

Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

December 21, 1995

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Charles Jenkins
Environmental Coordinator
Farmland Hydro, L.P.
Post Office Box 906
Bartow, Florida 33830

Dear Mr. Jenkins:

Re: North MAP/DAP Plant
AC53-210886/PSD-FL-186
Request to Amend permit

The Department hereby amends the above referenced permit as follows:

Specific Condition No. 15:

From:

The maximum heat input rate to the dryer shall not exceed 50 MMBtu/hour. 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 hours during any 12 month period.


Mr. Charles Jenkins
December 21, 1995
Page Two

To:

The maximum heat input rate to the dryer shall not exceed 50 MMBtu/hour. 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 may be burned for up to 400 hours during any 12 month period.

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit AC53-210886/PSD-FL-186.

Sincerely,


for Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this **PERMIT AMENDMENT** and all copies were mailed by certified mail before the close of business on 12-21-95 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.

Karin Joben 12-21-95
Clerk Date

Copies to be furnished to:

Jerry Kissel, SWD
Jewell Harper, EPA
Roy Harwood, Polk Co.

1050053-003-AC

2 127 633 226



Receipt for Certified Mail

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

PS Form 3800, March 1993

Sender's Name <i>Charles Jenkins</i>	
Street and No. <i>Garland Hydro</i>	
P.O. State and ZIP Code <i>Barrow, FL</i>	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date <i>12-21-95</i> <i>AL 53-210886</i> <i>PSD-FL-186</i>	

Is your RETURN ADDRESS completed on the reverse side?

SENDER'S INSTRUCTIONS

- Complete items 1, 2, and 3 for additional services.
- 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 will show to whom the article was delivered and the date delivered.

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:
Charles Jenkins, E.C.
Garland Hydro, LP
P.O. Box 906
Barrow, FL 33830

4a. Article Number
2 127 633 226

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
12/27/95

5. Signature (Addressee)
Linda Thompson

6. Signature (Agent)

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

PS Form 3800, March 1993

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Florida Department of
Environmental Protection

Memorandum

TO: C. H. Fancy
FROM: Martin Costello *MC 12/18/95*
DATE: December 19, 1995
SUB: North MAP/DAP Plant
AC53-210886/PSD-FL-186
Request to Amend permit

Attached for your review and approval is a permit amendment which removes the limit on sulfur content for the dryer backup fuel.

If you have any questions, I will be glad to discuss the details.

MC/h

Farmland Hydro, L.P.

Charles W. Jenkins
Manager
Environmental/Safety Services

Green Bay Plant
County Road 640
Post Office Box 960
Bartow, Florida 33831
Tele: 813 533-1141
Fax: 813 533-8793

November 8, 1995

merley

Mr. John Reynolds
Department of Environmental Protection
Bureau of Air Regulations
2600 Blairstone Road
Tallahassee, Florida 32399-2400

RECEIVED

NOV 13 1995

**BUREAU OF
AIR REGULATION**

RE: AFFIDAVIT OF PUBLICATION

Dear Mr. Reynolds:

Please find enclosed the Affidavit of Publication of Intent to Issue. This is a Permit Amendment to the North Granular DAP/MAP Plant Permit #AO53-250142, AIRS #1050053-029

If you have any questions, please contact me at (941) 533-1141, Ext. 334.

Sincerely,



Charles W. Jenkins
Manager,
Environmental and Safety Services

CWJ/ra/cwj179.95

Enclosures

CC: Merle Farris



FARMLAND (mc)

AFFIDAVIT OF PUBLICATION

THE LEDGER

Lakeland, Polk County, Florida

Case No

STATE OF FLORIDA)
COUNTY OF POLK)

Before the undersigned authority personally appeared Nelson Kirkland, who on oath says that he is Classified Advertising Manager of The Ledger, a daily newspaper published at Lakeland in Polk County, Florida; that the attached copy of advertisement, being a

Notice of Intent

in the matter of

AC 53-210886

in the

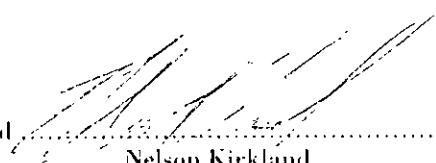
Court, was published in said newspaper in the issues of

October 20;

1995

Affiant further says that said The Ledger is a newspaper published at Lakeland, in said Polk County, Florida, and that the said newspaper has heretofore been continuously published in said Polk County, Florida, daily, and has been entered as second class matter at the post office in Lakeland, in said Polk County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Signed



Nelson Kirkland
Classified Advertising Manager

by Nelson Kirkland who is personally known to me

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF INTENT TO ISSUE PERMIT AMENDMENT
AC53-210886/PSD-FL-186(A)

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment to Farmland Hydro, L.P., Post Office Box 906, Bartow, Florida, 33830. The amendment is to remove the 0.5% limit on sulfur content for the dryer backup fuel from air construction permit number AC53-210886/PSD-FL-186 Specific Condition No. 15 for the North MAP/DAP Plant located at the fertilizer complex on S.R. 64 West near Polk County. There will be no changes in SO₂ emissions as a result of this amendment since 0.5% sulfur No. 2 fuel oil will continue to be used less than 400 hours per year. The rest of the time, natural gas, an inherently less polluting fuel, will be utilized in the dryer. The change will not cause or contribute to a violation of the applicable air quality standards.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information: (a) The name, address, and the telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of facts which petitioner contends warrants reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application/request is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Department of Environmental Protection
Southwest District
8407 Laurel Fair Circle
Tampa, Florida 33619

Any person may send written comments on the proposed action to Administrator, New Source Review Section at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.
F405 - 10-20: 1995



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

October 7, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Charles Jenkins
Environmental Coordinator
Farmland Hydro, L.P.
Post Office Box 906
Bartow, Florida 33830

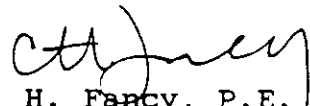
Dear Mr. Jenkins:

Re: North MAP/DAP Plant
Amendment to AC53-210886/PSD-FL-186(A)

Attached is one copy of the Proposed Permit Amendment, Intent to Issue, Public Notice of Intent to Issue Permit Amendment and Preliminary Determination for the aboved referenced emissions unit.

Please submit any comments you may have concerning the Department's proposed action to Mr. A. A. Linero, P.E., Administrator, New Source Review Section at the above address. If you have any questions, please call Mr. Martin Costello, P.E. or Mr. Linero at (904) 488-1344.

Sincerely,


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

CHF/mc/t

cc: Jerry Kissel, SWD
Jewell Harper, EPA
Roy Harwood, Polk Co.

Z 127 632 537



Receipt for Certified Mail

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

Gen. No.	
Charles Jenkins	
Street and No.	
Fairland Hydro	
City, State and ZIP Code	
Bartow, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
N. MAP/DAP 10-11-95	
AC53-210EE6/PSD-FL-186(A)	

PS Form 3800, March 1993

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- 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 will show to whom the article was delivered and the date delivered.

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:
Charles Jenkins, EC
Fairland Hydro, LP
PO Box 906
Bartow, FL 33830

4a. Article Number
Z 127 632 537

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
10/16/95

5. Signature (Addressee)
Charles Jenkins

6. Signature (Agent)
Linda Thompson

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

Thank you for using Return Receipt Service.

Preliminary Determination

On March 8, 1995 the Bureau of Air Regulation received a request to amend permit AC53-210886/PSD-FL-186 for the North MAP/DAPA Plant located at the Farmland Hydro, L.P. phosphate fertilizer chemical manufacturing facility on C.R. 640 West near Bartow, Florida. The applicant, Farmland Hydro, L.P. requested that the Department remove the 0.5% sulfur limitation from air construction permit number AC53-210886 Specific Condition No. 15 for the North MAP/DAP Plant located near Bartow Florida. The applicant stated that the sulfur content limit in the permit was not based on a regulatory standard, nor does it reflect an emission limitation requested by Farmland to avoid a specific rule applicability.

In the original application for construction permit, the permittee stated that diesel fuel/No. 2 fuel oil would be used as a backup fuel in the dryer for less than 400 hours a year. Since diesel fuel/No. 2 fuel oil is available at less than 0.5% sulfur content, the sulfur specification was included in the permit for clarification, i.e. to allow firing fuel oil with up to 0.5% sulfur content, by weight. No. 2 fuel oils can be purchased at sulfur contents--up to nominally 1% sulfur content. Because the fuel storage tank is used to fuel diesel vehicles at the plant, the applicant will continue to store 0.5% sulfur No. 2 fuel oil in this tank. Therefore sulfur dioxide emissions will not increase as a result of removing the limit on sulfur content from the No. 2 fuel oil. The Department intends to delete the limit of 0.5% sulfur content for the backup fuel oil, pending publications of the Intent to Issue Permit Amendment.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an
Application for Permit Amendment

DEP File Nos. AC53-210886
PSD-FL-186(A)
Polk County

Mr. Charles Jenkins
Environmental Coordinator
Farmland Hydro, L.P.
Post Office Box 906
Bartow, Florida 33830

INTENT TO ISSUE

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment (copy attached) for the applicant's facility as detailed in the application/request specified, above, for the reasons stated in the Preliminary Determination.

On March 8, 1995 the Bureau of Air Regulation received a request to amend permit AC53-210886/PSD-FL-186 for the North MAP/DAP Plant located at the Farmland Hydro, L.P. phosphate fertilizer chemical manufacturing facility on C.R. 640 West near Bartow, Florida. The applicant, Farmland Hydro, L.P. requested that the Department remove the 0.5% sulfur limitation from air construction permit number AC53-210886 Specific Condition No. 15 for the North MAP/DAP Plant located near Bartow Florida. The applicant stated that the sulfur content limit in the permit was not based on a regulatory standard, nor does it reflect an emission limitation requested by Farmland to avoid a specific rule applicability.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a permit amendment is required for the proposed work.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit Amendment. The notice shall be published one time only within 30 days in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall

provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit amendment.

The Department will issue the permit amendment with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information;

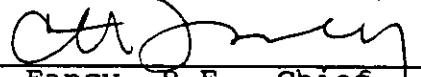
- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any

decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this intent in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION




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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this **INTENT TO ISSUE PERMIT AMENDMENT** all copies were mailed by certified mail before the close of business on 10-11-95 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

10-11-95
Date

Copies furnished to:

Jerry Kissel, SWD
Jewell Harper, EPA
Roy Harwood, Polk Co.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF INTENT TO ISSUE PERMIT AMENDMENT
AC53-210886/PSD-FL-186(A)

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit amendment to Farmland Hydro, L.P., Post Office Box 906, Bartow, Florida, 33830. The amendment is to remove the 0.5% limit on sulfur content for the dryer backup fuel from air construction permit number AC53-210886/PSD-FL-186 Specific Condition No. 15 for the North MAP/DAP Plant located at the fertilizer complex on S.R. 64 West near Polk County. There will be no changes in SO₂ emissions as a result of this amendment since 0.5% sulfur No. 2 fuel oil will continue to be used less than 400 hours per year. The rest of the time, natural gas, an inherently less polluting fuel, will be utilized in the dryer. The change will not cause or contribute to a violation of the applicable air quality standards.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by Petitioner, if any; (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this

Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application/request have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

The application/request is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Department of Environmental Protection
Southwest District
8407 Laurel Fair Circle
Tampa, Florida 33619

Any person may send written comments on the proposed action to Administrator, New Source Review Section at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered in the Department's final determination.

DRAFT

October XX, 1995

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Charles Jenkins
Environmental Coordinator
Farmland Hydro, L.P.
Post Office Box 906
Bartow, Florida 33830

Dear Mr. Jenkins:

Re: North MAP/DAP Plant
Amendment to AC53-210886/PSD-FL-186(A)

The Department hereby amends the above referenced permit as follows:

Specific Condition No. 15:

From:

The maximum heat input rate to the dryer shall not exceed 50 MMBtu/hour. 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 hours during any 12 month period.

To:

The maximum heat input rate to the dryer shall not exceed 50 MMBtu/hour. 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 may be burned for up to 400 hours during any 12 month period.

Mr. Charles Jenkins
October XX, 1995
Page Two

DRAFT

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit AC53-210886/PSD-FL-186.

Sincerely,

Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this **PERMIT AMENDMENT** and all copies were mailed by certified mail before the close of business on _____ 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 Date

Copies to be furnished to:

Jerry Kissel, SWD
Jewell Harper, EPA
Roy Harwood, Polk Co.

