

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
NOTICE OF PERMIT

In the matter of an  
Application for Permit by:

DER File No. AC 53-210886  
PSD-FL-186  
Polk County

Mr. C. M. Farris  
Farmland Hydro, L.P.  
P. O. Box 960  
Bartow, Florida 33830

Enclosed is Permit Number AC 53-210886 (PSD-FL-186) for the modification of the North GTSP/MAP/DAP Granulation Plant at the Green Bay phosphate fertilizer chemical complex on County Road 640 West near Bartow, Polk County, Florida, issued pursuant to Section(s) 403, Florida Statutes.

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



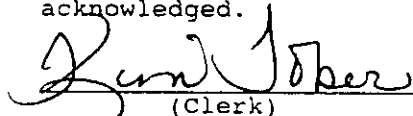
C. H. Fancy, P.E., Chief  
Bureau of Air Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400  
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 7-28-92 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,  
on this date, pursuant to  
§120.52(11), Florida Statutes,  
with the designated Department  
Clerk, receipt of which is hereby  
acknowledged.

  
(Clerk)

7-28-92  
(Date)

Copies furnished to:  
Bill Thomas, SWD  
Jewell Harper, EPA  
John Koogler, P.E.  
Chris Shaver, NPS

Final Determination

Farmland Hydro, L.P.  
Bartow, Polk County, Florida

North GTSP/MAP/DAP Granulation Plant Modification  
Permit No.: AC 53-210886 (PSD-FL-186)

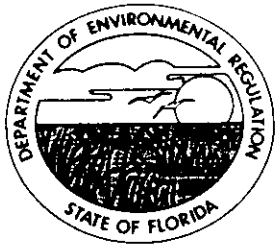
Department of Environmental Regulation  
Division of Air Resources Management  
Bureau of Air Regulation

July 24, 1992

## Final Determination

The Technical Evaluation and Preliminary Determination for the permit to construct (modify) the North GTSP/MAP/DAP Granulation Plant at the Green Bay phosphate fertilizer chemical complex that is located on County Road 640 West near Bartow, Polk County, Florida, was distributed on June 17, 1992. The Notice of Intent to Issue was published in the Lakeland Ledger on June 22, 1992. Copies of the evaluation were available for public inspection at the Department's Tampa and Tallahassee offices.

No adverse comments were submitted on the Department's Intent to Issue the permit. The final action of the Department will be to issue construction permit AC 53-210886 (PSD-FL-186) as proposed in the Technical Evaluation and Preliminary Determination.



# 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:**  
Farmland Hydro, L.P.  
P. O. Box 960  
Bartow, Florida 33830

**Permit Number:** AC 53-210886  
PSD-FL-186  
**Expiration Date:** January 1, 1994\*  
**County:** Polk  
**Latitude/Longitude:** 27°50'37"N  
81°56'05"W  
**Project:** North GTSP/MAP/DAP  
Granulation Plant Modifications

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 drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

Authorization to modify the existing North GTSP/MAP/DAP\*\* Granulation Plant to increase allowable production from 70 to 120 TPH MAP and from from 50 to 100 TPH DAP. The modifications include: installing a new reactor-granulator scrubber system followed by a new BFL scrubber system; a new cooler-chiller; a new venturi-cyclonic scrubber system; a new MAP pipe reactor and granulator; new screens and recycle conveyor; new smaller fans for the screens and mills; relocation of existing screens, elevators, elevator drive, and recycle conveyor in the screen system; new controls for the dryer scrubber and the screen/mill scrubber; relocation of the pipe reactor feed tank system; relocation and modification of the DAP reactor system; relocation of the north fines bin; relocation of the reclaim water tank system; removal of the existing GTSP scrubber systems; and other associated alterations. The plant will discharge air pollutants through the existing MAP/DAP main stack (114,000 acfm/88,000 dscfm/129 ft. elevation/7.5 ft. diameter/108°F) and the new reactor-granulator stack (49,700 acfm/27,000 dscfm/129 ft. elevation/5.5 ft. diameter/178°F). The North MAP/DAP Granulation Plant is located at Farmland Hydro, L.P.'s phosphate fertilizer chemical manufacturing facility on County Road 640 West, near Bartow, Polk County, Florida. The UTM coordinates of this facility are Zone 17, 409.5 km E and 3079.5 km N.

