



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

RECEIVED

DEC 10 1990

DER-BAQM

4APT-AEB

DEC 05 1990

Mr. Clair Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Farmland Industries, Inc. (PSD-FL-143A)

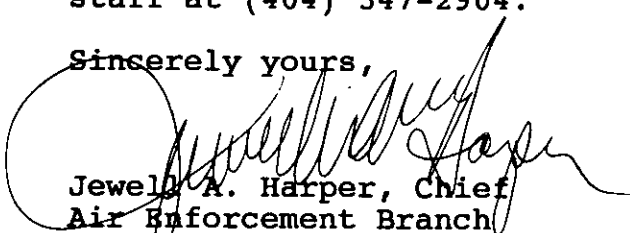
Dear Mr. Fancy:

This is to acknowledge receipt of an application dated August 20, 1990, for a modification to Farmland Industries' previously issued Prevention of Significant Deterioration (PSD) permit.

We have reviewed the application as requested and have no substantive comments at this time.

Thank you for the opportunity to review this package. If you have any questions or comments, please contact Mr. Gregg Worley of my staff at (404) 347-2904.

Sincerely yours,


Jewell A. Harper, Chief
Air Enforcement Branch
Air, Pesticides and Toxics
Management Division

cc: J. Reynolds
B. Thomas, SW Dist.
CHF/BA

AFFIDAVIT OF PUBLICATION

THE LEDGER Lakeland, Polk County, Florida

Case No.

STATE OF FLORIDA)
COUNTY OF POLK)

Before the undersigned authority personally appeared Stephen DeWitt, who on oath says that he is Controller 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

5 Plant

in the

Court, was published in said newspaper in the issues of

November 29;
.....
1990
.....

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

Stephen DeWitt
Controller
Barbara Stupper

Sworn to and subscribed before me this 29th
November 1990
day of A.D. 19

(Seal)

Barbara Stupper
Notary Public
Notary Public, State of Florida

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue
The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Farmland Industries, Inc., State Road 640 West, Bartow, Florida, to increase production rate of the No. 5 sulfuric acid plant at their facility near Bartow, Polk County, Florida. A determination of Best Available Control Technology (BACT) was required. The proposed project is subject to Prevention of Significant Deterioration regulations and federal new source performance standards. The project will increase total sulfuric acid production of the Farmland facility by approximately 8% and is not expected to result in significant deterioration of the environment. No PSD increment will be consumed. The Department is issuing this intent to issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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, within fourteen (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, Florida Statutes.

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 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, F.A.C.

The application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at: Department of Environmental Regulation Bureau of Air Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Department of Environmental Regulation Southwest District Office 4520 Oak Fair Blvd. Tampa, Florida 33610-7347

Any person may send written comments on the proposed action to Mr. Barry Andrews at the Department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the Department's final determination. Furthermore, a public hearing can be requested by any person. Such requests must be submitted within 30 days of this notice.
R-720 — 11-29-1990



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

KA 123-90-02

November 30, 1990

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DEC 05 1990

DER-BAQM

Mr. C. H. Fancy
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Farmland Industries, Inc.
Polk County, Florida
FDER File AC53-185490
PSD-FL-143A

Dear Mr. Fancy:

On behalf of Farmland Industries, Inc. (Farmland), I have reviewed the draft of permit AC53-185490 included in the Technical Evaluation and Preliminary Determination for the production rate increase for the No. 5 sulfuric acid plant proposed by Farmland. I have comments related to the nitrogen oxides emission limit and the monitoring requirement for nitrogen oxides.

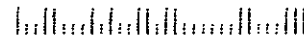
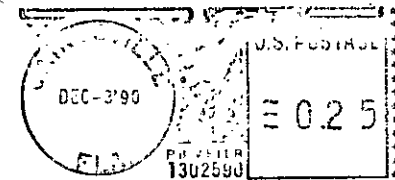
The nitrogen oxides emission limit of 11.9 pounds per hour is based on information that was provided in the permit application submitted by Farmland. This emission limit was based on a "emission factor" of 2.1×10^{-6} pounds of NO_x per dry standard cubic foot of sulfuric acid plant stack gas and on a stack gas flow rate of 56,739 dry standard cubic feet of stack gas per ton of 100% acid produced. The NO_x emission factor was developed by Koogler & Associates personnel in about 1976 from a one-time measurement using EPA Method 7. The measurement was made on a typical sulfuric acid plant in Polk County operating at a rate of approximately 2250 tons per day. The emission factor has been used quite extensively but, as I point out, it has been based on a very limited data base. Since the time we developed this emission factor, I have had the opportunity to review nitrogen oxides emission data developed by Monsanto showing a higher NO_x concentration in sulfuric acid plant stack gas and measurements made by another phosphate fertilizer company in west central Florida indicating lower NO_x concentrations in the stack gas.

The three sets of measurements that I have referenced all indicate that the emission factor of 2.1×10^{-6} pounds of NO_x per cubic foot of stack gas (18 ppm NO_x, by volume) is a reasonable emission factor. The data, however, demonstrate that there can be quite a bit of variability in this



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Tallahassee, FL 32399-2400



Mr. C. H. Fancy
Florida Department
of Environmental Regulation

November 30, 1990
Page 2

factor. My concern is that a "general" emission factor has been used to establish a "specific" emission limiting standard. I express this concern as specific emission limiting standards based on general emission factors have caused considerable problems for several companies in the past. These problems have resulted in a review of matters by the Department and time consuming negotiations between the permit holder and the Department to establish more reasonable emission limits for particular installations.

I recognize this as a complex problem as emission factors are commonly used during the preparation of permit applications for estimating emissions from facilities when actual emission data do not exist and, as the estimates are used for permitting, they must be binding on the applicant. On the other hand, it is not reasonable to limit the permittee to emissions based on a general emission factor with no leeway. I would suggest that Specific Condition No. 5 of the subject draft permit state that nitrogen oxides emissions are not expected to exceed 11.9 pounds per hour. The condition could continue with wording that would require Farmland to provide justification to the Department if this emission limit is exceeded. Once a compliance test is conducted at the plant, the NOx standard in the construction permit could be amended if necessary and the revised standard could then carry over to subsequent operating permits.

The other matter that I would like to address is the requirement for initial and annual compliance testing for nitrogen oxides emissions using EPA Method 7. As nitrogen oxides emissions from sulfuric acid plants are quite low, I would like to suggest that testing for nitrogen oxides emissions be required only as a condition of the construction permit (the initial test) and then be required only once every five years on the renewal date of the operating permit.

I appreciate your consideration of these matters and will be more than happy to provide additional information or to discuss the matters further with you. Please do not hesitate to contact me if you have questions regarding these matters.

Very truly yours,

KOGLER & ASSOCIATES


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

JBK:wa

cc: Mr. Ed Ferking, Farmland
G. Reynolds
C. Halladay
B. Thomas, SW Dist
CHF/SA

