY SUMMARY

<u>Facility</u>	<u>Potential to Emit (Uncontrolled), Tons/Year</u>				
	<u>TSP</u>	<u>SO₂</u>	<u>Acid Mist</u>	<u>NO_x</u>	<u>Fluoride</u>
A. New	920	161	(a)	28.5	912
B. Modified (After)	(b)	3193(c)	543(d)	(a)	215 (e)
C. Modified (Before)	(b)	3119(c)	429(d)	(a)	214 (f)
A + B - C (g)	920	235	114	28.5	913

(a) Pollutant not emitted

(b) Fugitive TSP emissions from gypsum piles are not quantified.
Modification assumed not to effect a change.

(c) Control is integral part of process. Potential assumed equal to allowable under State permit before modification. Potential after modification is increased proportional to capacity increase.

(d) Based on AP42 Table 5.17.2 as 1.7 pounds of acid mist per ton of 100% H₂SO₄.

(e) Includes 105.7 tons/year from gypsum/cooling/recycle ponds. Based upon an emission factor of 4.3 pounds of fluoride emitted per acre - day over 112.8 acres required for cooling (within 1⁰F of ambient) and an emission factor of 1.0 pounds of fluoride emitted per acre - day over the remaining 94.2 acres (approximately ambient) of the total 207 acres.

(f) Includes 104.4 tons/year from gypsum/cooling and separate surge ponds. Based upon 94 acres @ 4.3 for cooling and 163 acres @ 1 ambient surge pond.

(g) Source is subject to PSD review for the subject pollutant if potential increases by 100 tons/year or more. (No credit for reduction elsewhere.)

A. Control Technology Review

Although these facilities are exempt from a Best Available Control Technology (BACT) review they are required to meet all applicable emission limits and standards of performance under the Florida State Implementation Plan (SIP) and Federal Regulations (40 CFR Parts 60 and 61). Several of the facilities proposed for construction are subject to Federal New Source Performance Standards and/or requirements under the Florida State Implementation Plans. These requirements are referenced in Table 4 which summarizes the allowable emissions limits for the proposed new and modified facilities.

The limitation upon sulfur dioxide emission from No. 5 Ammonium Phosphate Plant was proposed by the applicant and is a condition of this permit to ensure the validity of the exemption from a BACT determination during this PSD review.

To achieve these limits the applicant proposes to use the following controls:

1) No. 5 Ammonium Phosphate Plant

Fluoride emissions are controlled by two stage scrubbers. These scrubbers will also reduce particulate, and ammonia emissions to less than 38 and 8 tons per year, respectively.

Sulfur dioxide emissions from the dryer are controlled by adsorption (70% reduction) onto the materials being dried and by limiting the sulfur content (2% sulfur) of the fuel oil. These assumed values shall be confirmed or adjusted in accordance with tested emission results.

2) Phosphoric Acid Plants

Fluoride emissions are controlled by a packed crossflow scrubber.

3) No. 7 Sulfuric Acid Plant

Sulfur dioxide emissions control will be improved by additional catalyst installed in the existing double absorption converter. Additional mist elimination and a new mist pad are also to be installed to control acid mist (and opacity).

Table 3

Applicability Summary - Controlled Emissions, Tons/year
(No Limits Upon Hours per Year)

Facilities	TSP	SO ₂	Acid Mist	NO _x	Fluoride
A. New or Reconstructed	43.8	43.8	(d)	28.5	11.3
B. Modified (After)	0 ^a	1279	47.9	(d)	109.6 ^b
C. Modified (Before)	321.1 ^a	2519	75.8	(d)	108.3 ^c
D. Increases from Modified	None	None	None	(d)	1.3
E. Increases New and Modified (A + D)	43.8	43.8	None	28.5	12.6
F. Existing (to be shut down)	728.8	(d)	(d)	(d)	12.4
G. Net Change from Proposed Construction (A + B - C - F)	-1006.1	-1196.2	-28.1	28.5	0.2

^aFugitive TSP emissions from gypsum piles are not quantified nor restricted by permit conditions, modification is not expected to cause change.

^bIncludes 105.7 tons/year emitted from gypsum/cooling/recycle ponds (see note (e) Table 2).

^cIncludes 104.4 tons/year emitted from gypsum cooling and surge ponds (see note (f) Table 2).

^dSpecific pollutant not emitted.

B. Class I Area Impact

The nearest Class I area is the Chassahowitzka National Wildlife Area located 90 km to the north. The impact upon this area is below significance with the emission of all PSD reviewed pollutants decreasing except the increase of .2 tons per year for fluorides. The majority of this .2 tons will be emitted from the gypsum and cooling pond which is a ground level source. Dispersion over 90 kilometers from a ground level source emitting .2 tons per year clearly will yield only insignificant impacts from this modification on the Class I area.

C. Impact Upon Areas of Known Increment Violation

No areas of known increment violation for TSP for SO₂ are known to be in the vicinity of the proposed modification. A portion of Hillsborough County is designated non-attainment for TSP; however the modification will not adversely impact this area as it results in a net reduction of allowable TSP emissions (1006.1 Tons/year).