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This permit will replace operation permit No. AC 53-171758 (40 TPA 53005329) when the permittee places any of the new/modified equipment authorized by this permit in service.

\*This permit is void if construction does not commence within 18 months of its issuance, if construction is discontinued for more than 18 months, or if construction is not completed and the plant placed in operation within a reasonable time.

\*\*GTSP - Granular Triple Superphosphate  
MAP - Monoammonium Phosphate  
DAP - Diammonium Phosphate

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.

Attachments are listed below:

1. Application received March 25, 1992.
2. Koogler & Associates' memo dated April 16, 1992.
3. Koogler & Associates' memo dated April 20, 1992.

**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 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. 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

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**GENERAL CONDITIONS:**

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.

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.

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**GENERAL CONDITIONS:**

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.

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 prescribed 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 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 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.

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**GENERAL CONDITIONS:**

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards (NSPS)

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.
- 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



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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:**

Construction Requirements

1. The modification of this facility shall reasonably conform to the plans and schedule submitted in the application.
2. The stack sampling facilities must comply with F.A.C. Rule 17-2.700(4).
3. The air pollution control systems shall be designed to meet the ammonia, fluorides, and particulate matter standards in this permit.
4. The plant shall be equipped with flow monitoring devices that comply with 40 CFR 60.223 (July 1, 1991) to continuously measure and record the phosphorus-bearing feed material to the process and the total pressure drop across each scrubbing systems.

Emission Restrictions

5. Emissions from the modified plant shall not exceed any of the limits listed in the following tables:

| <u>MAP Production</u> |                                    |                   |                  |                    |
|-----------------------|------------------------------------|-------------------|------------------|--------------------|
| <u>Pollutant</u>      |                                    | <u>Main Stack</u> | <u>R/G Stack</u> | <u>Plant Total</u> |
| Fluorides             | lbs/TP <sub>2</sub> O <sub>5</sub> | --                | --               | 0.06               |
|                       | lbs/hr                             | 1.87              | 1.87             | 3.74               |
|                       | TPY                                | 8.2               | 8.2              | 16.4               |
| Particulate Matter    | lbs/hr                             | 15.9              | 6.6              | 22.5               |
|                       | TPY                                | 69.6              | 29.0             | 98.6               |
| Ammonia               | lbs/hr*                            | 7.0               | 30.9             | 37.9               |
|                       | TPY                                | 30.7              | 135.5            | 166.2              |

\*24-hour average

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**SPECIFIC CONDITIONS:**

| <u>DAP Production</u> |                                    |                   |                  |                    |
|-----------------------|------------------------------------|-------------------|------------------|--------------------|
| <u>Pollutant</u>      |                                    | <u>Main Stack</u> | <u>R/G Stack</u> | <u>Plant Total</u> |
| Fluorides             | lbs/TP <sub>2</sub> O <sub>5</sub> | --                | --               | 0.06               |
|                       | lbs/hr                             | 1.60              | 1.16             | 2.76               |
|                       | TPY                                | 7.0               | 5.1              | 12.1               |
| Particulate Matter    | lbs/hr                             | 10.6              | 5.5              | 16.1               |
|                       | TPY                                | 46.5              | 24.2             | 70.7               |
| Ammonia               | lbs/hr*                            | 5.2               | 41.6             | 46.7               |
|                       | TPY                                | 22.7              | 182.0            | 204.7              |

\*24-hour average

6. Visible emissions from any part of this plant shall not exceed 20% opacity.

7. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor (F.A.C. Rule 17-2.620).

Operation Requirements

8. Production shall not exceed 120 TPH MAP and 100 TPH DAP.

9. Phosphoric acid feed shall not exceed 62.4 TPH P<sub>2</sub>O<sub>5</sub> during MAP manufacture and 46.0 TPH P<sub>2</sub>O<sub>5</sub> during DAP manufacture. Consumption of sulfuric and nitric acids shall be reported in the AOR.