Florida Department of
Environmental Protection

Memorandum

TO: C. H. Fancy
THROUGH: A. A. Linero *AAL* 10/9
FROM: Martin Costello *mc* 10/6/95
DATE: October 7, 1995
SUBJ: Farmland Hydro, L.P.
North MAP/DAP Plant
Amendment to AC53-210886/PSD-FL-186(A)

Attached for your review and approval is a permit amendment which removes the limit on sulfur content for the dryer backup fuel. There will be no change in SO₂ emissions as a result of this amendment since 0.5% sulfur No. 2 fuel oil will continue to be used.

If you have any questions, Martin Costello and I will be glad to discuss the details.

AAL/mc/t

RECEIVED

SEP 27 1995

Bureau of
Air Regulation

MEMORANDUM

TO: Marty Costello, FDEP
FROM: Pradeep Raval
DATE: September 26, 1995
SUBJECT: Extension of 90 Day Time Limit
Farmland Hydro, L.P.

This is a follow up to our telephone conversation today regarding waiver of the 90 day limit for Farmland Hydro, L.P.'s application for permit amendments.

As it is anticipated that the pending issues on this subject will be resolved soon, the attached waiver extension is granted until October 30, 1995.

If you have any questions, please give me a call.

par.
enc.

c: C. Jenkins, Farmland Hydro, L.P.



ATTACHMENT 1

LIST OF PERMIT AMENDMENTS SUBJECT TO
WAIVER OF THE 90 DAY TIME LIMIT

FARMLAND HYDRO, L.P.
POLK COUNTY, FLORIDA

Item	Unit/Operation	Construction Permit No.
1.	North MAP/DAP Plant	AC53-210886
2.	No. 5 SAP	AC53-185490





Lawton Chiles
Governor

Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

Virginia B. Wetherell
Secretary

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTIONS 120.60(2) and 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application No. See Attachment 1

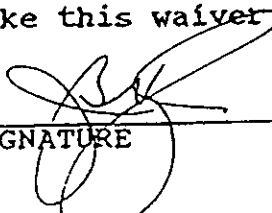
Applicant's Name: Farmland Hydro, L.P.

The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right under Sections 120.60(2) and 403.0876, Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Sections 120.60(2) and 403.0876, Florida Statutes. Said waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 30th day of October 1995.

The undersigned is authorized to make this waiver on behalf of the applicant.



SIGNATURE

NAME (PLEASE TYPE OR PRINT)

John B. Koogler, Ph.D., P.E.

MEMORANDUM

RECEIVED

AUG 28 1995

Bureau of
Air Regulation

TO: Martin Costello, FDEP
FROM: Pradeep Raval
DATE: August 24, 1995
SUBJECT: Additional Information Regarding
Permit Amendment Request
Farmland Hydro, L.P.

This is a follow up to our conversation yesterday regarding the request for an amendment of the North MAP/DAP Plant permit number AC53-210886.

In response to your question on what units share the fuel supply from the fuel storage tank servicing the DAP dryer, a list is provided below.

Please note that this particular storage tank is the only diesel fueling tank on site. Consequently, the tank supplies fuel to mobile equipment such as diesel operated vehicles; trucks; track mobiles/shuttles; front end loaders; air compressors; welding machines; etc.

It is anticipated that this information completes your review of the above mentioned permit amendment.

If you have any questions, please give me a call.

par

c: Charles Jenkins, Farmland Hydro, L.P.



MEMORANDUM

RECEIVED

AUG 28 1995

Division of
Air Regulation

TO: Marty Costello, FDEP
FROM: Pradeep Raval
DATE: August 24, 1995
SUBJECT: Extension of 90 Day Time Limit
Farmland Hydro, L.P.

This is a follow up to our conversation yesterday regarding waiver of the 90 day limit for Farmland Hydro, L.P.'s application for permit amendments.

As it is anticipated that the pending issues on this subject will be resolved soon, a waiver extension is granted until September 30, 1995.

If you have any questions, please give me a call.

par.
enc.

c: C. Jenkins, Farmland Hydro, L.P.



ATTACHMENT 1

LIST OF PERMIT AMENDMENTS SUBJECT TO
WAIVER OF THE 90 DAY TIME LIMIT

FARMLAND HYDRO, L.P.
POLK COUNTY, FLORIDA

Item	Unit/Operation	Construction Permit No.
1.	North MAP/DAP Plant	AC53-210886
2.	No. 5 SAP	AC53-185490





Lawton Chiles
Governor

Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

Virginia B. Wetherell
Secretary

WAIVER OF 90 DAY TIME LIMIT UNDER SECTIONS 120.60(2) and 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application No. See Attachment 1

Applicant's Name: Farmland Hydro, L.P.

The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right under Sections 120.60(2) and 403.0876, Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Sections 120.60(2) and 403.0876, Florida Statutes. Said waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 30th day of September 1995.

The undersigned is authorized to make this waiver on behalf of the applicant.



SIGNATURE

NAME (PLEASE TYPE OR PRINT)

John B. Koogler, Ph.D., P.E.

RECEIVED
JUN 27 1995

Bureau of
Air Regulation

MEMORANDUM

TO: Marty Costello, FDEP
FROM: Pradeep Raval
DATE: June 22, 1995
SUBJECT: Extension of 90 Day Time Limit

This is a follow up to our conversation this week regarding waiver of the 90 day limit for Farmland Hydro, L.P.'s application for permit amendments.

As it is anticipated that the pending issues on this subject will be resolved soon, the attached waiver extension is granted until August 30, 1995.

If you have any questions, please give me a call.

par.
enc.

c: C. Jenkins, Farmland Hydro, L.P.





Lawton Chiles
Governor

Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

Virginia B. Wetherell
Secretary

WAIVER OF 90 DAY TIME LIMIT UNDER SECTIONS 120.60(2) and 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application No. See Attachment 1

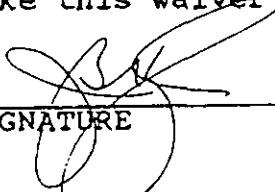
Applicant's Name: Farmland Hydro, L.P.

The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right under Sections 120.60(2) and 403.0876, Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Sections 120.60(2) and 403.0876, Florida Statutes. Said waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 30th day of August 1995.

The undersigned is authorized to make this waiver on behalf of the applicant.



SIGNATURE

NAME (PLEASE TYPE OR PRINT)

John B. Koogler, Ph.D., P.E.

ATTACHMENT 1

LIST OF PERMIT AMENDMENTS SUBJECT TO
WAIVER OF THE 90 DAY TIME LIMIT

FARMLAND HYDRO, L.P.
POLK COUNTY, FLORIDA

Item	Unit/Operation	Construction Permit No.
1.	North MAP/DAP Plant	AC53-210886
2.	Green SPA Plant *	AC53-138041 *
3.	No. 5 SAP	AC53-185490

* Farmland will amend this permit if required by FDEP.



MEMORANDUM

TO: Marty Costello, FDEP
FROM: Pradeep Raval
DATE: June 2, 1995
SUBJECT: Waiver of 90 Day Time Limit

This is a follow up to our conversation this week regarding waiver of the 90 day limit for Farmland Hydro, L.P.'s application for permit amendments.

As it is anticipated that the pending issues on this subject will be resolved soon, the attached waiver is granted until June 30, 1995.

If you have any questions, please give me a call.

par.
enc.

c: C. Jenkins, Farmland Hydro, L.P.

RECEIVED

JUN 8 1995

Bureau of
Air Regulation





Lawton Chiles
Governor

Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7577

Virginia B. Wetherell
Secretary

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTIONS 120.60(2) and 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application No. See Attachment 1

Applicant's Name: Farmland Hydro, L.P.

The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right under Sections 120.60(2) and 403.0876, Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Sections 120.60(2) and 403.0876, Florida Statutes. Said waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 30th day of June 1995.

The undersigned is authorized to make this waiver on behalf of the applicant.



SIGNATURE

NAME (PLEASE TYPE OR PRINT)

John B. Koogler, Ph.D., P.E.

RECEIVED

JUN 28 1995

F-1

Bureau of
Air Regulation

ATTACHMENT 1

LIST OF PERMIT AMENDMENTS SUBJECT TO
WAIVER OF THE 90 DAY TIME LIMIT

FARMLAND HYDRO, L.P.
POLK COUNTY, FLORIDA

Item	Unit/Operation	Construction Permit No.
1.	North MAP/DAP Plant	AC53-210886
2.	Green SPA Plant	AC53-138041
3.	No. 5 SAP	AC53-185490

RECEIVED

JUN 9 1995

Bureau of
Air Regulation





KOUGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
904/377-5822 • FAX 377-7158

KA 123-94-06

February 14, 1995

Mr. A. A. Linero
Florida Department of
Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Polk County-AP
Farmland Hydro, L.P.
Permit Amendment Requests

Dear Mr. Linero:

During recent discussions with FDEP staff, the subject of air permit conditions had come up. Based on those discussions, it is our understanding that all emission limitations in current permits must either be based on a standard, or reflect emission limits requested by a permittee to avoid a specific rule applicability (e.g. PSD, etc.). Any emission limit which is not supported by this criteria can be removed from the permit.

It is anticipated that the removal of such emission limitations from current operation permits and source construction permits will facilitate Title V permit application compilation by Farmland as well as the compilation of Title V permit conditions by FDEP. Thus, only valid applicable requirements will remain in the source permits.

Farmland has several air operation (and the preceding construction) permits which contain emission limitations outside of the above FDEP criteria. As a result, we are requesting FDEP to amend the permits tabulated below. A discussion on these permits is provided in the attachments. The attachment number corresponds to the item number in the table below.

In accordance with FDEP protocol, the request for permit amendment is being submitted to the office where the permit was issued. As the source operation permits were issued by FDEP's Tampa office, a request for amendment of those permits is simultaneously being submitted to that office. The amendment request for construction permits issued by the Bureau of Air Regulation (BAR) are being sent to your attention. The permit listing below, however, includes all the permits to be amended so that both the FDEP District and the BAR offices are aware of the scope of the permit amendments.

7

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MAR 8 1995
Bureau of
Air Regulation

It is requested that the following permits be amended:

Item	Unit/Operation	Operation Permit No.	Construction Permit No.
1.	North MAP/DAP Plant	A053-250142 (1)	AC53-210886 (2) <i>5/1/95</i>
2.	Green SPA Plant	A053-242141 (1)	AC53-138041 (2) <i>1/10/95</i>
3.	No. 5 SAP	A053-200485 (1)	AC53-185490 (2)
	Therminol Heater	A053-187834 (3)	None
	Auxiliary Steam Boiler	A053-159758 (3)	None

NOTES:

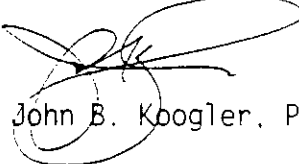
- (1) Operation permit amendment expected from FDEP District office after the construction permit amendment is issued by BAR.
- (2) Construction permit amendment expected from BAR.
- (3) Operation permit amendment expected from FDEP District office.

A check in the amount of \$750 (permit amendments processing fee) is enclosed.

Thank you for your kind assistance. If you have any questions, please call Pradeep Raval or me.

Very truly yours,

KOOGLER & ASSOCIATES



John B. Koogler, Ph.D., P.E.

JBK:par

c: C. Jenkins, Farmland Hydro, L.P.
G. Kissel, FDEP Tampa



ATTACHMENT 1

Unit/Operation : North MAP/DAP Plant

Permit No. : AC53-210886

Amendment Request :

The above referenced permit contains a 0.5% sulfur content limit for No. 2 fuel oil. This sulfur content reflects a typical analysis of No. 2 fuel oil available on the market. To our knowledge, the sulfur content limit in the permit is not based on a regulatory standard, nor does it reflect an emission limitation requested by Farmland to avoid a specific rule applicability (e.g. PSD, etc.).

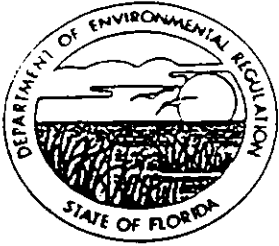
Therefore, it is requested that the construction permit be amended as follows:

Page 8, Specific Condition No. 15:

FROM: The maximum heat input rate to the dryer shall not exceed 50 MMBtu/hour. 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 upto 400 hours during any 12 month period.

TO: The maximum heat input rate to the dryer shall not exceed 50 MMBtu/hour. 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 may be burned for upto 400 hours during any 12 month period.





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.

PERMITTEE:
Farmland Hydro, L.P.

