HUEY, GUILDAY, KUERSTEINER & TUCKER, P. A.
ATTORNEYS AT LAW
SUITE 510, FIRST FLORIDA BANK BUILDING
POST OFFICE BOX 1794
TALLAHASSEE, FLORIDA 32302
(904) 224-7091
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THOMAS J. GUILDAY
DAVID P. HOPSTETTER
J. MICHAEL HUEY
J. D. BOONE KUERSTEINER
GEOFFREY B. SCHWARTZ
J. KENDRICK TUCKER

RALPH A. DEMEO
MARK E. HOLCOMB
LAUREL D. LANDRY
J. STEPHEN MENTON
MARY K. SIMPSON

April 7, 1986

DER
APR 7 1986
BAQM

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030

BY HAND DELIVERY THIS DATE

Mrs. Victoria J. Tschinkel, Secretary
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

ATTENTION: C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Re: Sulfur Vatting and Reclaiming Facilities
Construction Permit Modification
Occidental Chemical Agrico Products, Inc.
Department of Environmental
Regulation Permit No. AC24-61435

Dear Clair:

Please be advised that our client Occidental Chemical Agricultural Products, Inc. ("Occidental"), hereby agrees to an extension of time period for final agency action on the modification of the above-referenced construction permit under Section 120.60(2), Florida Statutes.

As indicated by the enclosed executed Waiver of 90 Day Time Limit ("Waiver"), [DER Form 17-1.121(17), F.A.C.], Occidental agrees to an extension of the time period for final agency action by the Department of Environmental Regulation ("Department") on the pending application to modify the permit to construct the sulfur vatting and reclaiming facilities at the Swift Creek Chemical Complex until and through the close of the business date on Friday, May 9, 1986. Occidental has agreed to extend the time period for final agency action to allow the Department an additional twenty-eight (28) days to complete its final agency review and consider Occidental's request for modification of certain terms and conditions of the subject construction permit.

On behalf of our client, Occidental, we would like to express our appreciation for the continued cooperation and assistance of your office in reviewing the foregoing matter. It is our understanding that final agency action must be taken by the Department on the subject application for modification of construction permit on or before Friday, May 9, 1986.

Sincerely,

HUEY, GUILDAY, KUERSTEINER
& TUCKER, P.A.

J. D. Boone Kuersteiner

JDBK/mss

cc: D. T. Sawyer
Assistant General Counsel
Occidental Chemical Agricultural
Products, Inc.

R. E. McNeill
Director
Safety, Health & Environmental
Control
Occidental Chemical Agricultural
Products, Inc.

W. W. Atwood
Manager
Environmental Control
Occidental Chemical Agricultural
Products, Inc.

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

PROPOSED MODIFICATIONS TO THE TECHNICAL REVIEW AND PRELIMINARY DETERMINATION FOR THE OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC. SULFUR VATTING AND RECLAIMING FACILITY, PERMIT NO. AC24-61435

APRIL 2, 1986

Sholtes & Koogler,
Environmental Consultants
1213 N.W. 6th Street
Gainesville, Florida 32601
(904) 377-5822

PROPOSED MODIFICATIONS TO THE
TECHNICAL REVIEW AND PRELIMINARY DETERMINATION
FOR THE
OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.
SULFUR VATTING AND RECLAIMING FACILITY,
PERMIT NO. AC24-61435

I. Cover Page

Proposed Modification

The applicant's name "Occidental Chemical Company" should be changed to Occidental Chemical Agricultural Products, Inc.

II. Technical Evaluation and Preliminary Determination

Section I

Proposed Modification

Change the applicant's name from "Occidental Chemical Company" to Occidental Chemical Agricultural Products, Inc.

Section I.C.(e)

Proposed Modification

Recovery ~~of~~ from reclaimed sulfur pile.

Rationale

The word "reclaimed" is added to clarify that the activity specifically addresses the recovery of reclaimed sulfur from the short-term reclaimed sulfur storage pile.

Section I.C.

Proposed Modification

The applicant's name should be changed from "Occidental Chemical Company" to Occidental Chemical Agricultural Products, Inc.

Section IV.A

Proposed Modification

~~The~~ Occidental Chemical ~~Company~~ Agricultural Products, Inc. is proposing to modify an existing permit to build two 75,000 ton solid sulfur storage vats . . .

Rationale

The sentence is modified to clarify the fact that Occidental presently has a Construction Permit to build and reclaim two 75,000 ton solid sulfur storage vats and that proposed Permit No. AC24-61435 addresses only modifications to the existing permit.

Section V.

Proposed Modification

In the first and third paragraphs of this section, the applicant's name should be changed from "Occidental Chemical Company" to Occidental Chemical Agricultural Products, Inc. Additionally, the first paragraph should be modified as follows:

The Occidental Chemical ~~Company~~ Agricultural Products, Inc. has applied ~~for a~~ to modify an existing permit to construct two 75,000 ton solid sulfur vats along with the associated sulfur handling facilities.

Rationale

The modification is to clarify the fact that Occidental currently has a permit to construct and reclaim solid sulfur storage vats and that Permit No. AC24-61435 addresses only modifications to this existing permit.

