

Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

September 11, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Kenneth V. Ford, Manager
Seminole Fertilizer Corporation
Post Office Box 471
Bartow, Florida 33830

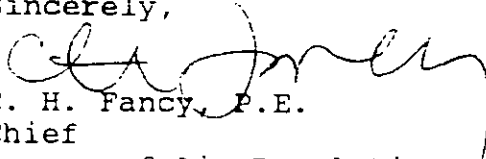
Re: Seminole Fertilizer Corporation
Proposed Sulfuric Acid Production Increase
Permit File No. AC53-216288, PSD-FL-191

The Department has received your application for an increase in the sulfuric acid production rates of the existing plants No. 4, 5, and 6 at your facility in Polk County. Based on our initial review of your proposed project, we have determined that additional information is needed in order to continue processing this application package. Please submit the information requested below to the Department's Bureau of Air Regulation.

1. Please verify the negative emission rates for the following sources contained in your PSD Class I sulfur dioxide modeling inventory: 170, 180, 190, 210-240, 420, 430, 450-500, 520-540, 750, 760, 960, 970, 1160, 1170, and 1230. The source numbers refer to numbers in Table I of your application package. Also, please verify the reduced emission rates for sources 260 and 280.
2. Please perform a Class I visibility analysis for the Chassahowitzka Class I area. The visibility analysis should include all particulate, nitrogen oxide, and sulfuric acid emissions which are subject to Prevention of Significant Deterioration; this includes existing as well as proposed increased emissions.

If you have any questions, please call Cleve Holladay at (904) 488-1344.

Sincerely,


C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/CH/plm

cc: J. Koogler, PhD, P.E., K&A

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 Fee will provide you the signature of the person delivered to and the date of delivery.

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

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

Consult postmaster for fee.

3. Article Addressed to:
Mr. Kenneth V. Ford, Manager
Seminole Fertilizer Corp.
Post Office Box 471
Bartow, FL 33830

4a. Article Number
P 062 921 996

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

7. Date of Delivery
SEP 14 1992

5. Signature (Addressee)

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

6. Signature (Agent)

PS Form 3811, November 1990 * U.S. GPO: 1991-287-066

DOMESTIC RETURN RECEIPT

P 062 921 996



Receipt for Certified Mail

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

Sent to Mr. Kenneth V. Ford	
Street and No Seminole Fertilizer P. O. Box 471	
P. O., State and ZIP Code Bartow, FL 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: 9-11-92 Permit: AC 53-216288 PSD-FL-191	

PS Form 3800, June 1991



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

SEP 02 1992

4APT-AEB

RECEIVED

SEP 8 1992

Division of Air
Resources Management

Mr. Clair H. 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: Seminole Fertilizer Corporation, Bartow, Florida
(PSD-FL-191)

Dear Mr. Fancy:

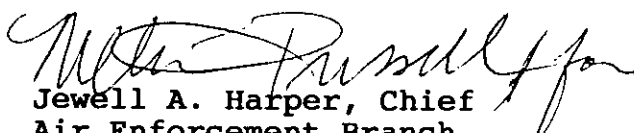
This is to acknowledge receipt of an application for a Prevention of Significant Deterioration (PSD) permit for the above referenced facility by your letter dated July 20, 1992. The proposed major modification to the existing facility consists of increasing the production rate at each of three sulfuric acid plants. As discussed between Mr. Cleve Holladay of your staff and Mr. Lew Nagler of my staff on August 13, 1992, we have the following comment related to the air quality analysis:

Our review indicates that the Class I and Class II area increments, and the NAAQS should not be threatened by the proposed modification. However, the cumulative modeled impact of other increment consuming sources indicates an exceedance of the 24-hour SO₂ Class I increment at a receptor in the Chassahowitzka National Wildlife Refuge. The Florida Department of Environmental Regulation should resolve the apparent Class I area increment modeling exceedance due to the cumulative impacts analysis.

Thank you for the opportunity to comment on this application. If you have any questions concerning modeling or monitoring, please contact Mr. Lew Nagler of my staff at (404) 347-5014. Any other questions may be directed to Mr. Stan Kukier of my staff also at (404) 347-5014.

