



# Department of Environmental Protection

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Lawton Chiles  
Governor

Northwest District  
160 Governmental Center  
Pensacola, Florida 32501-5794

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FEB 05 1997

Virginia B. Wetherell  
Secretary

**PERMITTEE:**

Air Products and Chemicals,  
Incorporated

AIRS I.D. Number: 1130004  
Air Permit Number: 1130004-008-AC  
Emission Units: 008, 026  
Date of Issue: January 31, 1997  
Expiration Date: January 31, 2002  
County: Santa Rosa  
Project: Ammonia Plant Production Rate Increase

This permit is issued under the provisions of Section 403.087, Florida Statutes, and Florida Administrative Code Rules 62-296, 62-297 and 62-4. The above named applicant, hereinafter called 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:

Construction permit to increase the production rate of the Ammonia Plant, permitted under AO57-179653, extended by FAC Rule 62-210.300(2)(c) for Title V facilities.

Ammonia Plant production rate capacity is increased from 22,000 pounds per hour to 25,834 pounds per hour of anhydrous ammonia. Anhydrous ammonia is synthesized by reacting hydrogen with nitrogen at a molar ratio of 3:1, then compressing the gas and cooling it to -33°C. Nitrogen is obtained from air, while hydrogen is obtained from the catalytic steam reforming of natural gas. Sulfur is removed from the natural gas feed with a zinc oxide desulfurizer catalyst, a process improvement from the carbon bed desulfurizers.

Air pollutants are emitted from the following process steps: combustion flue gases from fuel burned in the primary reformer (steam and natural gas, EU 008), exhausts from the four natural gas engines (EU 026) driving the compressors, synthesis and recovery vents used during startup, shutdown and for other intermittent process requirements and during periods when the zinc oxide desulfurizer catalyst is changed out (carbon bed desulfurizers will be used).

With the use of the zinc oxide desulfurizer catalyst and the production rate increase, the overall net emissions of PM<sub>10</sub> are increased by 0.5 tons per year, NO<sub>x</sub> emissions are increased by 17.7 tons per year, VOC emissions decrease by 380.2 tons per year, CO emissions decrease by 728.4 tons per year and SO<sub>x</sub> emissions decrease by 1.0 ton per year.

Located south of U.S. Highway 90, east of Pace, Santa Rosa County.

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## SPECIFIC CONDITIONS:

### General

1. The attached General Conditions are part of this permit. [FAC Rule 62-4.160]

### Construction

2. The Department shall be notified and prior approval shall be obtained of any changes or revisions made during the life of this permit. Projects beyond one year require annual status reports. [FAC Rule 62-4.030]

### Operation

3. The maximum allowable operating rate is 25,834 pounds of anhydrous ammonia (NH<sub>3</sub>) produced per hour. This is the operating rate at which compliance with standards shall be demonstrated. This maximum operating rate is a function of ambient temperature and catalyst activity. The Permittee shall notify the Department in writing as to the date and time that the operating rate reaches 25,834 pounds of anhydrous ammonia produced per hour. [FAC Rule 62-4.070, FAC Rule 62-296.320(1)(a)]
4. The Ammonia Plant may operate continuously (8760 hours per year). [FAC Rule 62-4.070 and construction application]

### Emissions

5. Visible emissions shall not exceed 20% opacity except for up to two minutes in any one hour at 40% opacity. [Permit AO57-179662 and 40CFR 60.18]

### Testing

7. Visible emissions tests (five tests: reformer and four engines) are required to show compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. Tests shall be conducted in accordance with EPA Method 9. Testing shall be conducted while operating at 90-100% of rated capacity. Such tests shall be conducted within 60 days of the operating rate increase. The Department shall be notified at least 15 days prior to testing to allow witnessing. More frequent tests may be required if Department inspections show a need for such tests. [Permit AO57-179662 and 40CFR 60.18]

### Administrative

8. An annual operation report [DEP Form 62-210.990(5)] shall be submitted by March 1st of each year. A copy of the form and instructions may be obtained from the Department of Environmental Protection, Northwest District, Air Resources Management Program, (904) 444-8364. [FAC Rule 62-210.370]

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SPECIFIC CONDITIONS:

9. A major Air Pollution Source Annual Operation Fee Form [DEP Form 17-213.900(11)] must be completed and submitted with appropriate fee between January 15 and March 1 of each year. If the Department has not received the fee payment by March 1, the Department shall impose, in addition to the fee, a penalty of 50 percent of the amount of the fee, plus interest on such amount computed in accordance with s.220.807, Florida Statutes. The Department may revoke any major air pollution source operation permit if it finds that the permit holder has failed to pay timely and required annual operation license fee, penalty or interest. The attached form shall be reproduced by the permittee and used for future annual submittals. The completed form and appropriate fees must be submitted to the Department of Environmental Protection, Title V (Facility AIRS I.D. Number), 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. [FAC Rule 17-213]

10. The applicant shall retain a Professional Engineer, registered in the State of Florida, for the inspection of this project. Upon completion the engineer shall inspect for conformity to the permit application and associated documents and submit a revision to the Title V permit application no later than 180 days after the operating rate increase occurs. [FAC Rule 62-4.050 and 62-213.420(1)(a)5.]

11. The permanent source identification numbers for these point sources are:

- 1130004008 Reformer
- 1130004026 Four Gas Fired Engines

Please cite the appropriate number(s) on all test reports and other correspondence specific to any permitted point source(s). [FAC Rule 62-297.570]

12. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (904) 444-8364, day or night, and for emergencies involving a significant threat to human health or the environment is (904) 413-9911. For routine business, telephone (904) 444-8364 during normal working hours. [FAC Rule 62-210.700]

Expiration Date:

Issued this 31<sup>st</sup> day of JAN, 1997.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



ED K. MIDDLESWART, P.E.  
Air Program Administrator

## 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 403.141, 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 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 acknowledgment 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.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are 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 this permit;
  - b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and,

GENERAL CONDITIONS:

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 provide the Department with the following information:

- a. A description of and cause of noncompliance; 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. 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.

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 Florida Rules of Civil Procedure and appropriate 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 62-4.120 and 62-730.300, as applicable. The permittee shall be liable for any noncompliance 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. 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.

GENERAL CONDITIONS:

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.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurement;
- the person responsible for performing the sampling or measurement;
- 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.

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 the 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.