III. Proposed Permit No. AC24-61435

Pages 1-9

Proposed Modification

The applicant's name should be changed from "Occidental Chemical Company" to Occidental Chemical Agricultural Products, Inc. on

each of the nine pages of the proposed permit. Also, the permit expiration date should be changed from January 1, 1989 to December 31, 1989 on each of the nine pages of the proposed permit.

Rationale

Due to the present price schedule for sulfur on the U.S. and world market, it is not feasible for Occidental to completely establish the two 75,000 ton sulfur storage vats by January 1, 1989. The extension of the proposed permit to December 31, 1989 is requested to provide Occidental additional flexibility to evaluate the sulfur market and to select the optimum time to establish the two proposed sulfur vats.

Page 5, Specific Condition No. 1

Proposed Modification

a) Railcar Unloading **. . .

** Refers to railcar unloading rates and operating time for sulfur vatting activities only.

Rationale

Specific Condition No. 1 defines the operating hours and sulfur handling rates for all of the activities proposed for the sulfur

vatting and reclamation facility. The proposed footnote clarifies the fact that the railcar unloading rate addressed in Specific Condition No. 1 applies only to the molten sulfur railcar unloading rates and times associated with sulfur vatting activities and not to molten sulfur railcar unloading activities associated with the normal supply of molten sulfur to existing sulfuric acid plants at the Swift Creek Chemical Complex.

Page 6, Specific Condition No. 2

Proposed Modification

Only 75,000 TPY of molten sulfur, for the first two years, shall be received in addition to the existing molten sulfur supply. The ~~main~~ primary emissions from the sulfur vatting and reclaiming facility shall not exceed 10 TPY for sulfur particulate, and 10 TPY for hydrogen sulfide.

Rationale

The term "of molten sulfur" is added to clarify the fact that the 75,000 TPY applies to molten sulfur. The term "main" is changed to "primary" for clarity. The term is meant to define the

Florida Department of Environmental Regulation (Department) intent to limit the emissions only from the sources addressed in Specific Condition No. 2 to less than ten TPY of particulate matter and less than ten TPY of hydrogen sulfide.

Page 7, Specific Condition No. 3

Proposed Modification

Visible emissions shall not exceed 10% opacity from any ~~source~~ activity involving solid sulfur and shall not exceed 20% opacity from any activity involving molten sulfur in the sulfur facility, as determined by DER Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources.

Rationale

There is no specific visible emission limiting standard for sulfur vatting contained in Rule 17-2.600(11)c, FAC, entitled Sulfur Vatting and Sulfur Vat Reclamation Facilities. The modified visible emission limits suggested for proposed Specific Condition No. 3 therefore, were selected from analogous sections of the Sulfur Storage and Handling Rule.

The visible emission limit of 20 percent opacity proposed for activities involving molten sulfur were based upon the visible emission limit established in Section 17-2.600(11)(a)7, FAC, for molten sulfur storage facilities in particulate matter attainment areas. It is reasoned that since the Department established a 20 percent opacity limit for molten sulfur storage tanks in particulate matter attainment areas, that it would also be reasonable to establish 20 percent opacity limit for molten sulfur being poured to the vat and for emissions from molten sulfur in a static sulfur melter pan for facilities in a particulate matter attainment area. The proposed Occidental vatted sulfur storage and reclamation facility will be located in Hamilton County which the Department has classified as a particulate matter attainment area.

The opacity limit of 10 percent suggested for all activities involving solid sulfur is based upon the emission limit of 10 percent opacity established in Section 17-2.600(11)(b)5, FAC, for visible emissions from any point in a solid sulfur facility located in a particulate matter attainment area. It is reasoned that since the Department established the 10 percent opacity limit for the handling of pelletized solid sulfur in a particulate matter attainment area, it would be reasonable to

establish an opacity limit of 10 percent for reclaiming solid sulfur from vats and the subsequent handling of the reclaimed sulfur in an attainment area.

Page 7, Specific Condition No. 4

Proposed Modification

The permittee shall maintain a record from each supplier of molten sulfur of the range of the hydrogen sulfide/hydrogen polysulfide content of the molten sulfur received at the Swift Creek Chemical Complex for vatting.

Rationale

The rationale clarifies the fact that a record provided by the supplier of molten sulfur of the range of hydrogen sulfide/hydrogen polysulfide content of the molten sulfur to be used for vatting will satisfy the intent of this Specific Condition and to clarify that it is not the Department's intent for Occidental to sample each shipment of molten sulfur received. The modification also clarifies the fact that records of the hydrogen sulfide/hydrogen polysulfide content of the molten sulfur need to be maintained only for molten sulfur that will be vatted; and not for molten sulfur that is normally received and immediately consumed in existing sulfuric acid plants.

Page 7, Specific Condition No. 6

Proposed Modification

Initial compliance tests shall be conducted using:

~~a) - DER Method 5, Determination of Particulate Emissions From Stationary Sources, for emissions from the melter.~~

~~b)~~ DER Method 9, for all sources in the sulfur facility.

