



FILE COPY

Department of Environmental Protection

Lawton Chiles
Governor

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Virginia B. Wetherell
Secretary

I.D. Number: 0330040
Air Permit Number: 0330040-003-AC
Date of Issue: November 25, 1996
Expiration Date: October 1, 2001
Amended: February 7, 1997
County: Escambia
Project: Nitric Acid Plant E Modifications

L. F. Hebert
Plant Manager
Monsanto Chemical Company
Post Office Box 97
Gonzalez, Florida 32560-0097

Dear Mr. Hebert:

This is in response to the letter from Bruce P. McLeod dated January 28, 1997 requesting changes in the construction permit for Nitric Acid Plant E Modifications at your Pensacola, Florida facility.

By this letter, Nitric Acid Plant E Air Construction Permit Number: 0330040-003-AC, source I.D. Number 0330040042 shall be amended as follows to allow additional time for test scheduling.

Change the fourth sentence, first paragraph of Specific Condition 17:

From: Such tests shall be scheduled, at a minimum, in accordance with the table below annually before March, or within 30 days after construction is completed of a construction phase when an increase in operating rate is desired.

To: Such tests shall be scheduled, at a minimum, in accordance with the table below, annually before March, or within 90 days after construction is completed or when an increase in operating rate is desired.

All other permit conditions remain in effect. This letter shall be attached to and become a part of air operating permit 0330040-003-AC.

Sincerely,

Ed K. Middleswart, P.E.
Air Program Administrator

EKM:asc
cc: DEP Division of Air Resources Management, Tallahassee

monamnit.doc



Department of Environmental Protection *Major*

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PERMITTEE:

Monsanto Company

AIRS I.D. Number: 0330040
Air Permit Number: 0330040-003-AC
Emission Units: 042
Date of Issue: November 25, 1996
Expiration Date: October 1, 2001
County: Escambia
Project: Nitric Acid Plant E Modifications

This permit is issued under the provisions of Section 403.087, Florida Statutes, and Florida Administrative Code Rules 62-4, 62-212, 62-296, and 62-297. 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 of Nitric Acid Plant E Modifications: The phased modifications are to increase production capacity by installing or modifying process equipment while holding emissions at or below current levels by operating parameters and/or use of a Selective Catalytic Reduction (SCR) NO_x abatement device. The first phase of expansion will include construction of the SCR unit. Following expansion phases will include installation or modification of other process equipment and instrumentation to debottleneck or enhance the existing production capacity.

In the synthesis process, ammonia is oxidized in the presence of a catalyst to form NO_x which is then converted to HNO₃ by a reaction with water.

Construction shall be consistent with the construction permit application signed August 12, 1996 and letters of September 20, 1996 and October 24, 1996.

Located: 3000 Old Chemstrand Road, Gonzalez

0330040-003-AC

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"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

PERMITTEE:

Monsanto Company

AIRS I.D. Number: 0330040

Air Permit Number: 0330040-003-AC

Emission Units: 042

Date of Issue: November 25, 1996

Expiration Date: October 1, 2001

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 upon commencement of construction, and within 15 days of completion of construction. Annual status reports shall be provided no later than March 1 of each year reviewing the status of construction during the preceding year up to completion of the project. [FAC Rule 62-4.070]
3. The Department shall be notified and prior approval shall be obtained of any changes or revisions made during construction. [FAC Rule 62-4.030]
4. Satisfactory ladders, platforms and other safety devices as well as necessary parts shall be provided/made available to facilitate an adequate inspection program.
[FAC Rule 62-297.310(6)]