Permit Number: AC 53-210886
PSD-FL-186
Expiration Date: January 1, 1994

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% P₂O₅ 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

ATTACHMENT 2

Unit/Operation : Green Super Phosphoric Acid Plant

Permit No. : AC53-138041

Amendment Request :

The most recent construction permit in our files was issued November 19, 1987. The permit contains nitrogen oxides (NOx) emission limits of 40.5 pounds per hour and 90.0 tons per year. NOx emissions are a by-product of the process. To our knowledge, the emission limitation in the permit is not based on a standard for GSPA, nor does it reflect an emission limitation requested by Farmland to avoid a specific rule applicability (e.g. PSD, etc.).

It is requested that the construction permit be amended as follows:

Page 6, Specific Condition No. 2:

FROM: The emissions from the Green Superphosphoric Acid plant shall not exceed:

Pollutant	Maximum Allowable Emissions	
	pounds/hour	tons/year
NOx	40.5	90.0
Fluoride	0.2	0.4

TO: Emissions of fluorides from the Green Superphosphoric Acid plant shall not exceed 0.2 pounds per hour, or 0.4 tons/year.

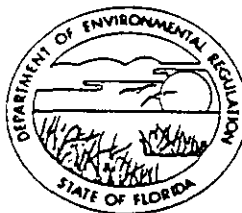
Page 6, Specific Condition No. 8:

FROM: Delete the portion of the condition which requires NOx testing.



STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

PERMITTEE:
Farmland Inc.
P. O. Box 960
Bartow, Florida 33830

Permit Number: AC 53-138041
Expiration Date: October 31, 1988
County: Polk
Latitude/Longitude: 27° 50' 37" N
81° 56' 05" W
Project: Green Super Phosphoric
Acid Oxidation Unit

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 Green Superphosphoric Acid (GSPA) plant located at the permittee's phosphate fertilizer complex near Bartow on State Road 640 in Polk County, Florida. UTM coordinates are 409.5 km E and 3079.5 km N.

Construction shall be in accordance with the attached permit application except as otherwise noted under the Specific Conditions set forth in this permit.

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER form 17-1.202(1), and letter dated August 7, 1987.
2. Southwest District DER letter dated October 16, 1987.
3. Farmland letter dated October 29, 1987, with attached letter from Koogler & Associates dated October 27, 1987.

PERMITTEE:
Farmland, Inc.

Permit Number: AC 53-138041
Expiration Date: October 31, 1988

SPECIFIC CONDITIONS:

- 2) The emissions from the Green Superphosphoric Acid plant shall not exceed:

Del? →

Pollutant	Maximum Allowable Emissions	
	lb/hr	T/yr
NOx	40.5	90.0
Fluoride	0.2	0.4

3. Other emissions from the process shall be controlled by sealing and/or venting such emissions to the pollution abatement system.

4. The permittee shall install, calibrate, maintain, operate and record data from flow monitoring devices used to determine total P₂O₅ input to the plant. A daily record on the P₂O₅ input to the plant shall be maintained.

5. The permittee shall measure and record the total pressure drop across the scrubber system. Pressure drop across the scrubber must be at least 4 inches of water during plant operation. These records shall be maintained for 2 years and available for inspection by regulatory agency personnel on request.

6. Construction should commence and be completed within a reasonable time based on the projections in the application.

7. Reasonable precautions to prevent fugitive particulate emissions during modification, such as coating or spraying roads and construction sites used by contractors, shall be taken by the permittee.

8) Before the construction permit expires, the GSPA plant shall be sampled for NOx and fluoride emissions. Test procedures shall be in accordance with EPA reference methods 1, 2, 3, 7 and 7A or 7E, 13A or 13B as published in 40 CFR 60, dated July 1, 1986. The Department shall be notified in writing 15 days or more prior to the compliance test. The test shall be conducted at permitted production capacity or no less than 90% thereof. P₂O₅ input, pH of scrubber water, and pressure drop across the scrubber shall be reported to the Department along with the test data and results.

Final Determination

Farmland Industries
Polk County

Green Super Phosphoric Acid Oxidation Unit
Permit No. AC 53-138041

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

November 17, 1987

Final Determination

The Bureau of Air Quality Management completed its review of Farmland's application for a permit to construct a Green Super Phosphoric Acid Oxidation Unit at their Polk County phosphate facility. On October 17, 1987, public notice of the Department's intent to issue the permit was published in the Lakeland Ledger. Copies of the Technical Evaluation and Preliminary Determination were available for public inspection at the Department's offices in Tampa and Tallahassee.

Comments were submitted by the applicant and the Southwest District DER office. The issues and the Department's responses are as follows:

Issue No. 1: Farmland requested a modification to Specific Condition No. 5 reducing the design minimum scrubber pressure drop to 4 inches of water.

The Department is in agreement with this request and the permit will be modified accordingly. If necessary, the minimum pressure drop can be changed again after results are obtained from the compliance test.

Issue No. 2: Farmland requested changes in the test methods specified in Specific Condition No. 8.

→ These changes were made as requested. NOx test method 7E was not included initially because 40 CFR 60, App. A, Method 7E, paragraph 1.1 states that the method is applicable only to those sources for which it is specified in the NSPS regulations, and Method 7E was not specified for nitric acid plants. Since this source is a one-of-a-kind unit with net emissions below the significant level, the Department agrees that method 7E will be sufficient.

Issue No. 3: The DER Southwest District office requested that a Specific Condition be added to require a maximum 10% opacity limit since the emissions are similar to those from a nitric acid plant.

Farmland has confirmed from their pilot plant data that the opacity will be less than 20% but likely will be more than 10%. Since it is possible that the opacity may be closer to 10% than 20% once fine tuning is completed, the Department is in agreement that a reasonable opacity limitation can be established after the plant starts up and is lined out. Language to this effect was included as Specific Condition No. 10. Since additional time will be needed for this determination, the permit expiration date was changed to October 31, 1988.

ATTACHMENT 3

Unit/Operation : No. 5 Sulfuric Acid Plant

Permit No. : AC53-185490

Amendment Request :

The above referenced permit contains emission limitations for nitrogen oxides. To our knowledge, this limitation in the permit is not based on a standard, nor does it reflect an emission limitation requested by Farmland to avoid a specific rule applicability. In fact FDEP's PSD review in 1989 (PSD-FL-143) acknowledged that NOx is a by-product of the sulfuric acid manufacturing process and there is no method of control to represent Best Available Control Technology for it. It is interesting to note that the PSD review at that time was triggered based on conservative projections of potential emissions from the project. Subsequent testing of the project, as built, have shown that a PSD review for NOx would not have been required if representative plant performance information was available during preconstruction review.

Based on the above discussion it is requested that the construction permit be amended as follows:

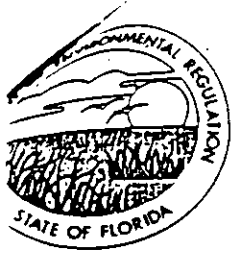
Page 6, Specific Condition No. 5:

Delete this condition regarding NOx emissions.

Page 6, Specific Condition No. 8:

Delete the portion of the condition which requires NOx testing.





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:
Farmland Industries, Inc.
P. O. Box 960
Bartow, FL 33830

Permit Number: AC 53-185490
PSD-FL-143A
Expiration Date: Sept. 30, 1991
County: Polk
Latitude/Longitude: 27°50'37"N
81°56'05"W
Project: Sulfuric Acid Plant
No. 5 - Production Increase to
2400 TPD

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the increase in production from 2000 TPD to 2400 TPD of sulfuric acid in plant No. 5. The source is located at the permittee's existing facility near Bartow, Polk County, Florida. The UTM coordinates are Zone 17, 409.5 km East and 3079.5 km North.

The increase in production shall be carried out 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 on August 23, 1990.

PERMITTEE:
Armland Industries, Inc.

Permit Number: AC 53-185490.
PSD-FL-143A
Expiration Date: September 30, 1991

SPECIFIC CONDITIONS:

4. Sulfuric acid mist emissions shall not exceed:
0.15 lb/ton of 100% sulfuric acid produced
15.0 lbs/hr
65.7 tons/yr
5. Nitrogen oxides emissions shall not exceed:
0.12 lb/ton of 100% sulfuric acid produced
11.9 lbs/hr
52.2 tons/year
6. Visible emissions shall not exceed 10% opacity.
7. Sulfuric acid plants No. 1 and No. 2 shall permanently cease operation within 90 days after the No. 5 sulfuric acid plant begins operation.
8. A continuous emission monitor shall be used to monitor sulfur dioxide, in accordance with F.A.C. Rule 17-2.710. Initial and annual compliance tests shall be conducted using:

EPA Method 7 for nitrogen oxides
EPA Method 8 for sulfur dioxide and acid mist
DER Method 9 for visible emissions
9. The compliance tests shall be conducted within 30 days after operation begins. The Department's Southwest District office shall be notified in writing 15 days prior to source testing and at least 5 days prior to initial startup. Written reports of the tests shall be submitted to that office within 45 days of test completion.
10. 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 date of the permit (F.A.C. Rule 17-4.090).
11. An application for an operation permit must be submitted to the Department's Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. The operation permit application shall include a set of conditions acceptable to the Department for sequential startup/shutdown of the permittee's three sulfuric acid plants. To

Technical Evaluation
and
Preliminary Determination

Farmland Industries, Inc.
Green Bay Complex
Bartow, Polk County, Florida

Sulfuric Acid Plant No. 5
Production Increase to 2,400 TPD

Permit No. AC 53-185490
PSD-FL-143A

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

November 15, 1990

III. Rule Applicability

The construction permit application is subject to review under Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. The facility is located in an area classified as attainment for each of the regulated air pollutants. The proposed major source is subject to the preconstruction review requirements of F.A.C. Rule 17-2.500, Prevention of Significant Deterioration (PSD). The proposed increases in SO₂ and acid mist emissions exceed significant levels set forth in Table 500-2 of F.A.C. Rule 17-2.500. Preconstruction review must include a determination of best available control technology (BACT), good-engineering practice stack height, ambient impact analysis, impact on soils, vegetation, and visibility. F.A.C. Rules 17-2.660, Table 660-1, Section 60.80, and 17-2.700, Table 700-1, apply to this new major source. Emissions will be limited by the federal new source performance standards for sulfur dioxide, acid mist and visible emissions, and the previous BACT determination for NO_x (PSD-FL-143).

IV. Source Impact Analysis

A. Ambient Air Analysis

Analysis of ambient air impact from the proposed source generally involves assessment of existing air quality, a PSD increment analysis, and an ambient air quality standards analysis. Existing air quality must be established by monitoring data if the emissions from the new source will have an impact equal to or greater than that listed in F.A.C. Rule 17-2.500, Table 500-3, De Minimus Ambient Impacts. However, if it is shown, as here, that the net increase in ambient concentrations of applicable pollutants will be less than the de minimus concentrations listed in Table 500-3, the source is exempt from ambient monitoring as provided by F.A.C. Rule 17-2.500(3)(e). The following table summarizes results of air quality analysis for the proposed project:

	Ambient Impacts (ug/m ³)	Signif. Impact	De Minimus Impact
Sulfur Dioxide			
3-hr	0.01	25.0	N/A
24-hr	(less than 0.01)	5.0	13.0
Annual	(less than 0)	1.0	N/A
Acid Mist (24-hr)	5.0	N/A	5.0*

*No de minimus or significant impact levels have been established for acid mist. This figure was calculated based on adjusted threshold limit value (TLV) in order to arrive at an acceptable ambient level (AAL).

Technical Evaluation
and
Preliminary Determination

Farmland Industries, Inc.
Green Bay Complex
Bartow, Polk County, Florida

Sulfuric Acid Plant No. 5
Permit No. AC 53-171751
PSD-FL-143

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

December 21, 1989

	Air Pollutant (tons/yr)			GSPA	Net Increase	Signif. Increase
	Sulfuric Acid Plants					
	1	2	5			
SO ₂						
Present	700	700				
Proposed	(700)	(700)	1460		60	40
Acid Mist						
Present	7.5	7.5				
Proposed	(7.5)	(7.5)	54.8		39.8	7
NO _x						
Present	25.2	25.2*		64.8		
Proposed	(25.2)	(25.2)	43.4	64.8	57.8	40

*Permanently shut down in 1985 but included for contemporaneous emission changes per F.A.C. Rule 17-2.500(2)(e)3.