Rationale

The proposed modification eliminates the necessity of determining the mass emission rate of particulate matter from the sulfur melter proposed by Occidental. Particulate matter emissions from the sulfur melter have been estimated to be 0.01 pounds per hour and 0.03 tons per year (see Specific Condition No. 2 of proposed Permit No. AC24-61435). The annual sulfur particle emission rate of 0.03 tons per year is 30 times less than the one ton per year exempting emission limit set forth in Section 17-2.600(11)(e)2, FAC. This rule exempts from weight emission limiting standards any source having an annual sulfur particle emission rate of less than one ton per year.

Since the sulfur melter proposed by Occidental is expected to have an emission rate 30 times less than the one ton per year exempt limit, no provision has been made to confine emissions from the melter and to vent them through a point source. The requirement to conduct a Method 5 particulate matter emissions test on the melter would therefore require the enclosure of the complete lower section of the melter for purposes of an initial compliance test only. The effort and expenses to enclose the melter and to conduct the proposed test is unwarranted in view of the extremely low emission rate from the melter

In summary, since the proposed sulfur melter will be exempt from weight emission limiting standards of the Sulfur Storage and Handling Rule in accordance with 17-2.600(11)(e)2, FAC, and since no provisions have been made to confine and vent emissions from the melter through a point source, there appears to be no technical justification for requiring the determination of particulate matter emissions from the melter using DER Method 5. For these reasons, the proposed modification is requested.

Page 7, Specific Condition No. 11

Proposed Modification

~~The following shall be submitted for approval to DER's District office within 45 days of completion of compliance tests, and a minimum of 90 days before the expiration date of this permit (copy to CAPS):~~

~~a) Compliance test results of DER Method 5 and DER Method 9.~~

~~b) Initial sulfur deposition monitoring report conducted according to Rule 17-2.753(2), FAC (DER Reference Method for Monitoring the Deposition of Sulfur Particulate).~~

Within 45 days of completion of compliance tests, and a minimum of 90 days before the expiration date of this permit, the permittee shall submit for approval to DER's District Office (with a copy to CAPS) the results of all compliance tests conducted in accordance with DER Method 9.

Rationale

The requirement to submit compliance test results of DER Method 5 tests has been eliminated since the requirement for all such testing (originally in Specific Condition No. 6) has been

determined to be unnecessary. Further, the requirement to submit initial sulfur deposition monitoring reports has been eliminated as a requirement of the Construction Permit since Specific Condition No. 10 of proposed Permit No. AC24-61435 specifically states that the sulfur monitoring plan will be implemented on the date of issuance of the initial Operating Permit.

Page 8, Specific Condition No. 13

Proposed Modification

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the Department's District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the Construction Permit until its expiration date. Unless a timely and sufficient application to renew this Construction Permit is filed with the Department pursuant to Section 120.60(6), Florida Statutes, Øoperation beyond Construction Permit expiration date requires a valid permit to operate. (Rules 17-4.22 and 17-4.23, FAC)

Rationale

The added language assures Occidental that the statutorily created authority in Section 120.60(6), Florida Statutes, to the right to renew the construction permit is not waived or otherwise abrogated by the specific conditions of this permit.

SHOLTES & KOOGLER, ENVIRONMENTAL CONSULTANTS
1213 N.W. 6th Street Gainesville, Florida 32601 (904) 377-5822

SKEC 102-82-03

October 18, 1983

Mr. Clair H. Fancy
Deputy Bureau Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

Subject: Occidental Chemical Company
Hamilton County, Florida
Construction Permit AC24-61435
Solid Sulfur Storage Facility

Dear Mr. Fancy:

In accordance with specific condition No. 11 of the subject air pollution source construction permit, Occidental Chemical Company is submitting a monitoring plan to measure elemental sulfur deposition around the proposed solid sulfur storage area. The monitoring plan describes the location of the samplers, the type of samplers to be employed, the sample collection and analysis procedures and the quality assurance measures. The plan is submitted within 30 days of the date the subject permit was mailed from your office.

Occidental proposes to locate four sulfur deposition monitors as described in Figure 1. These monitors are modified Nipher gauges which were developed, and are used, by the sulfur industry in Alberta, Canada. The four monitors will be located at the three monitoring sites shown in Figure 2. Two monitors will be located at Site No. 1 for quality assurance purposes.

The monitoring sites are described as follows:

1. This site is located at the Swift Creek Chemical Complex Environmental Laboratory. The site is designed to measure sulfur deposition in the chemical complex. Duplicate deposition monitors will be placed at this site for quality assurance purposes.