Sincerely yours,

9-9-92


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

CMF/PL
Willard Hanks
Cleve Holladay
Bill Thomas, SWD
Linda Novak, Polk Co

9-9-92 AM

Ph
FYI, reviewed
initial. Return to R/H,
for filing. J. L. L. S.
Bm



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

KA 203-92-01

August 6, 1992

RECEIVED

AUG 11 1992

Division of Air
Resources Management

Mr. Cleve Holladay
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: Ambient Air Quality Modeling
Modification of Sulfuric Acid
Plants No. 4, 5 and 6
Seminole Fertilizer Corporation
Polk County, Florida

Dear Mr. Holladay:

This is a follow up to your meeting on July 23, 1992, with Pradeep Raval regarding the ambient air quality modeling issues related to the above projects.

The ISC-ST2 modeling submitted to FDER demonstrated that the increase in sulfur dioxide emissions from the proposed project will not result in significant impact, as defined in FAC Rule 17-2.100. As the highest second high impacts were considered in determining if the impacts were significant or not, the highest-high impacts were not addressed in the tables.

The EPA draft modeling guideline to FDER recommends the consideration of the highest-high impacts to determine if modeling of all significant sulfur dioxide emitting sources in the area is necessary. Based on this guideline, you had requested the remodeling of the proposed project to not only evaluate what the highest-high impacts would be, but also determine what the sulfur dioxide impacts would be along Highway 60 in the vicinity of the proposed project.

As a response to your request, the ISC-ST2 model, Version 92062, was re-run with the following refinements:

- 1) The three sources were modeled individually (based on actual plant location) and not as a single emission point used previously.
- 2) Downwind receptor rings were added to the polar grid at 4000 and 5000 meters. Discrete receptors were located along Highway 60 at points of intersection with the polar grid radials to a distance of 5000 meters per your request.

The Department of Environmental Regulation
Mr. Cleve Holladay
August 6, 1992
Page two

- 3) Tampa meteorological data from 1985 to 1989 were used for the modeling instead of the 1982 to 1986 data used previously.

The modeling results summarized in the attached table show that the predicted highest-high impacts beyond the Seminole property boundary are below the threshold which would require additional modeling with other significant sulfur dioxide sources in the area. A printout of the modeling output and a diskette are enclosed for your review.

A map showing the Seminole property boundary and the physical barriers which preclude public access is also enclosed for your file.

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

Very truly yours,

KOOGLER & ASSOCIATES


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

JBK/bjm

Enclosure

cc: Mr. Ken Ford, Seminole
Mr. Mickey Martinasek, Seminole
Mr. Willard Hanks
B. Thomas, SW Dist
G. Warner, EPA
C. Shaver, NPS