10. Ammonia feed shall not exceed 16.1 TPH during MAP manufacture and 21.9 TPH during DAP manufacture.

11. The system shall be properly operated and maintained (F.A.C. Rule 17-2.210(2)). No person shall circumvent any pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly (F.A.C. Rule 17-2.240). Pressure drop across the R-G venturi scrubbers shall be at least 12 inches of water.

12. Any process equipment, vessel, seal tank, duct, etc., having the potential to emit air pollutants shall be sealed or covered during plant operation to minimize fugitive emissions.

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**SPECIFIC CONDITIONS:**

13. This plant shall not manufacture GTSP.
14. The plant may operate continuously, 8760 hrs/yr.
15. Heat input to the dryer shall not exceed 50 MMBtu/hr. Only natural gas (max. 0.05 MMCF/hr) shall be burned in the dryer; except when the natural gas supply to the plant is curtailed, then No. 2 fuel oil with a maximum of 0.5% sulfur may be burned for up to 400 hrs during any 12 month period.
16. Lignosulphonates (lignin) shall be used when needed to control unconfined dust emissions when handling MAP and DAP product. Defoamers may be added to the 28% P<sub>2</sub>O<sub>5</sub> scrubbing liquid.
17. Reasonable precautions for minimizing fugitive emissions of ammonia shall include routine inspection of vessels, piping, and hoses; placing scrubbers in operation prior to feeding ammonia to the process; and prompt repair of any leaks.

**Testing Requirements**

18. This plant shall be tested at a production rate of 108 to 120 TPH MAP and 90 to 100 TPH DAP within 60 days of commercial production of these products by the modified plant and annually thereafter for particulate matter, fluorides, and visible emissions. It shall also be tested for ammonia on achieving commercial production and prior to the renewal of any permit to operate issued for the modified plant (test every 5 years). The annual test during MAP and DAP production will be waived if that product is not manufactured during that year. All compliance tests shall meet the requirements listed in F.A.C. Rule 17-2.700. The unit shall not operate above the maximum permitted MAP or DAP production rates; except during the time of the compliance tests.
19. Test methods to determine compliance are EPA Method 5 for particulate matter, EPA Method 9 for visible emissions, and EPA 13A or 13B for fluorides. These methods are described in 40 CFR 60, Appendix A (July 1, 1991). Ammonia emissions shall be determined using a variation of the EPA Draft Method, using large impingers with 100 mls of 1.0 normal sulfuric acid in the first three impingers, the last impinger dry and a probe with an external design similar to that used in EPA Method 16, or any other test method agreed to by the Department.

**Administrative Requirements**

20. The Department's Southwest District shall be notified in

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**SPECIFIC CONDITIONS:**

writing a minimum of 15 days in advance of any compliance test to be conducted on this source. The permittee shall comply with the notification and recordkeeping requirements of 40 CFR 60.7 (July 1, 1991).

21. The permittee shall maintain records showing the plant's operating time, phosphoric acid ( $P_2O_5$ ), and ammonia consumption; MAP and DAP production (TPY); and scrubber pressure drops for a minimum of 2 years.

22. The permittee shall submit annual operation reports (AOR) that include a summary of the consumption of phosphoric acid and ammonia, the production of MAP and DAP, the fuel consumption, and a complete test report (F.A.C. Rule 17-2.700(7)) which includes the production and operation parameters (scrubber pressure drops) during the test and a report of any recent maintenance on the scrubbers.


23. Prior to placing the modified plant in service, the permittee shall surrender the permits for the rock unloading section (AO 53-151296), the PAD 1 Ball Mill (AO 53-157062), and the PAD 2 Ball Mill (AO 53-157064) to the Southwest District.

24. 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).

25. An application for an operation permit must be submitted to the Southwest District office at least 90 days prior to the expiration date of this construction permit. 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. Rules 17-4.055 and 17-4.220).