Operation

5. All requirements of 40 CFR 60, subpart G, Standards of Performance for Nitric Acid Plants, applicable to this facility shall be adhered to. [FAC Rule 62-204.800(7)(b)8, 40 CFR 60.70 and AC17-2179 amended November 30, 1988]
6. The Nitric Acid Plant E may operate continuously, i.e., 8760 hrs/yr, based on 24 hours/day, 7 days/week and 52 weeks per year. [FAC Rule 62-4.070 and AC17-2179 - amended November 30, 1988]
7. The maximum allowable operating rate is 1500 tons of 100% nitric acid produced per day. This is the operating rate at which compliance with standards shall be demonstrated. Permittee may request a higher operating rate after compliance testing demonstrates that the maximum allowable emissions rate for NOx is not exceeded at the higher operating rate. [FAC Rule 62-4.070, AC17-2179 amended November 30, 1988, construction permit application signed August 12, 1996 and letter of October 24, 1996]

0330040-003-AC

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limited to
1274.7 TRD
per 2/18/98
stock test

PERMITTEE:

Monsanto Company

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Expiration Date: October 1, 2001

SPECIFIC CONDITIONS:

8. When the SCR Unit is not employed, the absorber column chilled water shall be monitored and water flow shall be maintained between 200 gal/min and 440 gal/min, and water temperature shall be maintained between 32 °F and 54 °F. [FAC Rule 62-4.070, letter of June 14, 1988, and letters of September 20, 1996 and October 24, 1996]
9. Records of daily production, hours of operation, absorber column operating parameters and continuous emission monitor maintenance (down time, calibrations, and adjustments) shall be maintained and be available for inspection by the Department. [FAC Rule 62-4.070 and AC17-2179 amended November 30, 1988]
10. The zero and span drift of the continuous emission monitor for NO_x shall be checked at least once daily, and adjustments shall be made to zero and span whenever they exceed 2% and 2.5%, respectively. This shall be done consistent with 40 CFR 60.13(d). [FAC Rule 62-204.800(7)(b)8, 40 CFR 60.73(a)]
11. The Permittee shall develop and implement a plan to continuously monitor performance of the SCR Unit and ensure compliance with the emission limit. [FAC Rule 62-4.070] A draft of the plan shall be submitted to the Department for review within 90 days of issuance of this permit. As a minimum, the plan shall include the following:
- monitoring, logging and record keeping of operating parameters
 - development and use of operating parameters to monitor the SCR Unit's performance and to insure that emissions are within the appropriate limits.

A finalized plan shall be submitted for Department approval within 90 days of startup of the SCR unit.

Emissions

12. The maximum allowable annual emission rate for NO_x is 2.72 lb/Ton of 100% HNO₃. The permittee chose this stricter NO_x emissions standard in 1988 to avoid additional permit review. The maximum allowable annual NO_x emissions are 360 T NO_x/yr based on a 365 day rolling total amount. [FAC Rule 62-4.070, permittee request and AC17-2179 amended November 30, 1988, letter of October 24, 1996]
13. All reports of excess emissions shall be submitted to the Northwest District Office of the Department with copies provided to the NSPS Coordinator, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32301-8241. [FAC Rule 62-204.800(7)(b)8, 40 CFR 60.7(c)]

PERMITTEE:

Monsanto Company

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SPECIFIC CONDITIONS:

206 ppm
per 2/18/98 test
Emissions shall not exceed 10% opacity. [FAC Rule 62-204.800(7)(b)8, 40
2)]

210 ppm
Conversion factor established in accordance with 40 CFR 60.73 is 0.0125 lbs
NOx/ton nitric acid per ppm. As such, the emission standard of 2.72 lbs/ton is equivalent
to 218 ppm. The conversion factor shall be reevaluated during each reference method
performance test, and a written report included in the reference method test report.
[FAC Rule 62-4.070 and AC17-2179 - amended November 30, 1988, FAC Rule 62-
204.800(7)(b)8, 40 CFR 60.73(b), Construction permit application signed August 12,
1996]

16. No objectionable odors shall be allowed off plant property. If the Department
determines the facility is emitting objectionable odors, the Permittee shall submit an odor
remediation plan within 45 days of receipt of written notification from the Department.
The plan shall include, but not be limited to, dispersion modeling analysis, strategies to
reduce odorous chemicals utilization, and modifications of operating cycles, operating
methods and/or plant exhaust systems. [FAC Rule 62-296.320(2)]