SUMMARY OF SULFUR DIOXIDE IMPACT ANALYSIS

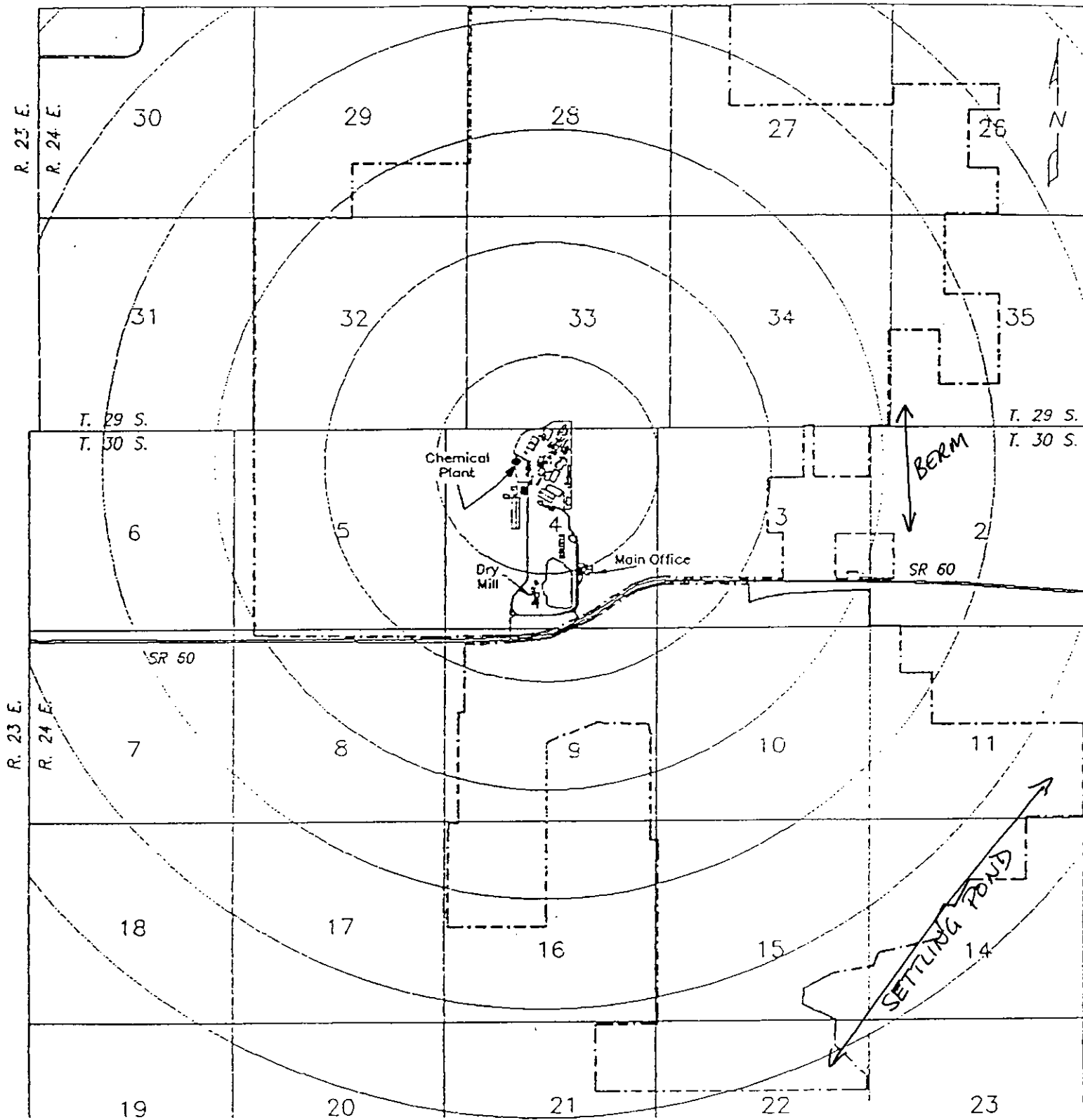
SEMINOLE FERTILIZER CORPORATION POLK COUNTY, FLORIDA

Year	Sulfur Dioxide Impact($\mu\text{g}/\text{m}^3$)*		
	3-hour	24-hour	Annual
1985	27.8 (2000m, 80°)** 27.1 (2500m, 80°)** 26.1 (1750m, 80°)**	4.6 (2000m, 90°)	0.24 (2500m, 80°)
1986	23.0 (1500m, 80°)	4.9 (1750m, 90°)	0.29 (2500m, 90°)
1987	27.0 (2000m, 50°)** 26.6 (1750m, 50°)**	4.5 (2000m, 50°)	0.21 (2500m, 90°)
1988	20.5 (1500m, 200°)	3.8 (2500m, 10°)	0.14 (2500m, 50°)
1989	25.2 (1500m, 50°)**	5.3 (2500m, 360°)** 5.2 (3000m, 360°)**	0.18 (2500m, 50°)
Additional Modeling Criteria	25.0	5.0	1.0

* Highest-high impacts based on the increase in sulfur dioxide emissions from the proposed project of 180 lbs/hr, 22.7 g/s.

** Impacts above guideline levels but occurring on plant property.

PROPERTY BOUNDARY MAP
SEMINOLE FERTILIZER CORPORATION



NOTE: The property is patrolled by the Agriculture Dept. Patrol and also
Seminole Fertilizer Guards.

SCALE - FEET
0 2000 4000
1000 meters

SEMINOLE

Bonny Lake Tract
Half Mile Radius