FIGURE 2

OCCIDENTAL CHEMICAL COMPANY
SWIFT CREEK CHEMICAL COMPLEX
SOLID SULFUR DEPOSITION
MONITORING NETWORK

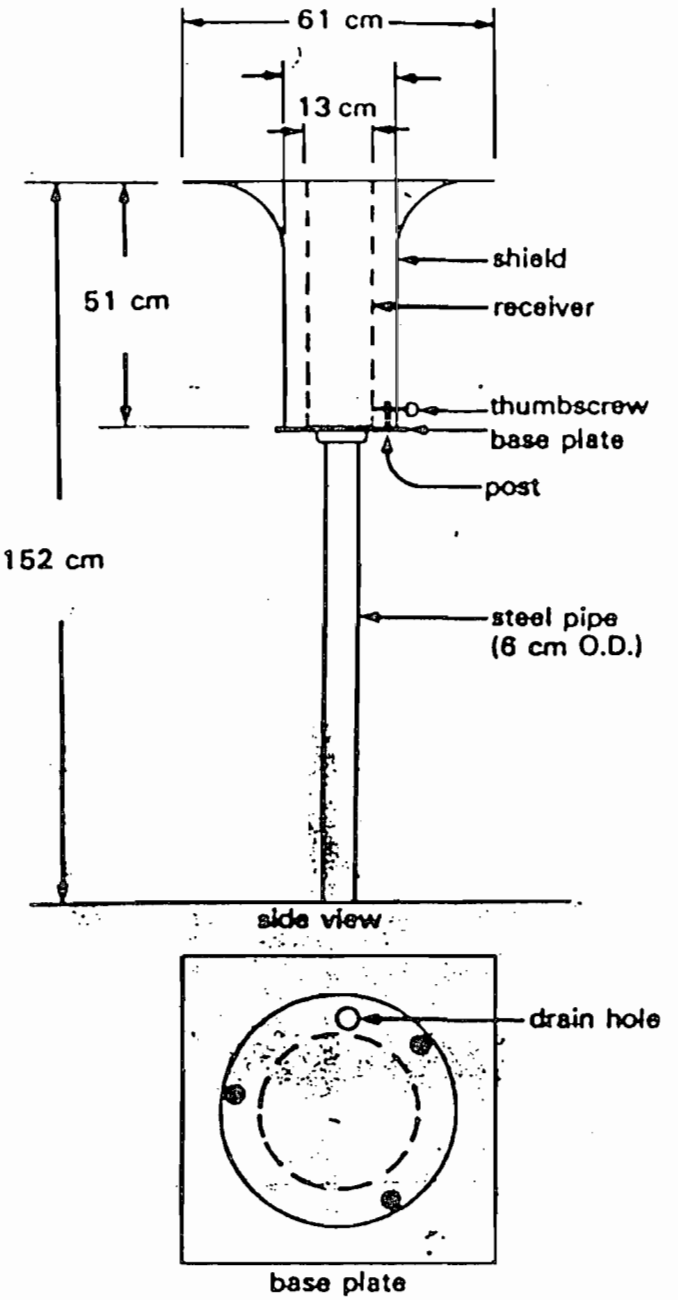


FIGURE 1

NIPHER GAUGE MODIFIED FOR SULFUR DEPOSITION MEASUREMENTS

2. This site is located northwest of the sulfur storage area at the Occidental property line nearest to the storage area. The purpose of this monitor is to measure property line sulfur deposition.

3. This monitor is located east of the sulfur storage area approximately 0.8 kilometers. The purpose of this monitor is to provide sulfur deposition data in a direction not covered by monitors at Sites No. 1 and 2.

The sulfur deposition rate will be measured over monthly periods. At the end of each calendar month, the Nipher gauges will be returned to the Occidental environmental laboratory and the contents of each gauge will be quantitatively recovered and placed in a sealed container. The elemental sulfur in each container will be extracted and the sample prepared in accordance with AOAC (Association of Official Analytical Chemists) Method 2.162; the method of extraction and preparation for free sulfur. The analysis of the sample will be by either EPA Method 375.2, the methyl-thymol blue automated method, or EPA Method 375.3, a gravimetric method. The method of analysis will depend upon the quantity of free sulfur present in the samples.

Quality assurance measures will include the co-location of samplers at Station No. 1 (similar to the hi-vol sampling method described in 40 CFR 50, Appendix B), and the analysis of spiked samples by the laboratory.

In accordance with specific condition No. 11 of the subject construction permit, the monitoring network will be operated for a 12-month period. Samples will be collected and analyzed monthly and data will be reported to the Department within 30 days of the end of each calendar quarter. At the end of the 12-month monitoring period we will review the monitoring data with you and reevaluate the monitoring network.

If you have any questions or comments regarding this proposed monitoring program, please do not hesitate to contact me.

Very truly yours,

SHOLTES & KOOGLER,
ENVIRONMENTAL CONSULTANTS, INC.

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

JBK:sc
Enclosures

cc: Mr. W. W. Atwood
Mr. J.D.B. Kuersteiner

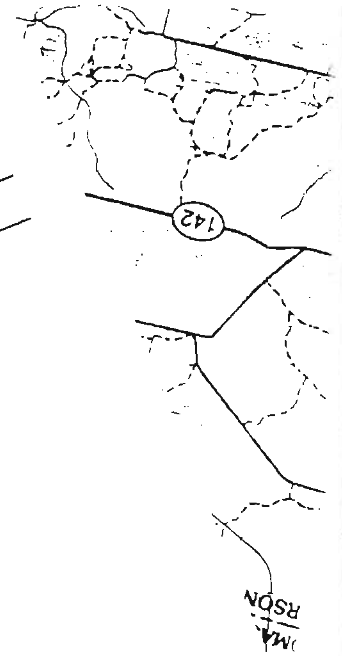
September 20, 1983

This is to acknowledge receipt of the original Occidental Permit this 20th day of September 1983.