Issued this 27 day  
of July, 1992

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL REGULATION

  
Carol M. Browner  
Secretary

Best Available Control Technology (BACT) Determination  
Farmland Hydro, L.P.  
Polk County  
MAP/DAP Granulation Plant

The applicant proposes to modify their existing MAP/DAP granulation plant and increase production to 100 TPH diammonium phosphate (DAP) and 120 TPH monammonium phosphate (MAP). This plant is located at their phosphate fertilizer chemical manufacturing facility on County Road 640 West near Bartow, Polk County, Florida.

The proposed project will result in a significant increase in the emissions of fluorides and is therefore subject to Prevention of Significant Deterioration (PSD) review in accordance with F.A.C. Rule 17-2.500(5). The BACT review is part of the PSD review requirements in accordance with F.A.C. 17-2.500(5)(c).

Date of Receipt of a BACT Application

March 25, 1992

Control Technology

The proposed reactor-granulator scrubbing system is a "double mole" three stage scrubber using 10% and 28%  $P_2O_5$  acid as the scrubbing liquids. The second stage is a low pressure (12" water) venturi scrubber. Each stage is followed by a cyclonic separator. This system is followed by a BFL scrubber that uses recirculated condensate and process water as the final scrubbing liquid. The gases are discharged through a new stack that served only this scrubber system.

The existing dryer scrubber system consists of a down flow scrubber using 28%  $P_2O_5$  phosphoric acid scrubber liquid followed by a cyclonic separator. The gases from this separator pass through a cross-flow scrubber that is shared with the screen and mill (S/M) scrubber. The cross-flow scrubber uses recycled process water as the scrubber medium. The gases are discharged through the existing plant stack to the atmosphere. Except for new controls and fans, this scrubber system is not being modified.

The description of the S/M scrubber system is identical to the above one for the dryer scrubber system.

The product cooler system will cool air by the evaporation of ammonia which is then used to cool the product. (The condensate from cooling the air is used in the BFL scrubber.) The air leaving the product cooler passes through a venturi scrubber that uses 10%  $P_2O_5$  phosphoric acid as the scrubber liquid and through a cyclonic separator before being mixed with the gases leaving the cross-flow scrubber and discharged through the existing plant stack to the atmosphere.

BACT Determination Procedure

In accordance with Florida Administrative Code Chapter 17-2, Air Pollution, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account: energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

- (a) Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- (b) All scientific, engineering, and technical material and other information available to the Department.
- (c) The emission limiting standards or BACT determinations of any other state.
- (d) The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

BACT Determination by DER

The Department accepts the applicant's recommendation for BACT. The following table summarizes the fluoride emission standards for the modified MAP/DAP plant.

| Control   | Fluoride Emissions                                     |       |                                    |  |       |                                    |
|---|--|-------|------------------------------------|--|-------|------------------------------------|
|   | DAP Production (46 TPH P <sub>2</sub> O <sub>5</sub> ) |       |                                    | MAP Production (62.4 TPH P <sub>2</sub> O <sub>5</sub> ) |       |                                    |
|   | lbs/hr   | TPY   | lbs/TP <sub>2</sub> O <sub>5</sub> | lbs/hr   | TPY   | lbs/TP <sub>2</sub> O <sub>5</sub> |
| R-G Scrubber System                                   | 1.16   | 5.08  | 0.025                              | 1.87   | 8.19  | 0.030                              |
| Cross-Flow Scrubber System (Dryer plus S/M scrubbing) | 0.66   | 2.89  | 0.014                              | 0.66   | 2.89  | 0.011                              |
| Product Cooler Scrubbing System                       | 0.94   | 4.12  | 0.020                              | 1.21   | 5.30  | 0.03                               |
| TOTAL   | 2.76   | 12.09 | 0.06                               | 3.74   | 16.38 | 0.06                               |