III. Rule Applicability

The construction permit application is subject to review under Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. The facility is located in an area classified as attainment for each of the regulated air pollutants. The proposed major source is subject to the preconstruction review requirements of F.A.C. Rule 17-2.500, Prevention of Significant Deterioration (PSD). The proposed increases in emissions exceed significant levels set forth in Table 500-2 of F.A.C. Rule 17-2.500. Preconstruction review must include a determination of best available control technology (BACT), good-engineering practice stack height, ambient impact analysis, impact on soils, vegetation, and visibility. F.A.C. Rules 17-2.660, Table 660-1, Section 60.80, and 17-2.700, Table 700-1, apply to this new major source. Emissions will be limited by the federal new source performance standards for sulfur dioxide, acid mist and visible emissions, and the BACT determination for NO_x.

IV. Source Impact Analysis

A. Ambient Air Analysis

Analysis of ambient air impact from the proposed source generally involves assessment of existing air quality, a PSD increment analysis, and an ambient air quality standards analysis. Existing air quality must be established by monitoring data if the emissions from the new source will have an impact equal to or greater than that listed in F.A.C. Rule 17-2.500, Table 500-3, De Minimus Ambient Impacts. However, if it is shown, as here, that the net increase in ambient concentrations of applicable pollutants will be less than the de minimus concentrations listed in Table 500-3, the source is exempt from ambient monitoring as provided by F.A.C. Rule 17-2.500(3)(e). The following table summarizes results of air quality analysis for the proposed project:

0003381



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
904/377-5822 • FAX 377-7158

KA 123-94-01

March 28, 1994

Mr. John C. Brown, Jr.
Florida Department of
Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Permit Modification Request
For North MAP/DAP Plant
Farmland Hydro, L.P.
Polk County, Florida
DEP Permit No. AC53-210886, PSD-FL-186

RECEIVED
PLR - MAIL ROOM
531 MAR 29 AM 11:27

Dear Mr. Brown:

This is a follow up to your telephone conversation with Mr. Pradeep Raval on March 22, 1994, and earlier discussions between Farmland staff and Mr. Willard Hanks regarding a modification of the ammonia emission limitation for the above referenced plant.

FDEP issued permit AC53-210886, PSD-FL-186 on July 27, 1992, for an increase in the production rate of the North MAP/DAP plant. The project involved physical modifications to the existing plant, including a new scrubbing system to control the emissions of fluorides and particulate matter.

Recent initial emission measurements indicate that the modified plant will be able to operate in full compliance with the permitted emission limits for fluoride and particulate matter. The plant also seems capable of meeting the ammonia emissions limit when producing MAP. However, ammonia emissions are much higher than anticipated when producing DAP (see Attachment 1). While the measured emissions exceed the initial estimated emission rate, they are comparable to ammonia emissions from similar DAP plants in the region (e.g. Cargill, IMC). As in the case of many similar fertilizer facilities, the existing plant's air permit did not address ammonia emissions. As a result, accurate information on potential ammonia emissions was not available at the time the permit application was submitted.

Mr. John C. Brown, Jr.
Florida Department of
Environmental Protection

March 28, 1994
Page 2

Air dispersion modeling using the ISC2 model with 1991 Tampa meteorological data, based on the higher ammonia emission rate, indicates that FDEP's air reference concentration (ARC) will not be exceeded (see Attachment 2). The FDEP ARC for ammonia is 100 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), while the maximum predicted ambient air impact is $61.7 \mu\text{g}/\text{m}^3$. As there are no ambient air quality standards for ammonia, further analysis was not necessary.

This request is for a modification of the DAP operation's ammonia emission limitation in the above referenced permit from 41.6 pounds per hour (lbs/hr) and 182.0 tons per year (tpy) to 200 lbs/hr and 876 tpy. As discussed with you, this request is submitted to merely correct the ammonia emission estimate initially presented in the above PSD permit application. Accordingly, a check in the amount of \$250 (permit modification fee) is attached.

If you have any questions, please do not hesitate to call me.

Very truly yours,

KOGLER & ASSOCIATES



John B. Koogler, Ph.D., P.E.

JBK:par
Enc.

c: G. Meier, Farmland Hydro, L.P.
C. Jenkins, Farmland Hydro, L.P.



ATTACHMENT 1

AMMONIA EMISSION RATES

NORTH MAP/DAP PLANT
FARMLAND HYDRO, L.P.
POLK COUNTY, FLORIDA

Material Rate TPH	Ammonia Emissions Rates (lbs/hr)			Permit Limit
	Measured Rates			
	Run 1	Run 2	Run 3	
119.7 MAP REACTOR	9.64	19.97	18.63	30.9
119.3 MAP DRYER	0.25	0.41	0.97	7.0
90.0 DAP REACTOR	78.82*	197.05*	40.05	41.6
96.6 DAP DRYER	3.10	2.27	2.88	5.2

* These measured emissions exceed the current construction permit limit.



ATTACHMENT 2

ISC2 MODELING RESULTS FOR AMMONIA



CO STARTING
 TITLEONE FARMLAND-HYDRO, **BARTOW FLORIDA AMMONIA REVISED** MET=TAMPA 1991
 MODELOPT DFAULT CONC RURAL
 AVERTIME PERIOD
 POLLUTID OTHER
 DCAYCOEF .000000
 RUNORNOT RUN
 ERRORFIL ERRORS.OUT
 CO FINISHED

SO STARTING
 ** Source Location Cards:
 **

SRCID	SRCTYP	XS	YS	ZS
LOCATION S_R&G	POINT	32.9	-41.4	00.00
LOCATION S_DRY	POINT	0	-37.5	00.00
LOCATION N_R&G	POINT	32.9	0	00.00
LOCATION N_DRY	POINT	0	0	00.00

** Source Parameter Cards:
 **

POINT:	SRCID	QS	HS	TS	VS	DS
SRCPARAM S_R&G		6.70	54.88	341.3	5.37	1.52
SRCPARAM S_DRY		4.20	39.33	329.1	11.01	2.29
SRCPARAM N_R&G		25.20	39.33	354.1	10.63	1.68
SRCPARAM N_DRY		0.66	39.33	315.2	13.11	2.29

BUILDHGT S_R&G 36*33.
 S_DRY 36*33.
 N_R&G 36*33.
 N_DRY 36*33.
 BUILDWID S_R&G 36*47.
 S_DRY 36*47.
 N_R&G 36*47.
 N_DRY 36*47.

SRCGROUP ALL

SO FINISHED

RE STARTING
 GRIDPOLR POL STA
 GRIDPOLR POL ORIG 0.0 0.0
 GRIDPOLR POL DIST 175.0 200.0 300.0 400.0 500.0 1000.0
 GRIDPOLR POL GDIR 36 10.00 10.00
 GRIDPOLR POL END
 RE FINISHED

ME STARTING
 INPUTFIL D:\ISC2\TAMPA91.ASC
 ANEMHGHT 10.000 METERS
 SURFDATA 12842 1991 TAMPA_FL
 UAIRDATA 12842 1991 RUSKIN_FL
 WINDCATS 1.54 3.09 5.14 8.23 10.80
 ME FINISHED

OU STARTING
 RECTABLE ALLAVE FIRST SECOND
 MAXTABLE ALLAVE 50
 OU FINISHED

 *** SETUP Finishes Successfully ***

*** MODELING OPTIONS USED: CONC RURAL FLAT DFault

*** MODEL SETUP OPTIONS SUMMARY ***

**Model Is Setup For Calculation of Average CONcEntration Values.

**Model Uses RURAL Dispersion.

**Model Uses Regulatory DEFAULT Options:

- 1. Final Plume Rise.
- 2. Stack-tip Downwash.
- 3. Buoyancy-induced Dispersion.
- 4. Use Calms Processing Routine.
- 5. Not Use Missing Data Processing Routine.
- 6. Default Wind Profile Exponents.
- 7. Default Vertical Potential Temperature Gradients.
- 8. "Upper Bound" Values for Supersquat Buildings.
- 9. No Exponential Decay for RURAL Mode

**Model Assumes Receptors on FLAT Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates PERIOD Averages Only

**This Run Includes: 4 Source(s); 1 Source Group(s); and 216 Receptor(s)

**The Model Assumes A Pollutant Type of: OTHER

**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:

- Model Outputs Tables of PERIOD Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- Model Outputs Tables of Overall Maximum Short Term Values (MAXTABLE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
 m for Missing Hours
 b for Both Calm and Missing Hours

**Misc. Inputs: Anem. Hgt. (m) = 10.00 ; Decay Coef. = 0.0000 ; Rot. Angle = 0.0
 Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
 Output Units = MICROGRAMS/M**3

**Input Runstream File: FARM_91R.INP ; **Output Print File: FARM_91R.OUT

**Detailed Error/Message File: ERRORS.OUT

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
S_R&G	0	0.67000E+01	32.9	-41.4	0.0	54.88	341.30	5.37	1.52	YES	
S_DRY	0	0.42000E+01	0.0	-37.5	0.0	39.33	329.10	11.01	2.29	YES	
N_R&G	0	0.25200E+02	32.9	0.0	0.0	39.33	354.10	10.63	1.68	YES	
N_DRY	0	0.66000E+00	0.0	0.0	0.0	39.33	315.20	13.11	2.29	YES	

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	S_R&G , S_DRY , N_R&G , N_DRY ,

*** MODELING OPTIONS USED: CONC RURAL FLAT DEFAULT

*** DIRECTION SPECIFIC BUILDING DIMENSIONS ***

SOURCE ID: S_R&G

IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK
1	33.0	47.0	0	2	33.0	47.0	0	3	33.0	47.0	0	4	33.0	47.0	0	5	33.0	47.0	0	6	33.0	47.0	0
7	33.0	47.0	0	8	33.0	47.0	0	9	33.0	47.0	0	10	33.0	47.0	0	11	33.0	47.0	0	12	33.0	47.0	0
13	33.0	47.0	0	14	33.0	47.0	0	15	33.0	47.0	0	16	33.0	47.0	0	17	33.0	47.0	0	18	33.0	47.0	0
19	33.0	47.0	0	20	33.0	47.0	0	21	33.0	47.0	0	22	33.0	47.0	0	23	33.0	47.0	0	24	33.0	47.0	0
25	33.0	47.0	0	26	33.0	47.0	0	27	33.0	47.0	0	28	33.0	47.0	0	29	33.0	47.0	0	30	33.0	47.0	0
31	33.0	47.0	0	32	33.0	47.0	0	33	33.0	47.0	0	34	33.0	47.0	0	35	33.0	47.0	0	36	33.0	47.0	0

SOURCE ID: S_DRY

IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK
1	33.0	47.0	0	2	33.0	47.0	0	3	33.0	47.0	0	4	33.0	47.0	0	5	33.0	47.0	0	6	33.0	47.0	0
7	33.0	47.0	0	8	33.0	47.0	0	9	33.0	47.0	0	10	33.0	47.0	0	11	33.0	47.0	0	12	33.0	47.0	0
13	33.0	47.0	0	14	33.0	47.0	0	15	33.0	47.0	0	16	33.0	47.0	0	17	33.0	47.0	0	18	33.0	47.0	0
19	33.0	47.0	0	20	33.0	47.0	0	21	33.0	47.0	0	22	33.0	47.0	0	23	33.0	47.0	0	24	33.0	47.0	0
25	33.0	47.0	0	26	33.0	47.0	0	27	33.0	47.0	0	28	33.0	47.0	0	29	33.0	47.0	0	30	33.0	47.0	0
31	33.0	47.0	0	32	33.0	47.0	0	33	33.0	47.0	0	34	33.0	47.0	0	35	33.0	47.0	0	36	33.0	47.0	0

SOURCE ID: N_R&G

IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK
1	33.0	47.0	0	2	33.0	47.0	0	3	33.0	47.0	0	4	33.0	47.0	0	5	33.0	47.0	0	6	33.0	47.0	0
7	33.0	47.0	0	8	33.0	47.0	0	9	33.0	47.0	0	10	33.0	47.0	0	11	33.0	47.0	0	12	33.0	47.0	0
13	33.0	47.0	0	14	33.0	47.0	0	15	33.0	47.0	0	16	33.0	47.0	0	17	33.0	47.0	0	18	33.0	47.0	0
19	33.0	47.0	0	20	33.0	47.0	0	21	33.0	47.0	0	22	33.0	47.0	0	23	33.0	47.0	0	24	33.0	47.0	0
25	33.0	47.0	0	26	33.0	47.0	0	27	33.0	47.0	0	28	33.0	47.0	0	29	33.0	47.0	0	30	33.0	47.0	0
31	33.0	47.0	0	32	33.0	47.0	0	33	33.0	47.0	0	34	33.0	47.0	0	35	33.0	47.0	0	36	33.0	47.0	0