Laurence Adkison

Laurence Adkison

BEST AVAILABLE COPY



Check Sheet

Company Name: Occidental Chemical Company
Permit Number: AC 24-061435
PSD Number:
Permit Engineer:

Cross References:
- ☐
- ☐
- ☐

Application:
- ☐ ✓ Initial Application
- ☑ Incompleteness Letters
- ☑ Responses
- ☐ Waiver of Department Action
- ☐ Department Response
- ☐ Other

Intent:
- ☑ Intent to Issue
- ☑ Notice of Intent to Issue
- ☑ Technical Evaluation
- ☐ BACT or LAER Determination
- ☑ Unsigned Permit
- Correspondence with:
  - ☐ EPA
  - ☐ Park Services
  - ☐ Other
- ☑ Proof of Publication
- ☐ Petitions - (Related to extensions, hearings, etc.)
- ☐ Waiver of Department Action
- ☐ Other

Final Determination:
- ☑ Final Determination
- ☑ Signed Permit
- ☐ BACT or LAER Determination
- ☐ Other

Post Permit Correspondence:
- ☑ Extensions/Amendments/Modifications
- ☑ Other

missing application for modification Dated 19 JULY 1985

Revision #5

In the folder labeled as follows there are documents, listed below, which were not reproduced in this electronic file. That folder can be found in one of the file drawers labeled Supplementary Documents Drawer. Folders in that drawer are arranged alphabetically, then by permit number.

Folder Name: Occidental Chemical Corporation

Permit(s) Numbered:

AC	24	-	061435

Period during which document was received:		Detailed Description
APPLICATION 27 MAY 1982	1.	24"×36" BLUEPRINT: PLOT PLAN SULFUR VAT ATTACHMENT 4 (DRAWING NUMBER: 68G-217)
	2.	24"×36" BLUEPRINT: SULFUR VATTING H2O PIPING ARRANG'T ATTACHMENT 2 (DRAWING NUMBER: 68-P-219)

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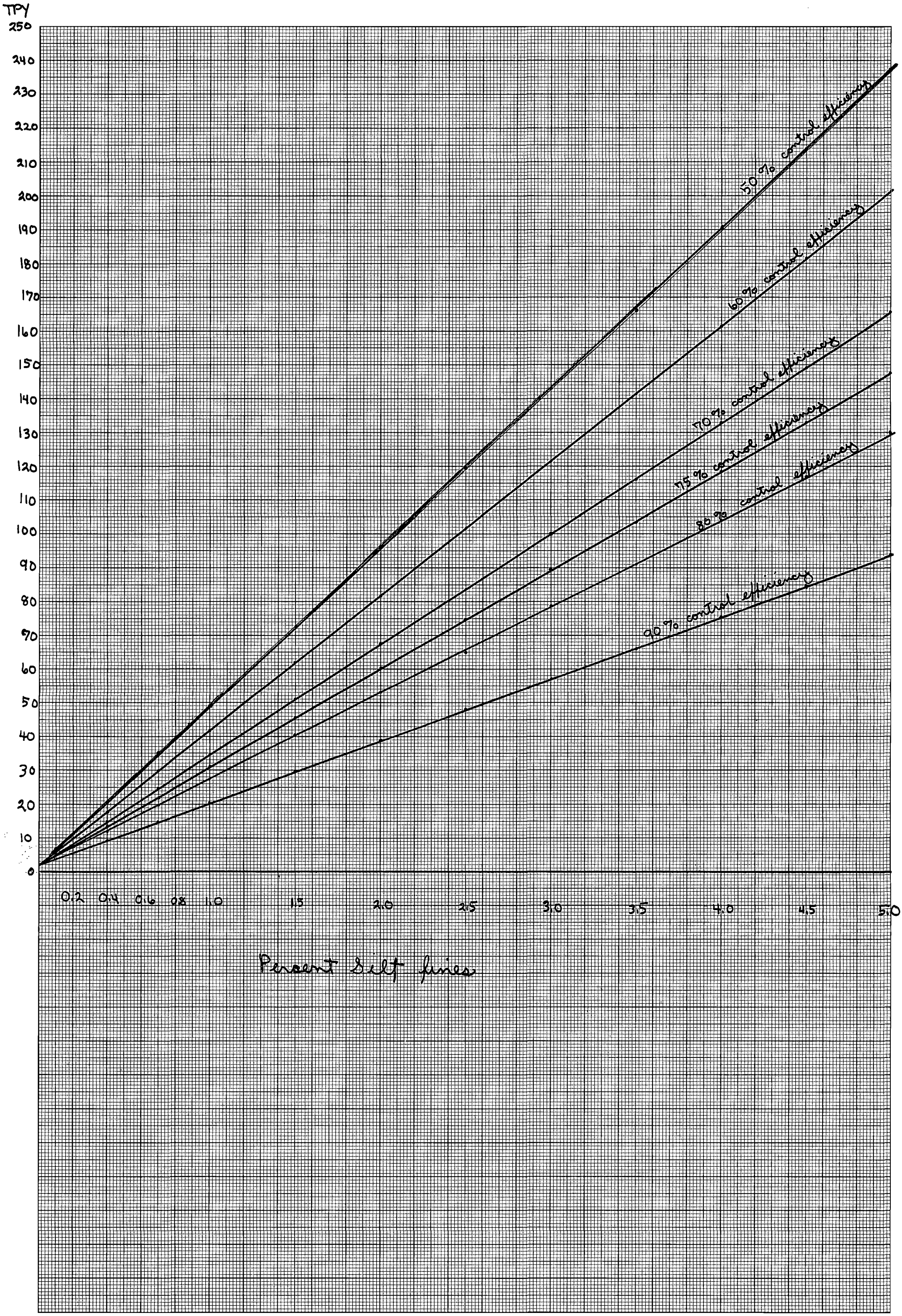
2.0	wind		2.0	2.0	2.0
5.02	Traffic		35.15	50.21	75.31
2.14	off-load		15.00	21.43	32.14