BACT Determination Rationale

DER's BACT determination is the same as proposed by the applicant, earlier BACT determinations for similar processes in Florida, and the new source performance standards for diammonium phosphate plants, 40 CFR 60, Subpart V. The MAP/DAP plants emit both fluoride and ammonia -- along with particulate matter. Most first stage scrubbers in these plants use phosphoric acid scrubbing liquid to recover ammonia. Ammonia is a raw material for the plant and a generally unregulated air pollutant that has the potential to cause objectionable odors, even in low ambient air concentrations. Fluorides are evolved from the phosphoric acid in the scrubber. This plant modification uses a lower strength acid (10% P<sub>2</sub>O<sub>5</sub> instead of the more common 28% acid) in the first stage of some scrubbers. This lowers the amount of fluoride evolved. Final fluoride removal occurs in a scrubber using recycle process water. The recycle process water contains traces of fluoride (0.45%) that limit the amount of fluoride that can be readily adsorbed from the gas stream. Fluosilicic acid production at this facility will also help reduce the quantity of fluorides getting into the recycle plant process water which will lower the fluoride emissions. Fresh or treated water in the final scrubber would lower fluoride emissions. However, because of the large consumption of fresh water by the phosphate industry in Florida which is concentrated near this plant, the companies are being forced to lower the quantity of fresh water used. Using treated water does not appear cost effective as the proposed system is estimated to achieve over 99.9% fluoride removal while also providing reasonable control of ammonia emissions.

Environmental Impact Analysis

The actual ambient air impact of the increased fluorides emissions is expected to be approximately:

| <u>Averaging Time (hrs)</u> | <u>Increase Impact ug/m<sup>3</sup></u> |
|-----------------------------|---|
| 8                           | 6.7                                     |
| 24                          | 3.4                                     |
| Annual                      | 0.2                                     |

The Department and U. S. Environmental Protection Agency (EPA) do not have an ambient air standard for fluorides. Fluorides are classified by EPA as a welfare-related pollutant (no demonstrated effect on public health).

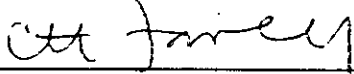
Conclusion

There will be no significant change in the ambient effects of fluorides on the soils and vegetation as a result of the increased fluoride emissions resulting from the modification of this plant.

Details of the Analysis May be Obtained by Contacting:

Preston Lewis, P.E.  
Department of Environmental Regulation  
Bureau of Air Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Recommended by:



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

Date

July 24 1992

Approved by:



Carol M. Browner, Secretary  
Dept. of Environmental Regulation

Date

July 27 1992



P 710 058 425



### Certified Mail Receipt

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

PS Form 3800, June 1990

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| P.O., State & ZIP Code<br><i>Barrow, HI</i>                 |                                 |
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| Return Receipt Showing to Whom & Date Delivered             |                                 |
| Return Receipt Showing to Whom, Date, & Address of Delivery |                                 |
| TOTAL Postage & Fees  | \$                              |
| Postmark or Date  | <i>AC 53-210866<br/>7-28-92</i> |

#### SENDER:

- Complete items 1 and/or 2.
- Complete items 3, and 4a & b:
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
*C.M. Jarvis  
 Gairland Hydro, L.P.  
 P.O. Box 960  
 Barrow, HI 33830*

4a. Article Number

4b. Service Type

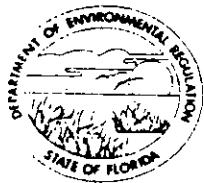
|   |   |
|---|---|
| <input type="checkbox"/> Registered           | <input type="checkbox"/> Insured                        |
| <input checked="" type="checkbox"/> Certified | <input type="checkbox"/> COD                            |
| <input type="checkbox"/> Express Mail         | <input type="checkbox"/> Return Receipt for Merchandise |

7. Date *JUL 30 1992*

5. Signature (Addressee)  
*Linda Thompson*

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)



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: Carol M. Browner  
FROM: Howard L. Rhodes  
DATE: July 24, 1992  
SUBJ: Approval of Construction Permit AC 53-210886; PSD-FL-186  
Farmland Hydro, L.P.

Attached for your approval and signature is a permit prepared by the Bureau of Air Regulation which will authorize Farmland Hydro, L.P. to modify and increase production at their existing ammonium phosphate fertilizer plant near Bartow, Polk County, Florida. The higher production will increase particulate matter and fluorides emissions.

No negative comments on the Department's intent to issue this permit were submitted.

I recommend your approval and signature.

HLR/WH/plm

Attachments