SOURCE ID: N_DRY

IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK	IFV	BH	BW	WAK
1	33.0	47.0	0	2	33.0	47.0	0	3	33.0	47.0	0	4	33.0	47.0	0	5	33.0	47.0	0	6	33.0	47.0	0
7	33.0	47.0	0	8	33.0	47.0	0	9	33.0	47.0	0	10	33.0	47.0	0	11	33.0	47.0	0	12	33.0	47.0	0
13	33.0	47.0	0	14	33.0	47.0	0	15	33.0	47.0	0	16	33.0	47.0	0	17	33.0	47.0	0	18	33.0	47.0	0
19	33.0	47.0	0	20	33.0	47.0	0	21	33.0	47.0	0	22	33.0	47.0	0	23	33.0	47.0	0	24	33.0	47.0	0
25	33.0	47.0	0	26	33.0	47.0	0	27	33.0	47.0	0	28	33.0	47.0	0	29	33.0	47.0	0	30	33.0	47.0	0
31	33.0	47.0	0	32	33.0	47.0	0	33	33.0	47.0	0	34	33.0	47.0	0	35	33.0	47.0	0	36	33.0	47.0	0

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: POL ; NETWORK TYPE: GRIDPOLR ***

*** ORIGIN FOR POLAR NETWORK ***

X-ORIG = 0.00 ; Y-ORIG = 0.00 (METERS)

*** DISTANCE RANGES OF NETWORK ***

(METERS)

175.0, 200.0, 300.0, 400.0, 500.0, 1000.0,

*** DIRECTION RADIALS OF NETWORK ***

(DEGREES)

10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0,
110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0, 180.0, 190.0, 200.0,
210.0, 220.0, 230.0, 240.0, 250.0, 260.0, 270.0, 280.0, 290.0, 300.0,
310.0, 320.0, 330.0, 340.0, 350.0, 360.0,

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: D:\ISC2\TAMPA91.ASC

FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1)

SURFACE STATION NO.: 12842

UPPER AIR STATION NO.: 12842

NAME: TAMPA_FL

NAME: RUSKIN_FL

YEAR: 1991

YEAR: 1991

YEAR	MONTH	DAY	HOUR	FLOW	SPEED	TEMP	STAB	MIXING HEIGHT (M)	
				VECTOR	(M/S)	(K)	CLASS	RURAL	URBAN
91	1	1	1	231.0	1.54	293.7	6	1598.4	383.0
91	1	1	2	228.0	2.06	293.2	5	1613.2	383.0
91	1	1	3	234.0	1.54	292.6	6	1628.0	383.0
91	1	1	4	233.0	2.06	292.6	5	1642.8	383.0
91	1	1	5	233.0	2.06	292.6	5	1657.7	383.0
91	1	1	6	232.0	2.06	292.6	5	1672.5	383.0
91	1	1	7	235.0	2.06	292.0	4	1687.3	1687.3
91	1	1	8	263.0	2.06	292.6	4	1702.1	1702.1
91	1	1	9	237.0	2.06	293.2	3	1716.9	1716.9
91	1	1	10	301.0	3.09	297.6	3	1731.7	1731.7
91	1	1	11	294.0	4.12	299.8	3	1746.6	1746.6
91	1	1	12	296.0	3.60	300.9	2	1761.4	1761.4
91	1	1	13	353.0	3.09	300.9	2	1776.2	1776.2
91	1	1	14	349.0	3.09	302.0	2	1791.0	1791.0
91	1	1	15	302.0	3.60	302.6	3	1791.0	1791.0
91	1	1	16	354.0	3.60	302.0	3	1791.0	1791.0
91	1	1	17	81.0	3.60	300.4	4	1791.0	1791.0
91	1	1	18	137.0	3.60	298.7	5	1786.7	1711.1
91	1	1	19	164.0	3.60	296.5	5	1775.5	1502.2
91	1	1	20	167.0	4.12	295.4	5	1764.2	1293.4
91	1	1	21	190.0	2.57	293.7	6	1753.0	1084.5
91	1	1	22	222.0	3.09	294.3	6	1741.8	875.7
91	1	1	23	250.0	3.09	293.7	6	1730.5	666.8
91	1	1	24	240.0	2.57	293.2	6	1719.3	458.0

*** NOTES: STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): S_R&G , S_DRY , N_R&G , N_DRY ,

*** NETWORK ID: POL ; NETWORK TYPE: GRIDPOLR ***

*** CONC OF OTHER IN MICROGRAMS/M**3 **

DIRECTION (DEGREES)	DISTANCE (METERS)					
	175.00	200.00	300.00	400.00	500.00	1000.00
10.00	13.86934	13.41717	14.12409	13.58986	12.01921	6.44452
20.00	17.40121	17.87184	18.21247	16.58521	14.18190	7.18943
30.00	19.38363	18.94156	18.52506	16.80001	14.12445	6.88180
40.00	17.77990	17.16791	17.33632	16.73254	14.57648	7.49489
50.00	18.82819	18.49276	18.59373	17.71691	15.19128	7.43780
60.00	20.75057	20.81119	21.03482	20.20258	17.16084	7.96848
70.00	20.61308	20.48580	21.05208	20.63361	17.61064	7.97085
80.00	22.23388	22.00149	22.38340	22.01326	18.84379	8.65632
90.00	25.02110	24.76638	24.61001	23.81738	20.38287	9.73317
100.00	23.32727	23.18370	22.73187	21.66363	18.36120	8.78095
110.00	19.91750	19.22949	18.19644	17.35375	14.70187	7.30721
120.00	25.41645	23.70703	20.01718	18.22407	15.31600	8.26239
130.00	21.61732	21.60711	21.24694	20.39754	17.41410	9.84994
140.00	16.98994	16.88823	16.50273	15.72969	13.48537	7.54108
150.00	14.74951	14.63869	14.51740	13.35410	11.08739	5.82127
160.00	15.06717	14.15354	12.45103	11.49577	9.76558	5.20201
170.00	16.33532	15.94596	14.81717	13.34582	11.26347	5.96973
180.00	17.86626	17.39701	16.17333	14.27087	11.92824	6.39218
190.00	18.64227	18.35105	16.38085	14.21387	12.00269	6.57660
200.00	22.71861	21.06758	17.26398	14.67169	12.25002	6.69895
210.00	33.53421	31.65519	26.52924	21.77177	17.67788	9.06777
220.00	49.32191	46.13616	38.52204	31.77539	25.87998	13.02612
230.00	61.65229	58.74124	53.09313	45.13068	37.56770	20.03838
240.00	59.78386	58.87420	58.39108	51.55456	44.15358	25.03193
250.00	50.79090	49.96955	51.25286	44.74513	38.62027	22.07165
260.00	41.54403	40.76941	41.13229	35.51525	30.41822	16.75208
270.00	36.84706	35.93301	36.05843	30.60843	26.17554	14.47660
280.00	35.31586	34.69967	35.38778	29.79640	25.24496	13.70234
290.00	41.85250	41.23106	41.35864	34.59497	29.29559	15.95236
300.00	40.94348	40.76286	42.06417	37.10099	31.86280	17.51984
310.00	40.56028	39.04033	37.70040	32.72985	27.84926	14.96494
320.00	31.39180	29.59245	27.79605	23.94104	20.12794	10.18471
330.00	21.67579	19.91154	18.82148	16.63297	14.16887	7.15091
340.00	16.88196	15.88121	15.53133	13.95207	11.90559	5.99593
350.00	14.35537	13.78611	14.13392	12.87147	11.07786	5.78709
360.00	13.89471	13.31042	13.46038	12.22383	10.54936	5.69738

*** MODELING OPTIONS USED: CONC RURAL FLAT DEFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3

**

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS 61.65229 AT (	-134.06, -112.49,	0.00, 0.00)	GP POL
	2ND HIGHEST VALUE IS 59.78386 AT (	-151.55, -87.50,	0.00, 0.00)	GP POL
	3RD HIGHEST VALUE IS 58.87420 AT (	-173.21, -100.00,	0.00, 0.00)	GP POL
	4TH HIGHEST VALUE IS 58.74124 AT (	-153.21, -128.56,	0.00, 0.00)	GP POL
	5TH HIGHEST VALUE IS 58.39108 AT (	-259.81, -150.00,	0.00, 0.00)	GP POL
	6TH HIGHEST VALUE IS 53.09313 AT (	-229.81, -192.84,	0.00, 0.00)	GP POL

*** RECEPTOR TYPES:

- GC = GRIDCART
- GP = GRIDPOLR
- DC = DISCCART
- DP = DISCPOLR
- BD = BOUNDARY

*** MODELING OPTIONS USED: CONC RURAL FLAT DFAULT

*** Message Summary For ISC2 Model Execution ***

----- Summary of Total Messages -----

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 572 Informational Message(s)

A Total of 571 Calm Hours Identified

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
*** NONE ***

*** ISCST2 Finishes Successfully ***

KOGLER & ASSOCIATES

4014 N.W. 13TH ST. 377-5822
GAINESVILLE, FL 32609

00033817152

63-2/630
00320

Mar 28 1994

PAY TO THE ORDER OF

Florida Dept. of Environmental Protection

\$ 250⁰⁰

Two Hundred Fifty and 00/100

DOLLARS



First Union National Bank
of Florida
Gainesville, Florida

David Lee Prince

FOR Farmland Hydro - 123-94-01

⑈007152⑈ ⑆063000021⑆ 2132000456902⑈

GUARDIAN SAFETY
SECURE AMERICAN BANK



Florida Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

February 23, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. C. Gene Meier, Administrator
Environmental Services
Farmland Hydro, L.P.
Post Office Box 960
Bartow, Florida 33830

Dear Mr. Meier:

Re: Permit No. AC 53-210886/PSD-FL-186

The Department has reviewed your request for an extension of the expiration date of the referenced permit to modify the North Granulation plant. The additional time is needed to complete the compliance tests on the modified air pollution control equipment and submit an application for permit to operate the plant. This request is acceptable and the expiration date of Permit No. AC 53-210886/PSD-FL-186 is extended from April 1, 1994, to August 1, 1994.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

Mr. C. Gene Meier
AC 53-210886
Permit Amendment
February 23, 1994
Page 2 of 3

The Petition shall contain the following information:

- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action;
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Mr. C. Gene Meier
AC 53-210886
Permit Amendment
February 23, 1994
Page 3 of 3

A copy of this letter shall be filed with the referenced permit and will become a part of that permit.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/WH/bjb

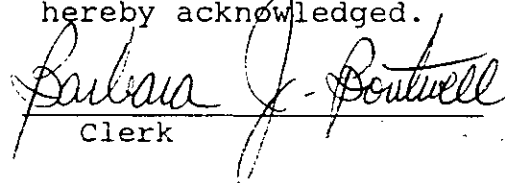
Attachment: Farmland December 10, 1993, letter

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 2/23/94 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.

 2/23/94
Clerk .Date

Is your RETURN ADDRESS completed on the reverse side?

SENDER: <ul style="list-style-type: none"> • Complete items 1 and/or 2 for additional services. • 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 will show to whom the article was delivered and the date delivered. 		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. C. Gene Meier, Administrator Environmental Services Farmland Hydro, L.P. Post Office Box 960 Bartow, Florida 33830		4a. Article Number P 872 562 608	
		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 of Delivery <i>2-28-94</i>	
5. Signature (Addressee) <i>Linda Thompson</i>		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent)			

Thank you for using Return Receipt Service.

P 872 562 608




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

PS Form 3800, JUNE 1991

Sent to		Mr. C. Gene Meier
Street and No.		Post Office Box 960
P.O., State and ZIP Code		Bartow, Florida 33830
Postage		\$
Certified Fee		
Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt Showing to Whom & Date Delivered		
Return Receipt Showing to Whom, Date, and Addressee's Address		
TOTAL Postage & Fees		\$
Postmark or Date		Mailed: 2/23/94 Permit No. AC 53-210886/ PSD-FL-186

Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes
FROM: Clair H. Fancy 
DATE: February 23, 1994
SUBJ: Amendment of Permit
Farmland Hydro, L.P.

Attached for your approval and signature is a letter that will extend a construction permit to modify a phosphate fertilizer plant. The extension is to allow additional time to complete the compliance tests and submit an application for permit to operate.

The request is not controversial. I recommend your approval and signature.

CHF/WH/bjb

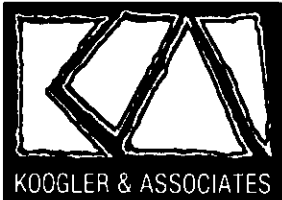
Attachment

Patty

2/22

Howard signed
this one.