2.0	2.5	3.0	3.5	4.0	4.5	5.0
22.45	28.06	33.67	38.89	44.89	50.51	56.12
2.0	2.0	2.0	2.0	2.0	2.0	2.0
100.42	125.52	150.63	175.73	200.84	225.94	251.05
42.85	53.57	64.28	74.99	85.71	96.42	107.13
					322.36	358.18



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0.1% fines

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Control efficiency

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

November 4, 1983

Mr. John B. Koogler, Ph.D., P.E.
Sholtes & Koogler, Environmental Consultants
1213 NW 6th Street
Gainesville, Florida 32601

Re: Occidental Chemical Company, Hamilton County, Florida
Construction permit AC 24-61435
Submittal of deposition monitoring plan 10/18/83 for solid sulfur storage facility

Dear Mr. Koogler:

The Bureau of Air Quality Management has reviewed your proposal in accordance with specific condition No. 11, of the subject permit, and has determined that it is an adequate response to that provision.

Please advise my office when the Nipher gages are installed, so that we may have the opportunity to verify their location and configuration relative to your proposal.

Sincerely,

for C. H. Fancy, P.E.
Deputy Bureau Chief
Bureau of Air Quality Management

CHF/EH/bjm

SHOLTES & KOOGLER, ENVIRONMENTAL CONSULTANTS
1213 N.W. 6th Street Gainesville, Florida 32601 (904) 377-5822

SKEC 102-82-03

April 2, 1986

Mr. J. D. B. Kuersteiner
Huey, Guilday, Kuersteiner & Tucker, P.A.
Post Office Box 1794
Tallahassee, Florida 32302

Subject: Occidental Chemical Agricultural Products, Inc.
Hamilton County, Florida
Draft Permit AC24-61435

Dear Boone:

On February 25, 1986, I discussed the Technical Evaluation and Preliminary Determination of the sulfur vatting and reclaiming facility proposed by Occidental Chemical Agricultural Products, Inc. (Occidental) with Mr. Pradeep Raval of the Florida Department of Environmental Regulation (FDER). On March 5, 1985, I understand that you had further discussion with Mr. Raval and Mr. Bill Thomas of FDER to discuss Occidental's concerns regarding certain general and specific permitting conditions proposed by FDER for the modification of the subject facilities. The purpose of both of our discussions was to request modifications in the text of the Technical Evaluation and Preliminary Determination for purposes of clarification and also to request modifications to certain Specific Conditions of proposed Permit No. AC24-61435 which is part of the Technical Evaluation and Preliminary Determination.

To document the requested modifications I am attaching a document entitled Proposed Modifications to the Technical Review and Preliminary Determination for the Occidental Chemical Agricultural Products, Inc. Sulfur Vatting and Reclaiming Facility, Permit No. AC24-61435. This document includes the proposed modifications and the rationale for the modifications.

If you have any questions or comments regarding this matter, please do not hesitate to call me.

Very truly yours,

SHOLTES & KOOGLER,
ENVIRONMENTAL CONSULTANTS

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

JBK:ssc
Attachment

cc: Mr. W.W. Atwood (w/enc)

DER

APR 7 1986

BAQM

WAIVER OF 90 DAY TIME LIMIT

UNDER SECTION 120.60(2), FLORIDA STATUTES

Permit Application No. AC24-61435

Applicant's Name: Occidental Chemical Agricultural Products, Inc.

The undersigned has read Section 120.60(2), Florida Statutes, and fully understands the Applicant's rights under that Section.

With regard to the above-referenced permit application, Occidental Chemical Agricultural Products, Inc. hereby with full knowledge and understanding of its rights under Section 120.60(2), Florida Statutes, waives the right under Section 120.60(2), 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 Section 120.60(2), Florida Statutes. Said waiver is made freely and voluntarily by Occidental Chemical Agricultural Products, Inc., is in 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 Friday, the 9th day of May, 1986.

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

Signature

J. D. Boone Kuersteiner
HUEY, GUILDAY, KUERSTEINER
& TUCKER, P.A.
Post Office Box 1794
Tallahassee, Florida 32302

Attorneys for OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.

Date: April 7, 1986

Sworn to and subscribed before me this 7th day of April, 1986.

Notary Public, State of Florida
My Commission Expires Nov. 13, 1988
Bonded Thru Troy Fain-Insurance, Inc.