Testing

17. Emissions tests are required to show compliance with the standards of the
Department. [FAC Rule 62-4.070] The test results must provide reasonable assurance
that the source is capable of compliance at the permitted maximum operating rate, or at a
desired new increased operating rate. [FAC Rule 62-297.310(2)] Tests shall be
conducted in accordance with the table below. [FAC Rule 62-204.800(7)(b)8, 40 CFR
60.74] Such tests shall be scheduled, at a minimum, in accordance with the table below
annually before March, or within 30 days after construction is completed of a construction
phase when an increase in operating rate is desired. The Department shall be notified at
least 15 days prior to testing to allow witnessing. Results shall be submitted to the
Department within 45 days after testing.

<u>Pollutant</u>	<u>Frequency</u>	<u>Test Method</u>
VE	Annually	DEP 9 (one half hour) *
NOx	Annually	EPA 7, 7A, 7B, 7C or 7D
NOx	Continuous	Continuous Emissions Monitor

The VE test shall be conducted during the method 7 NOx test runs. Test reports shall
comply with FAC Rule 62-297.570, Test Reports. The Department can require special
compliance tests in accordance with FAC Rule 62-297.340(2).

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Monsanto Company

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SPECIFIC CONDITIONS:

Test reports shall comply with F.A.C. Rule 62-297.310(8), Test Reports. Additionally, the compliance test report shall provide the following information on the air pollution control devices:

- a. General condition of equipment, noting any deficiencies or problems with the equipment which occur during testing.
- b. Normal operating parameters of the equipment and the actual operation parameters for each test run.

The Department can require special compliance tests in accordance with F.A.C. Rule 62-297.310(7)(b).

Other test methods and alternate compliance procedures may be used only after prior Departmental approval has been obtained in writing.

Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of rated capacity. If it is impractical to test at capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department. [FAC Rule 62-297.310(2)]

Administrative

18. An annual operating report for air pollutant emitting facility, DEP Form 62-210.990(5), shall be submitted by March 1 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(3)]

19. 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. An application for an operation permit [Form DEP 62-210.900(1), Long Form or 62-210.900(2), Short Form, as applicable] shall be submitted with the compliance test results and appropriate fee when applicable. These are to be submitted within 75 days of completion of construction. The permittee shall obtain an operating permit for this source before the expiration of this construction permit if the permittee desires to continue operation. [FAC Rule 62-4.050(3), FAC Rule 62-210.300(2)]

PERMITTEE:

Monsanto Company

AIRS I.D. Number: 0330040

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Emission Units: 042

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SPECIFIC CONDITIONS:

20. In accordance with F.A.C. Rule 62-213, a Major Air Pollution Source Annual Operation Fee Form [DEP Form 62-213.900(1) attached] 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 completed form and appropriate fees must be submitted to the Department of Environmental Protection, Title V Annual Emissions Fee, Cashiers Office, P.O. Box 3070, Tallahassee, Florida 32351-3070.

21. The emission unit covered by this permit is 0330040042. Please cite this number on all test reports and other correspondence specific to this permitted emission unit. [FAC Rule 62-297.310(8)]

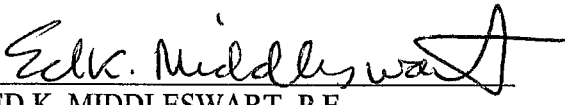
22. The Department telephone number for reporting problems, malfunctions or exceedances under this permit is (904) 444-8364, day or night, and for emergencies involving a significant threat to human health or the environment is (904) 413-9911. For routine business, telephone (904) 444-8364 during normal working hours. [FAC Rule 62-4.130]

Expiration Date:

October 1, 2001

Issued this 25th day of Nov.,
1996.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


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