Clair



KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
904/377-5822 • FAX 377-7158

KA 123-94-06

February 14, 1995

Mr. A. A. Linero
Florida Department of
Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Polk County-AP
Farmland Hydro, L.P.
Permit Amendment Requests

Dear Mr. Linero:

During recent discussions with FDEP staff, the subject of air permit conditions had come up. Based on those discussions, it is our understanding that all emission limitations in current permits must either be based on a standard, or reflect emission limits requested by a permittee to avoid a specific rule applicability (e.g. PSD, etc.). Any emission limit which is not supported by this criteria can be removed from the permit.

It is anticipated that the removal of such emission limitations from current operation permits and source construction permits will facilitate Title V permit application compilation by Farmland as well as the compilation of Title V permit conditions by FDEP. Thus, only valid applicable requirements will remain in the source permits.

Farmland has several air operation (and the preceding construction) permits which contain emission limitations outside of the above FDEP criteria. As a result, we are requesting FDEP to amend the permits tabulated below. A discussion on these permits is provided in the attachments. The attachment number corresponds to the item number in the table below.

In accordance with FDEP protocol, the request for permit amendment is being submitted to the office where the permit was issued. As the source operation permits were issued by FDEP's Tampa office, a request for amendment of those permits is simultaneously being submitted to that office. The amendment request for construction permits issued by the Bureau of Air Regulation (BAR) are being sent to your attention. The permit listing below, however, includes all the permits to be amended so that both the FDEP District and the BAR offices are aware of the scope of the permit amendments

RECEIVED
MAR 8 1995
Bureau of
Air Regulation

Mr. A. A. Linero
Florida Department of
Environmental Protection

February 14, 1995
Page 2

It is requested that the following permits be amended:

Item	Unit/Operation	Operation Permit No.	Construction Permit No.
1.	North MAP/DAP Plant	A053-250142 (1)	AC53-210886 (2)
2.	Green SPA Plant	A053-242141 (1)	AC53-138041 (2)
3.	No. 5 SAP	A053-200485 (1)	AC53-185490 (2)
	Therminol Heater	A053-187834 (3)	None
	Auxiliary Steam Boiler	A053-159758 (3)	None

NOTES:

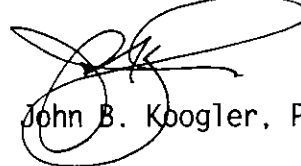
- (1) Operation permit amendment expected from FDEP District office after the construction permit amendment is issued by BAR.
- (2) Construction permit amendment expected from BAR.
- (3) Operation permit amendment expected from FDEP District office.

A check in the amount of \$750. (permit amendments processing fee) is enclosed.

Thank you for your kind assistance. If you have any questions, please call Pradeep Raval or me.

Very truly yours,

KOUGLER & ASSOCIATES



John B. Koogler, Ph.D., P.E.

JBK:par

c: C. Jenkins, Farmland Hydro, L.P.
G. Kissel, FDEP Tampa



ATTACHMENT 1

Unit/Operation : North MAP/DAP Plant

Permit No. : AC53-210886

Amendment Request :

The above referenced permit contains a 0.5% sulfur content limit for No. 2 fuel oil. This sulfur content reflects a typical analysis of No. 2 fuel oil available on the market. To our knowledge, the sulfur content limit in the permit is not based on a regulatory standard, nor does it reflect an emission limitation requested by Farmland to avoid a specific rule applicability (e.g. PSD, etc.).

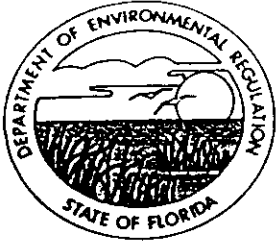
Therefore, it is requested that the construction permit be amended as follows:

Page 8, Specific Condition No. 15:

FROM: The maximum heat input rate to the dryer shall not exceed 50 MMBtu/hour. 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 upto 400 hours during any 12 month period.

TO: The maximum heat input rate to the dryer shall not exceed 50 MMBtu/hour. 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 may be burned for upto 400 hours during any 12 month period.





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.

PERMITTEE:
Farmland Hydro, L.P.

Permit Number: AC 53-210886
PSD-FL-186
Expiration Date: January 1, 1994

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% P₂O₅ 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

ATTACHMENT 2

Unit/Operation : Green Super Phosphoric Acid Plant

Permit No. : AC53-138041

Amendment Request :

The most recent construction permit in our files was issued November 19, 1987. The permit contains nitrogen oxides (NOx) emission limits of 40.5 pounds per hour and 90.0 tons per year. NOx emissions are a by-product of the process. To our knowledge, the emission limitation in the permit is not based on a standard for GSPA, nor does it reflect an emission limitation requested by Farmland to avoid a specific rule applicability (e.g. PSD, etc.).

It is requested that the construction permit be amended as follows:

Page 6, Specific Condition No. 2:

FROM: The emissions from the Green Superphosphoric Acid plant shall not exceed:

Pollutant	Maximum Allowable Emissions	
	pounds/hour	tons/year
NOx	40.5	90.0
Fluoride	0.2	0.4

TO: Emissions of fluorides from the Green Superphosphoric Acid plant shall not exceed 0.2 pounds per hour, or 0.4 tons/year.

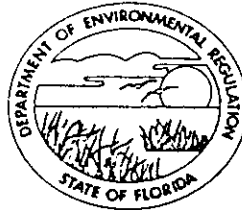
Page 6, Specific Condition No. 8:

FROM: Delete the portion of the condition which requires NOx testing.



STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400



BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

PERMITTEE:
Farmland Inc.
P. O. Box 960
Bartow, Florida 33830

Permit Number: AC 53-138041
Expiration Date: October 31, 1988
County: Polk
Latitude/Longitude: 27° 50' 37" N
81° 56' 05" W
Project: Green Super Phosphoric
Acid Oxidation Unit

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 Green Superphosphoric Acid (GSPA) plant located at the permittee's phosphate fertilizer complex near Bartow on State Road 640 in Polk County, Florida. UTM coordinates are 409.5 km E and 3079.5 km N.

Construction shall be in accordance with the attached permit application except as otherwise noted under the Specific Conditions set forth in this permit.

Attachments are as follows:

1. Application to Construct Air Pollution Sources, DER form 17-1.202(1), and letter dated August 7, 1987.
2. Southwest District DER letter dated October 16, 1987.
3. Farmland letter dated October 29, 1987, with attached letter from Koogler & Associates dated October 27, 1987.

PERMITTEE:
Farmland, Inc.

Permit Number: AC 53-138041
Expiration Date: October 31, 1988

SPECIFIC CONDITIONS:

2. The emissions from the Green Superphosphoric Acid plant shall not exceed:

Pollutant	Maximum Allowable Emissions	
	lb/hr	T/yr
NOx	40.5	90.0
Fluoride	0.2	0.4

3. Other emissions from the process shall be controlled by sealing and/or venting such emissions to the pollution abatement system.

4. The permittee shall install, calibrate, maintain, operate and record data from flow monitoring devices used to determine total P₂O₅ input to the plant. A daily record on the P₂O₅ input to the plant shall be maintained.

5. The permittee shall measure and record the total pressure drop across the scrubber system. Pressure drop across the scrubber must be at least 4 inches of water during plant operation. These records shall be maintained for 2 years and available for inspection by regulatory agency personnel on request.

6. Construction should commence and be completed within a reasonable time based on the projections in the application.

7. Reasonable precautions to prevent fugitive particulate emissions during modification, such as coating or spraying roads and construction sites used by contractors, shall be taken by the permittee.

8. Before the construction permit expires, the GSPA plant shall be sampled for NOx and fluoride emissions. Test procedures shall be in accordance with EPA reference methods 1, 2, 3, 7 and 7A or 7E, 13A or 13B as published in 40 CFR 60, dated July 1, 1986. The Department shall be notified in writing 15 days or more prior to the compliance test. The test shall be conducted at permitted production capacity or no less than 90% thereof. P₂O₅ input, pH of scrubber water, and pressure drop across the scrubber shall be reported to the Department along with the test data and results.

Final Determination

Farmland Industries
Polk County

Green Super Phosphoric Acid Oxidation Unit
Permit No. AC 53-138041

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

November 17, 1987

Final Determination

The Bureau of Air Quality Management completed its review of Farmland's application for a permit to construct a Green Super Phosphoric Acid Oxidation Unit at their Polk County phosphate facility. On October 17, 1987, public notice of the Department's intent to issue the permit was published in the Lakeland Ledger. Copies of the Technical Evaluation and Preliminary Determination were available for public inspection at the Department's offices in Tampa and Tallahassee.

Comments were submitted by the applicant and the Southwest District DER office. The issues and the Department's responses are as follows:

Issue No. 1: Farmland requested a modification to Specific Condition No. 5 reducing the design minimum scrubber pressure drop to 4 inches of water.

The Department is in agreement with this request and the permit will be modified accordingly. If necessary, the minimum pressure drop can be changed again after results are obtained from the compliance test.

Issue No. 2: Farmland requested changes in the test methods specified in Specific Condition No. 8.

→ These changes were made as requested. NOx test method 7E was not included initially because 40 CFR 60, App. A, Method 7E, paragraph 1.1 states that the method is applicable only to those sources for which it is specified in the NSPS regulations, and Method 7E was not specified for nitric acid plants. Since this source is a one-of-a-kind unit with net emissions below the significant level, the Department agrees that method 7E will be sufficient.

Issue No. 3: The DER Southwest District office requested that a Specific Condition be added to require a maximum 10% opacity limit since the emissions are similar to those from a nitric acid plant.

Farmland has confirmed from their pilot plant data that the opacity will be less than 20% but likely will be more than 10%. Since it is possible that the opacity may be closer to 10% than 20% once fine tuning is completed, the Department is in agreement that a reasonable opacity limitation can be established after the plant starts up and is lined out. Language to this effect was included as Specific Condition No. 10. Since additional time will be needed for this determination, the permit expiration date was changed to October 31, 1988.

ATTACHMENT 3

Unit/Operation : No. 5 Sulfuric Acid Plant

Permit No. : AC53-185490

Amendment Request :

The above referenced permit contains emission limitations for nitrogen oxides. To our knowledge, this limitation in the permit is not based on a standard, nor does it reflect an emission limitation requested by Farmland to avoid a specific rule applicability. In fact FDEP's PSD review in 1989 (PSD-FL-143) acknowledged that NOx is a by-product of the sulfuric acid manufacturing process and there is no method of control to represent Best Available Control Technology for it. It is interesting to note that the PSD review at that time was triggered based on conservative projections of potential emissions from the project. Subsequent testing of the project, as built, have shown that a PSD review for NOx would not have been required if representative plant performance information was available during preconstruction review.

Based on the above discussion it is requested that the construction permit be amended as follows:

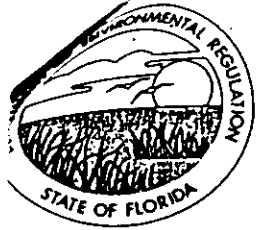
Page 6, Specific Condition No. 5:

Delete this condition regarding NOx emissions.

Page 6, Specific Condition No. 8:

Delete the portion of the condition which requires NOx testing.





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:
Farmland Industries, Inc.
P. O. Box 960
Bartow, FL 33830

Permit Number: AC 53-185490
PSD-FL-143A
Expiration Date: Sept. 30, 1991
County: Polk
Latitude/Longitude: 27°50'37"N
81°56'05"W
Project: Sulfuric Acid Plant
No. 5 - Production Increase to
2400 TPD

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the increase in production from 2000 TPD to 2400 TPD of sulfuric acid in plant No. 5. The source is located at the permittee's existing facility near Bartow, Polk County, Florida. The UTM coordinates are Zone 17, 409.5 km East and 3079.5 km North.

The increase in production shall be carried out 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 on August 23, 1990.

PERMITTEE:
Armland Industries, Inc.

Permit Number: AC 53-185490
PSD-FL-143A
Expiration Date: September 30, 1991

SPECIFIC CONDITIONS:

4. Sulfuric acid mist emissions shall not exceed:

0.15 lb/ton of 100% sulfuric acid produced
15.0 lbs/hr
65.7 tons/yr

5. Nitrogen oxides emissions shall not exceed:

0.12 lb/ton of 100% sulfuric acid produced
11.9 lbs/hr
52.2 tons/year

6. Visible emissions shall not exceed 10% opacity.

7. Sulfuric acid plants No. 1 and No. 2 shall permanently cease operation within 90 days after the No. 5 sulfuric acid plant begins operation.