EILEEN E. HILL NOTARY PUBLIC STATE OF FLORIDA AT LARGE

HUEY, GUILDAY, KUERSTEINER & TUCKER, P. A.
ATTORNEYS AT LAW
SUITE 510, FIRST FLORIDA BANK BUILDING
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THOMAS J. GUILDAY
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J. KENDRICK TUCKER

RALPH A. DeMEO
MARK E. HOLCOMB
LAUREL D. LANDRY
J. STEPHEN MENTON
MARY K. SIMPSON

April 7, 1986

BY HAND DELIVERY THIS DATE

DER
APR 7 1986
BAQM

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Re: Sulfur Vatting and Reclaiming Facilities
Construction Permit Modification
Occidental Chemical Agrico Products, Inc.
Department of Environmental Regulation
Permit No. AC24-61435

Dear Clair:

On behalf of our client, Occidental Chemical Agricultural Products, Inc. ("Occidental"), we are hereby submitting the following materials in support of our request that certain general and special conditions proposed by the Florida Department of Environmental Regulation ("Department") for the above-referenced proposed modified construction permit be revised:

1. Correspondence to our office from John B. Koogler, Ph.D., P.E., Sholtes & Koogler, Environmental Consultants dated April 2, 1986; and

2. Report entitled Proposed Modifications to the Technical Review and Preliminary Determination for the Occidental Chemical Agricultural Products, Inc. Sulfur Vatting and Reclamation Study, Permit No. AC24-61435 prepared by Sholtes & Koogler, Environmental Consultants dated April 2, 1986.

Subsequent to our review of the enclosed supporting materials, we would ask that you contact our office should you have further questions on the proposed permit conditions for which revision is sought or the rationale for the requested revisions. We would also request that our office be given an opportunity to review the precise language of the revised general and special permit conditions proposed by the Department prior to the Department taking final agency action on the subject construction permit modification.

The continued assistance and cooperation of your office and the other members of the Department's Bureau of Air Quality Management with regard to this matter is greatly appreciated.

Sincerely yours,

HUEY, GUILDAY, KUERSTEINER
& TUCKER, P.A.

J. D. Boone Kuersteiner

JDBK/mss
Enclosures

cc: D. T. Sawyer
Assistant General Counsel
Occidental Chemical Agricultural
Products, Inc.

R. E. McNeill
Director
Safety, Health & Environmental
Control
Occidental Chemical Agricultural
Products, Inc.

W. W. Atwood
Manager
Environmental Control
Occidental Chemical Agricultural
Products, Inc.

Carl J. Axelson, Jr.
Manager
Supply & Distribution
Occidental Chemical Agricultural
Products, Inc.

Laszlo Takacs, Ph.D.
Manager
Air Quality
Environment, Health & Safety
Occidental Chemical Company

PS Form 3811, July 1983

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
Mr. M. P. McArthur
Occidental Chemical Agricultural Prod.
Post Office Box 300
White Springs, Florida 32096

4. Type of Service:	Article Number
☐ Registered ☐ Insured XX Certified ☐ COD ☐ Express Mail	P 408 532 001

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X Clarence Rogers

7. Date of Delivery
5-12-86

8. Addressee's Address *(ONLY if requested and fee paid)*

DOMESTIC RETURN RECEIPT

P 408 532 001

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. M. P. McArthur	
Street and No.	
P.O., State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date 5/9/86	

PS Form 3800, Feb. 1982

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. M. P. McArthur
Occidental Chemical Agricultural
Products, Inc.
Post Office Box 300
White Springs, Florida 32096

May 9, 1986

Enclosed is Permit Number AC 24-61435 to Occidental Chemical Agricultural Products, Inc. which authorizes the construction of a sulfur vatting and reclaiming facility in White Springs, Hamilton County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any Party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

John Koogler
Johnny Cole

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on May 9, 1986 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52(9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Patricia B. Adams — Clerk

May 9 1986 — Date

Final Determination

Occidental Chemical Agricultural Products, Inc.
White Springs, Hamilton County, Florida

Sulfur Vatting and Reclaiming Facility

Permit No. AC 24-61435

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

May 5, 1986

Final Determination

The application by Occidental Chemical Agricultural Products, Inc., to modify a permit to construct a sulfur vatting and reclaiming facility in White Springs, Hamilton County, Florida, has been reviewed by the Bureau of Air Quality Management. Public Notice of the department's Intent to Issue the modified permit was published in The Jasper News on January 30, 1986.

Comments were received from Dr. John Koogler for Occidental (see attachment No. 4) in response to the Public Notice.

The department is in agreement with the following comments in part III:

(a) Applicant's name should be Occidental Chemical Agricultural Products, Inc. The expiration date is requested to be changed to December 31, 1989, in place of January 1, 1989.

(b) and (c) To clarify that the permit conditions refer to receiving molten sulfur for the vatting project and that specific conditions on activities and sources apply to the vatting project as proposed in the application.

(d) Visible emissions limits in molten sulfur handling areas are requested to be 20%, in place of 10% opacity.

(e) Clarify that the applicant should maintain a record of the range of hydrogen sulfide content in the molten sulfur received, from each supplier.