V. Conclusions

EPA Region IV proposes a final determination of approval for construction of the modification to the Gardinier, Inc.'s Tampa Chemical Plant proposed in their application dated November 26, 1979 as amended by letter dated February 7, 1980. The conditions set forth in the permit are as follows:

- 1) The modification and the facilities constructed shall be in accordance with the capacities and specifications stated in the application. Specifically included are the initial operating capacities listed in Table 1 for new and modified facilities.

Any change in an operating capacity, in accordance with an appropriate condition (1 through 7), shall be allowable only after EPA Region IV has been notified of the proposed change (not less than two weeks nor more than three months prior to the actual change). The notification shall contain evidence that indicates the applicable emission limit should not be violated by the proposed capacity change. The notification shall provide for testing to verify compliance with the appropriate emission limit at the proposed operating rate. The performance testing shall be scheduled within 30 days after the proposed process

Table 4

Summary of Allowable Emission Limits

Facility Pollutant	Basis for Requirement	Emission Limits Standard	lbs/hr
No. 5 Ammonium Phosphate Plant (23 Tons/hour Maximum Equivalent P_2O_5 Feed)			
Fluorides	NSPS ^C Subpart V and Fla. SIP (AC29-26670)	0.06 ^{a,d}	1.38
Particulates	Fla. SIP (AC29-26670)	0.43 ^a	10
Sulfur dioxides	Proposed by Applicant	0.43 ^a	10
No. 3 Phosphoric Acid Plant (46.5 Tons/hour Maximum Equivalent P_2O_5 Feed)			
Fluorides	Fla. SIP (AC29-21345)	0.02 ^a	0.93
No. 4 Phosphoric Acid Plant (60 Tons/hour Maximum Equivalent P_2O_5 Feed)			
Fluorides	NSPS ^C Subpart T and Fla. SIP (AC29-21343)	0.02 ^{a, e}	1.2
No. 7 Sulfuric Acid Plant (73 Tons/hour Maximum 100% H_2SO_4 Production)			
Sulfur dioxide	Fla. SIP (AC29-21345)	4 ^b	291.7
Acid mist	Fla. SIP (AC29-21345)	0.15 ^b	10.9
Opacity	Fla. SIP (AC29-21345)	<10%	--

^aPounds of pollutant per ton of equivalent P_2O_5 Feed.

^bPounds of pollutant per ton of 100% H_2SO_4 produced.

^cStandards of Performance for New Stationary Sources (40 CFR Part 60).

^dContinuous monitoring of feed rate and scrubber pressure drop.

^eContinuous monitoring of SO_2 .

change occurs. EPA Region IV shall be notified at least 30 days prior to the performance testing to allow witnessing of the performance test.

- 2) Emissions of fluorides from the No. 5 Ammonium Phosphate Plant shall not exceed 1.38 pounds per hour. This emission limit is based on an operating rate of 23 tons per hour of equivalent P_2O_5 feed and a fluoride emission rate of 0.06 pounds per ton of equivalent P_2O_5 feed. At greater operating rates, fluoride emissions shall be less than 0.06 pounds per ton so that the limit of 1.38 pounds of fluorides per hour shall not be exceeded. At lesser operating rates the emissions of fluorides shall not exceed 0.06 pounds per ton of equivalent P_2O_5 feed.
- 3) Emissions of particulate from the No. 5 Ammonium Phosphate Plant shall not exceed 10 pounds per hour. This limit is based on an operating rate of 23 tons per hour of equivalent P_2O_5 feed and a particulate emission rate of 0.43 pounds per ton of equivalent P_2O_5 feed. At greater operating rates, particulate emissions shall be less than 0.43 pounds per ton so that the limit of 10 pounds of particulate per hour shall not be exceeded. At lesser operating rates the emissions of particulate shall not exceed 0.43 pounds per ton of equivalent P_2O_5 feed.
- 4) Emissions of sulfur dioxide from the No. 5 Ammonium Phosphate Plant shall not exceed 10 pounds per hour. This limit is based on an operating rate of 23 tons per hour of equivalent P_2O_5 feed and a sulfur dioxide emission rate of 0.43 pounds per ton of equivalent P_2O_5 feed. At greater operating rates, sulfur dioxide emissions shall be less than 0.43 pounds per ton so that the limit of 10 pounds of particulate per hour shall not be exceeded. At lesser operating rates the emissions of sulfur dioxide shall not exceed 0.43 pounds per ton of equivalent P_2O_5 feed. The sulfur content of the oil used during compliance testing shall be recorded and the maximum allowable fuel sulfur content shall be calculated based upon the test results and the allowable sulfur dioxide limit above.