8. A continuous emission monitor shall be used to monitor sulfur dioxide, in accordance with F.A.C. Rule 17-2.710. Initial and annual compliance tests shall be conducted using:

EPA Method 7 for nitrogen oxides
EPA Method 8 for sulfur dioxide and acid mist
DER Method 9 for visible emissions

9. The compliance tests shall be conducted within 30 days after operation begins. The Department's Southwest District office shall be notified in writing 15 days prior to source testing and at least 5 days prior to initial startup. Written reports of the tests shall be submitted to that office within 45 days of test completion.

10. 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 date of the permit (F.A.C. Rule 17-4.090).

11. An application for an operation permit must be submitted to the Department's Southwest District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. The operation permit application shall include a set of conditions acceptable to the Department for sequential startup/shutdown of the permittee's three sulfuric acid plants. To

Technical Evaluation
and
Preliminary Determination

Farmland Industries, Inc.
Green Bay Complex
Bartow, Polk County, Florida

Sulfuric Acid Plant No. 5
Production Increase to 2,400 TPD

Permit No. AC 53-185490
PSD-FL-143A

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

November 15, 1990

III. Rule Applicability

The construction permit application is subject to review under Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. The facility is located in an area classified as attainment for each of the regulated air pollutants. The proposed major source is subject to the preconstruction review requirements of F.A.C. Rule 17-2.500, Prevention of Significant Deterioration (PSD). The proposed increases in SO₂ and acid mist emissions exceed significant levels set forth in Table 500-2 of F.A.C. Rule 17-2.500. Preconstruction review must include a determination of best available control technology (BACT), good-engineering practice stack height, ambient impact analysis, impact on soils, vegetation, and visibility. F.A.C. Rules 17-2.660, Table 660-1, Section 60.80, and 17-2.700, Table 700-1, apply to this new major source. Emissions will be limited by the federal new source performance standards for sulfur dioxide, acid mist and visible emissions, and the previous BACT determination for NO_x (PSD-FL-143).

IV. Source Impact Analysis

A. Ambient Air Analysis

Analysis of ambient air impact from the proposed source generally involves assessment of existing air quality, a PSD increment analysis, and an ambient, air quality standards analysis. Existing air quality must be established by monitoring data if the emissions from the new source will have an impact equal to or greater than that listed in F.A.C. Rule 17-2.500, Table 500-3, De Minimus Ambient Impacts. However, if it is shown, as here, that the net increase in ambient concentrations of applicable pollutants will be less than the de minimus concentrations listed in Table 500-3, the source is exempt from ambient monitoring as provided by F.A.C. Rule 17-2.500(3)(e). The following table summarizes results of air quality analysis for the proposed project:

	Ambient Impacts (ug/m ³)	Signif. Impact	De Minimus Impact
Sulfur Dioxide			
3-hr	0.01	25.0	N/A
24-hr	(less than 0.01)	5.0	13.0
Annual	(less than 0)	1.0	N/A
Acid Mist (24-hr)	5.0	N/A	5.0*

*No de minimus or significant impact levels have been established for acid mist. This figure was calculated based on adjusted threshold limit value (TLV) in order to arrive at an acceptable ambient level (AAL).

Technical Evaluation
and
Preliminary Determination

Farmland Industries, Inc.
Green Bay Complex
Bartow, Polk County, Florida

Sulfuric Acid Plant No. 5
Permit No. AC 53-171751
PSD-FL-143

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

December 21, 1989

	Air Pollutant (tons/yr)			GSPA	Net Increase	Signif. Increase
	Sulfuric Acid	Sulfuric Acid	Plants			
	1	2	5			
SO ₂						
Present	700	700				
Proposed	(700)	(700)	1460		60	40
Acid Mist						
Present	7.5	7.5				
Proposed	(7.5)	(7.5)	54.8		39.8	7
NO _x						
Present	25.2	25.2*		64.8		
Proposed	(25.2)	(25.2)	43.4	64.8	57.8	40

*Permanently shut down in 1985 but included for contemporaneous emission changes per F.A.C. Rule 17-2.500(2)(e)3.

III. Rule Applicability

The construction permit application is subject to review under Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. The facility is located in an area classified as attainment for each of the regulated air pollutants. The proposed major source is subject to the preconstruction review requirements of F.A.C. Rule 17-2.500, Prevention of Significant Deterioration (PSD). The proposed increases in emissions exceed significant levels set forth in Table 500-2 of F.A.C. Rule 17-2.500. Preconstruction review must include a determination of best available control technology (BACT), good-engineering practice stack height, ambient impact analysis, impact on soils, vegetation, and visibility. F.A.C. Rules 17-2.660, Table 660-1, Section 60.80, and 17-2.700, Table 700-1, apply to this new major source. Emissions will be limited by the federal new source performance standards for sulfur dioxide, acid mist and visible emissions, and the BACT determination for NO_x.

IV. Source Impact Analysis

A. Ambient Air Analysis

Analysis of ambient air impact from the proposed source generally involves assessment of existing air quality, a PSD increment analysis, and an ambient air quality standards analysis. Existing air quality must be established by monitoring data if the emissions from the new source will have an impact equal to or greater than that listed in F.A.C. Rule 17-2.500, Table 500-3, De Minimus Ambient Impacts. However, if it is shown, as here, that the net increase in ambient concentrations of applicable pollutants will be less than the de minimus concentrations listed in Table 500-3, the source is exempt from ambient monitoring as provided by F.A.C. Rule 17-2.500(3)(e). The following table summarizes results of air quality analysis for the proposed project:



Florida Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

April 11, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. C. Gene Meier, Administrator
Environmental Services
Farmland Hydro, L.P.
P. O. Box 960
Bartow, Florida 33830

Dear Mr. Meier:

Re: Amendment of Permit
AC 53-210886/PSD-FL-186

The Department is in receipt of John Koogler's March 28, 1994, letter requesting that the referenced permit be amended to allow an increase in ammonia emissions. The emission test results listed in Attachment 1 of this letter showed that Farmland's ammonia emission rate was similar to the emission rate of other ammonium phosphate plants. The ambient air modeling results listed in Attachment 2 of this letter showed that the Acceptable Ambient Concentration for ammonia will not be exceeded at the higher emission rate requested. Based on this information, Specific Condition No. 5 or Permit No. AC 53-210886/PSD-FL-186 is changed:

From:

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

MAP Production				
Pollutant		Main Stack	R/G Stack	Plant Total
Fluorides	lbs/TP ₂ O ₅	--	--	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

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services
- 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 will show to whom the article was delivered and the date delivered.

RECEIVED

APR 25 1994

Bureau of

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

- 1. Addressee's Address
 - 2. Restricted Delivery
- Consult postmaster for fee.

3. Article Addressed to **Air Regulation**
 Mr. C. Gene Meier, Administrator
 Environmental Services
 Farmland Hydro, L.P.
 P. O. Box 960
 Bartow, Florida 33830

4a. Article Number
 P 872 563 626

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 4/21/94

5. Signature (Addressee)
Juda Thompson
 6. Signature (Agent)

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

Thank you for using Return Receipt Service.

P 872 563 626



Receipt for Certified Mail


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

PS Form 3800, JUNE 1991

Sent to Mr. C. Gene Meier	
Street and No. P. O. Box 960	
P.O., State and ZIP Code Bartow, Florida 33830	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 4/19/94 AC 53-210886/PSD-FL-186	

Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes
FROM: Clair H. Fancy 
DATE: April 11, 1994
SUBJ: Amendment of Permit
Farmland Hydro, L.P.

Attached for your approval and signature is a letter that will allow an increase in ammonia emissions from a MAP/DAP plant located near Bartow, Florida.

As the Department does not have an emission standard for ammonia, this pollutant will be tracked for inventory purposes only.

I recommend your approval and signature.

CHF/WH/bjb

Attachment

Mr. C. Gene Meier
 AC 53-210886
 Permit Amendment
 April 11, 1994
 Page 2 of 5

DAP Production				
Pollutant		Main Stack	R/G Stack	Plant Total
Fluorides	lbs/TP ₂ O ₅	--	--	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

To:

Emissions from the modified plant shall not exceed any of the limits listed for fluorides and particulate matter in the following tables:

MAP Production				
Pollutant		Main Stack	R/G Stack	Plant Total
Fluorides	lbs/TP ₂ O ₅	--	--	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

Mr. C. Gene Meier
 AC 53-210886
 Permit Amendment
 April 11, 1994
 Page 3 of 5

DAP Production

Pollutant		Main Stack	R/G Stack	Plant Total
Fluorides	lbs/TP ₂ O ₅	--	--	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	128.7	133.9
	TPY	22.7	563.7	586.4

*Ammonia emission estimates (24-hour averages) listed in these tables are for inventory purposes only. Should the ammonia emissions exceed the listed estimates, the permittee shall model the maximum ammonia emissions to show that the Acceptable Ambient Concentration for ammonia of 100 ug/m³ (annual average) is not being exceeded and submit a report on these results to the Southwest District.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

Mr. C. Gene Meier
AC 53-210886
Permit Amendment
April 11, 1994
Page 4 of 5

The Petition shall contain the following information:

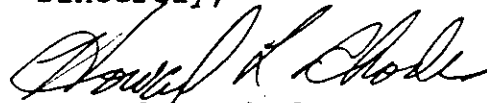
- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action;
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Mr. C. Gene Meier
AC 53-210886
Permit Amendment
April 11, 1994
Page 5 of 5

A copy of this letter must be filed with Permit No. AC
53-210886/PSD-FL-186 and shall become a condition of that permit.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/WH/bjb

Attachment: Koogler's March 28, 1994, letter

cc: Bill Thomas, SWD
John Koogler, P.E.
Jewell Harper, EPA

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that
this AMENDMENT and all copies were mailed by certified mail before
the close of business on 4/19/94 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.

Barbara J. Boutwell 4/19/94
Clerk Date

Farmland Hydro, L.P.

Green Bay Plant
County Road 640
Post Office Box 960
Bartow, Florida 33830
Tele.: 813 533-1141

RECEIVED

C. Gene Meier
Administrator
Environmental Services

DEC 21 1993

December 10, 1993

Bureau of
Air Regulation 0001281

Mr. C. H. Fancy, P.E.
Chief, Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED
DEF - MAIL ROOM
1993 DEC 14 AM 11:55

Re: Permit No. AC53-210886 PSD-FL-186

Dear Mr. Fancy,

Farmland Hydro, L.P. has a construction permit to modify the North Granulation Plant that will allow us to increase our production rates. We have encountered major start-up problems along with having to have some customized stack sampling equipment made because of height stack temperatures and excessive moisture in one of the stacks.

We requested, and you granted, a three (3) month extension on our current permit. This allowed us to complete the compliance testing on all of the stacks. This testing revealed several problems: (1) one with ammonia when we operated the plant to produce MAP, (2) there was a problem on one of the three tests with particulates on the dryer when producing MAP, and (3) there was a problem on the reactor granulator caused by excessive moisture and temperature variation that would not allow for an isokinetic state during sampling.

Mr. Merle Farris, Vice President, Operations, and I met with Mr. Bill Thomas and his staff on 12/07/93 to determine what course of action to pursue at this point. We suggested some engineering changes we could make that we believe will help overcome some of the problems. Mr. Thomas agreed and asked us to outline these changes and a timetable. The changes we plan to make are listed below:

1. Increase the fan rate on the BFL scrubber. This should help reduce the isokinetic problem with the R/G stack.
2. Raise the sprays in the BFL scrubber and also replace the BFL mist pads. This should help with the particulate problem.
3. Increase the size of the drain pipe on the R/G stack to reduce water entrainment.
4. Add 30% phosphoric acid to the dryer, screen an mill and cooler scrubber. This should reduce the ammonia loss when we produce DAP.



A Delaware Limited Partnership



These changes should be made and re-testing should be completed by April 1, 1994. We are requesting our construction permit be extended an additional three (3) months (completed operation permit application must be submitted 90 days before construction permit expires). This would allow us time to evaluate our changes because we may have to request some modifications to our permit and would allow higher particulate and ammonia emissions. We may also have to address the isokinetic variation on R/G stack, but we hope the engineering changes will correct the problem.

Thank you for your considerations and if you have any questions please give me a call.

Sincerely,



C. Gene Meier
Administrator
Environmental Services

CGM:dr/cgm7693

cc: C. M. Farris
Bill Thomas

St. Ydankis
G. Harper, EPA

These changes should be made and re-testing should be completed by April 1, 1994. We are requesting our construction permit be extended an additional three (3) months (completed operation permit application must be submitted 90 days before construction permit expires). This would allow us time to evaluate our changes because we may have to request some modifications to our permit and would allow higher particulate and ammonia emissions. We may also have to address the isokinetic variation on R/G stack, but we hope the engineering changes will correct the problem.

Thank you for your considerations and if you have any questions please give me a call.

Sincerely,

C. Gene Meier/dr

C. Gene Meier
Administrator
Environmental Services

CGM:dr/cgm7693

cc: C. M. Farris
Bill Thomas

~~A. Reynolds~~ St. Hanks
J. Harper, EPA

2/18/94

Gene Meier asked that the extension be for 4 months
in case the on-going tests reveal a
problem.

lmd

5.25 F0346 FLORIDA DEPARTMENT OF
 CO. BR. VENDOR NO. VENDOR NAME

REMITTANCE ADVICE

96626 CHECK NUMBER 69996626

DESCRIPTION	P.O.	VOUCHER	INVOICE NO	INV. DATE	INVOICE AMOUNT	DISCOUNT TAKEN	AMOUNT PAID
002222		90439	12893	120893	50.00		50.00
001							
							50.00+
							50.00*+
Farmland Hydro, L.P. P.O. Box 7305 Kansas City, Missouri 64116				TOTALS	50.00		50.00

-6310 (10/91)

Farmland Hydro, L.P.
 P.O. Box 7305
 Kansas City, Missouri 64116

CHECK NO. 69996626

01281

80-182
1019

16 25 F0346 12/10/93
 CO. BR. VEND. NO. CHECK DATE

PAY EXACTLY \$*****50 DOLLARS AND 00 CENTS

CHECK AMOUNT
 \$*****50.00
 VOID AFTER 180 DAYS

Boatmen's Bank of Marshall
 Marshall, Missouri 65340

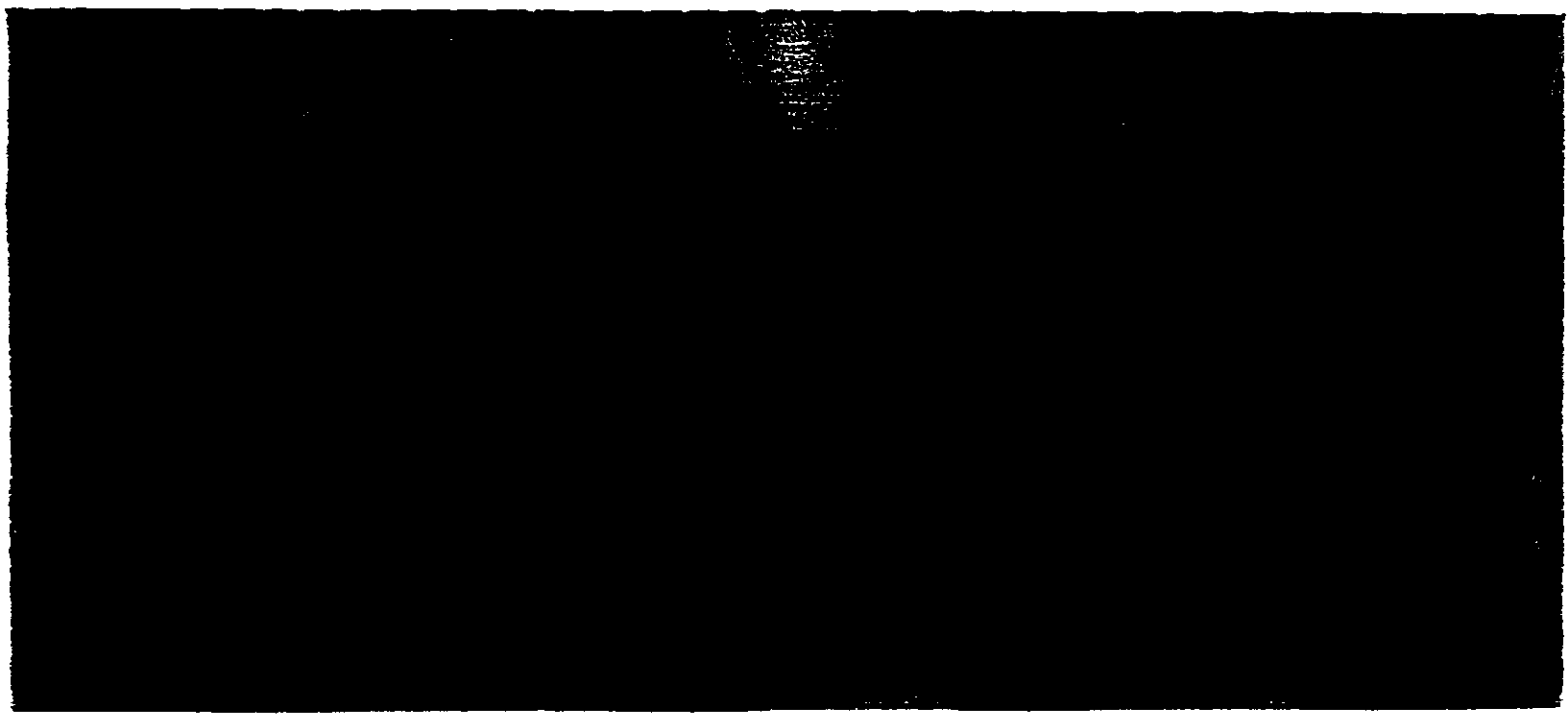
Farmland Hydro, L.P.

PAY

TO THE ORDER OF
 FLORIDA DEPARTMENT OF
 ENVIRONMENTAL REGULATION
 2600 BLAIR STONE RD
 TALLAHASSEE FL 32399

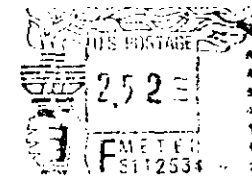
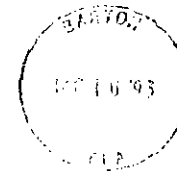
Olivia
Steve Rodgers

⑈69996626⑈ ⑆101901820⑆ 390103000877⑈



Farmland Hydro, L.P.

Green Bay Plant
County Road 640
Post Office Box 960
Bartow, Florida 33830



Mr. C. H. Fancy, P.E.
Chief, Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Fl. 32399-2400



Lawton Chiles
Governor

Florida Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

November 8, 1993

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

*23938:1
PATS updated*

Dear Mr. Farris:

Re: Amendment of Permit No. AC53-210886

The Department has reviewed Mr. Gene Meier's September 16, 1993, letter requesting that the referenced construction permit for Farmland's North GTSP/MAP/DAP Granulation Plant Modification be extended. The additional time is needed to complete the compliance tests. This request is acceptable and construction permit no. AC 53-210886 is extended from January 1, 1994, to April 1, 1994.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

Mr. C. M. Farris
AC 53-210886
Permit Amendment
November 8, 1993
Page 2 of 3

The Petition shall contain the following information:

- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action;
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Mr. C. M. Farris
AC 53-210886
Permit Amendment
November 8, 1993
Page 3 of 3

A copy of this letter must be filed with the referenced permit and shall become a part of that permit.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/WH/bjb

Attachment: Farmland's September 16, 1993, letter

cc: Bill Thomas, SWD

P 872 562 496



Receipt for Certified Mail

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

Sent to Mr. C. M. Farris	
Street and No. P. O. Box 960	
P.O., State and ZIP Code Bartow, Florida 33830	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 11/10/93 AC53-210886	

PS Form 3800, JUNE 1991

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- 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 will show to whom the article was delivered and the date delivered.

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

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Mr. C. M. Farris
Farmland Hydro, L.P.
P. O. Box 960
Bartow, Florida 33830

4a. Article Number
P 872 562 496

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
11-16-93

5. Signature (Addressee)
Lucia Thompson

6. Signature (Agent)
Lucia Thompson

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

Thank you for using Return Receipt Service.

Memorandum

Florida Department of
Environmental Protection

TO: Howard L. Rhodes
FROM: Clair Fancy *CHF*
DATE: November 8, 1993
SUBJ: Amendment of Permit
Farmland Hydro, L.P.

Attached for your approval and signature is a letter that will extend the expiration date of a construction permit issued for the modification of a phosphate fertilizer granulation plant located near Bartow, Polk County, Florida. The additional time is needed to complete the compliance tests.

I recommend your approval and signature.

CHF/WH/bjb

Attachment



Florida Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

September 27, 1993

0000714

CERTIFIED MAIL-RETURN RECEIPT

Mr. C. Gene Meier
Administrator, Environmental Services
Farmland Sydro, L.P.
Post Office Box 960
Bartow, Florida 33830

Dear Mr. Meier:

RE: Farmland Hydro. L.P.
AC53-210886, PSD-FL-186
Request for Permit Extension

RECEIVED
DER-MAIL ROOM
1993 OCT -7 PM 12:41

The Bureau of Air Regulation received your September 16, 1993, request for the above referenced project. On October 30, 1991, Rule 17-4.050(4)(o), F.A.C., was changed to require a \$50 processing fee for a permit extension; therefore, we will not be able to take action on your request until the fee is received. If you have any questions, please call Patty Adams at (904)488-1344.

Sincerely,

Patricia G. Adams

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

002222

CHF/pa

cc: Willard Hanks

Attached is Check For Processing Fee For
Permit Extension.

Gene Meier

P 230 524 412



Receipt for Certified Mail

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

PS Form 3800, June 1991

Sent to Mr. C. Gene Meier	
Street and No. P. O. Box 960	
P. O., State and ZIP Code Bartow, Florida 33830	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 9/27/93 AC53-210886, PSD-FL-186	

Is your RETURN ADDRESS completed on the reverse side?

SENDER: • Complete items 1 and/or 2 for additional services. • 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 will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. C. Gene Meier Administrator, Environ. Sciences Farmland Sydro, L.P. Post Office Box 960 Bartow, Florida 33830		4a. Article Number P 230 524 412	
5. Signature (Addressee) <i>Gene Meier</i>		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	
6. Signature (Agent)		7. Date of Delivery OCT 01 1993	
8. Addressee's Address (Only if requested and fee is paid)			

Thank you for using Return Receipt Service.

Andy Nguyen
FAX 813-744-6083
FAX 542-6083
813-744-6100
542-6100 ext 342

Farmland Hydro, L.P.
P.O. Box 7305
Kansas City, Missouri 64116

CHECK NO. 69995102

0000714

80-182
1019

16 25 F0436 10-1-93
CO. BR. VEND. NO. CHECK DATE

PAY EXACTLY \$*****50 DOLLARS AND 00 CENTS

CHECK AMOUNT

\$*****50.00

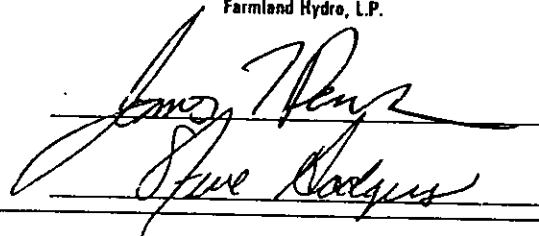
VOID AFTER 180 DAYS

Boatmen's Bank of Marshall
Marshall, Missouri 65340

PAY
TO THE
ORDER
OF

Florida Department of
Environmental Protection
2600 Blair Stone Rd
Tallahassee, FL 32399-2400

Farmland Hydro, L.P.



⑈69995102⑈ ⑆101901820⑆ 390103000877⑈

Farmland Hydro, L.P.

Green Bay Plant
County Road 640
Post Office Box 960
Bartow, Florida 33830
Tele.: 813 533-1141

C. Gene Meier
Administrator
Environmental Services

September 16, 1993

RECEIVED
SEP 24 1993
Division of Air
Resources Management

Mr. C. H. Fancy, P.E.
Chief, Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

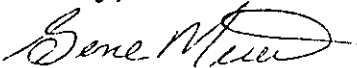
Re: Permit # AC53-210886 PSD-FL-186

Dear Mr. Fancy,

Farmland Hydro, L.P. has a construction permit to modify the north granulation plant that will allow us to increase our production rates. We have encountered some problems achieving the designed production rates, but have recently corrected this problem. We have also had some problems trying to determine the emissions rate from our stacks because of high stack temperature. Because of the high temperature and excessive moisture content we had to purchase some customized sampling equipment. This has caused some delays in our compliance testing schedule, therefore we are requesting a two (2) month extension on our construction permit AC53-210886.

Thank you for your consideration and if you have any questions please give me a call.

Sincerely,



C. Gene Meier
Administrator,
Environmental Services

CGM:dr/cgm5493

cc: Bill Thomas - DEP
C. M. Farris



A Delaware Limited Partnership