- 5) Emissions of fluorides from the No. 3 Phosphoric Acid Plant shall not exceed 0.93 pounds per hour. This emission limit is based on an operating rate of 46.5 tons per hour of equivalent P_2O_5 feed and a fluoride emission rate of 0.02 pounds per ton of equivalent P_2O_5 feed. At greater operating rates fluoride emissions shall be less than 0.02 pounds per tons so that the limit of 0.92 pounds of fluorides per hour shall not be exceeded. At lesser operating rates the emissions of fluorides shall not exceed 0.02 pounds per ton of equivalent P_2O_5 feed.
- 6) Emissions of fluorides from the No. 4 Phosphoric Acid Plant shall not exceed 1.2 pounds per hour. This emission limit is based on an operating rate of 60 tons per hour of equivalent P_2O_5 feed and a fluoride emission rate of 0.02 pounds per ton of equivalent P_2O_5 feed. At greater operating rates fluoride emissions shall be less than 0.02 pounds per ton so that the limit of 1.2 pounds of fluorides per hour shall not be exceeded. At lesser operating rates the emissions of fluorides shall not exceed 0.02 pounds per ton of equivalent P_2O_5 feed.
- 7) Emissions of sulfur dioxide and acid mist from the No. 7 Sulfuric Acid Plant shall not exceed 291.7 and 10.9 pounds per hour respectively. These limits are based on an operating rate of 72.9 tons per hour of 100% sulfuric acid produced, a sulfur dioxide emission rate of four pounds per ton of 100% sulfuric acid produced, and an acid mist emission rate of 0.15 pounds per ton of 100% sulfuric acid produced. At greater operating rates sulfur dioxide emissions shall be less than 4 pounds per ton and acid mist emissions shall be less than 0.15 pounds per ton so that the limits of 291.7 pounds of sulfur dioxide per hour and 10.9 pounds of acid mist per hour shall not be exceeded. At lesser operating rates, the emissions of sulfur dioxide and acid mist shall not exceed 4 and 0.15 pounds, respectively, per ton of 100% sulfuric acid produced.

- 8) Visible emissions from No. 7 Sulfuric Acid Plant shall be less than 10% opacity as measured by EPA standard Method 9.
- 9) The mass flow rate of daily equivalent P_2O_5 feed and the total pressure drop across the scrubbing systems shall be monitored for the No. 5 Diammonium Phosphate Plant, and No. 3 and 4 Phosphoric Acid Plants in accordance with the provisions of 40 CFR 60 subparts V and T (Standards of Performance for Phosphate Fertilizer Industry), respectively.
- 10) Sulfur dioxide emissions of the No. 7 Sulfuric Acid Plant shall be continuously monitored to show compliance with condition 7.
- 11) The No. 5 Ammonium Phosphate Plant and the No. 4 Phosphoric Acid Plant shall comply with all specific provisions of the NSPS subparts cited (Table 4) and also all applicable general provisions of that regulation set forth in 40 CFR 60 subpart A.
- 12) Compliance with all emissions limits shall be determined by performance tests. Performance tests shall be scheduled in accordance with the General Conditions attached and the provisions of 40 CFR 60.8. The reference methods of 40 CFR 60 Appendix A, except as provided for in 40 CF 60.8(b), shall be used to determine compliance as follows:
 - a) Method 5 for concentration of particulate matter and associated moisture content,
 - b) Method 1 for sample and velocity traverses,
 - c) Method 2 for volumetric flow rate,
 - d) Method 3 for gas analysis,
 - e) Method 9 for visible emissions,
 - f) Method 6 for the concentration of SO_2 (from DAP plant),
 - g) Method 8 for the concentration of SO_2 and acid mist (from H_2SO_4 plant), and
 - h) Method 13A or 13B for the concentration of total fluorides and the associated moisture content.

The processes shall operate within 10 percent of maximum capacity during sampling.

- 13) As the new facilities are started up for test or continued operation the total emission for the total source shall be controlled by shutdown or reductions in process rates, such that present permitted or ultimate allowable limits are not exceeded.
- 14) All facilities planned for shutdown (in accordance with the application and listed in Table 1) shall cease operation as soon as feasible. Final shutdown of these facilities shall be completed within 90 days of startup of individual replacement facilities. Shutdown of these facilities shall be verified by voiding or deletion from appropriate Florida State permits. Notification of such compliance shall be made to EPA Region IV.
- 15) The source will comply with the requirements of the attached General Conditions.

GENERAL CONDITIONS

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.
2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.
3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within forty-five (45) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.
4. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.
5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall provide the permitting authority with the following information in writing within five (5) days of such conditions:
 - (a) description of noncomplying emission(s),
 - (b) cause of noncompliance,
 - (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,
 - (d) steps taken by the permittee to reduce and eliminate the noncomplying emission,and
 - (e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.
7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority.
8. The permittee shall allow representatives of the State environmental control agency or representatives of the Environmental Protection Agency, upon the presentation of credentials:
 - (a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;
 - (b) to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;
 - (c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;
 - (d) to sample at reasonable times any emission of pollutants;and
 - (e) to perform at reasonable times an operation and maintenance inspection of the permitted source.
9. All correspondence required to be submitted by this permit to the permitting agency shall be mailed to the:

Chief, Air Facilities Branch
Air and Hazardous Materials Division
U.S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30308
10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.