(f) DER Method 5, for determining the particulate matter emissions from the sulfur static melter, should not be required since emission estimates indicate insignificant emissions.

The following changes will be made in the permit to reflect the Department's consideration of comments received:

1. The name of the applicant will be corrected.

2. The expiration date will be extended from January 1, 1989 to December 31, 1989.

3. Changes in Specific Conditions:

Note to be added: The following specific conditions apply only to activities and sources associated with the sulfur vatting project as proposed in the application.

No. 3
From:

Visible emissions shall not exceed 10% opacity from any source in the sulfur facility, as determined by DER Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources.

To:

Visible emissions shall not exceed 10% opacity from any source or activity involving solid sulfur and shall not exceed 20% opacity from any source or activity involving molten sulfur in the sulfur facility, as determined by DER Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources.

No. 4
From:

The permittee shall maintain a record of the Hydrogen Sulfide/Hydrogen Polysulfide content of the sulfur received at the Swift Creek Chemical Complex.

To:

The permittee shall maintain a record of the range of the Hydrogen Sulfide/Hydrogen Polysulfide content of the molten sulfur received for vatting at the Swift Creek Chemical Complex, from each supplier.

No. 6
From:

Initial compliance tests shall be conducted using;

a) DER Method 5, Determination of Particulate Emissions from Stationary Sources, for emissions from the melter.

b) DER Method 9, for all sources in the sulfur facility.

To:

Initial and annual compliance tests shall be conducted using DER Method 9, for all sources in the sulfur facility.

No. 7

Will be deleted, since it repeats amended condition No. 6.

No. 11
From:

The following shall be submitted for approval to DER's District office within 45 days of completion of compliance tests, and a minimum of 90 days before the expiration date of this permit (copy to CAPS):

a) Compliance test results of DER Method 5 and DER Method 9.

b) Initial sulfur deposition monitoring report conducted according to Rule 17-2.753(2), FAC (DER Reference Method for Monitoring the Deposition of Sulfur Particulate).

To:

The following shall be submitted for approval to DER's District office within 45 days of completion of compliance tests, and a minimum of 90 days before the expiration date of this permit (copy to CAPS):

a) Compliance test results of DER Method 9.

b) Initial sulfur deposition monitoring report conducted according to Rule 17-2.753(2), FAC (DER Reference Method for Monitoring the Deposition of Sulfur Particulate).

The final action of the department will be to issue the modified permit as proposed in the Preliminary Determination with the above mentioned ammendments to the permit.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.
P. O. Box 300
White Springs, Florida 32096

Permit Number:AC 24-61435
Expiration Date: December 31, 1989
County: Hamilton
Latitude/Longitude: 30° 25' 56"N/ 83° 47' 51"W
Project: Sulfur Vatting and Reclaiming Facility

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 drawings, 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 sulfur vatting and reclaiming facility consisting of a railcar unloading system, a molten sulfur receiving pit, surge storage tanks, molten sulfur pouring arms, two 75,000 ton vats, rubber tired payloaders and escavating equipment, a 70 tons per hour static melter, and the sulfur facility water spray system.

Construction shall be in accordance with the attached permit application unless otherwise stated in the General and Specific Conditions herein.

Attachments are as follows:

1. Occidental's application package dated July 19, 1985.

2. DER's letter dated August 20, 1985.

3. Occidental's response dated November 7, 1985.

4. Occidental's modification package dated April 2, 1986.

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-61435
Expiration Date: December 31, 1989

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

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

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

Note: The following specific conditions apply only to activities and sources associated with the sulfur vatting project as proposed in the application.

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-61435
Expiration Date: December 31, 1989

SPECIFIC CONDITIONS:

1. The maximum operating hours and rates of sulfur processing activities shall not exceed:

Activity	TPH	TPD	TPY	Hrs/Day
a) Railcar Unloading	270	1500	375,000*	6
b) Vatting	270	1500	375,000*	6
c) Storage			150,000T	24
d) Reclaiming	210	1680	300,000	8
e) Recovering	210	1680	300,000	8
f) Melting	70	1680	300,000	24

*375,000 for the first two years only, and 300,000 for subsequent years.

Note:

i) TPH, tons per hour; TPD, tons per day; TPY, tons per year.
ii) 150,000T is storage capacity of two sulfur vats at their maximum.
iii) Railcar unloading and vat reclamation activities will not be conducted simultaneously.

2. Only 75,000 TPY, for the first 2 years, shall be received in addition to the existing molten sulfur supply. The main emissions from the sulfur vatting and reclaiming facility shall not exceed 10 TPY for sulfur particulate, and 10 TPY for hydrogen sulfide.

Summary of Emissions

Source	Suspended Particulate (1) 24-hour (3) (lb/hr)	Annual (4) (tons)	Total Particulate (2) Annual (tons)
Railcar Unloading	0.01	0.01	0.01
Sulfur Vatting	7.25	1.28	1.28
Sulfur Reclamation	5.21	0.72	1.51
Sulfur Recovery	1.51	0.24	0.50
Sulfur to Melter	0.09	0.17	0.35
Traffic	5.02	2.05	4.30
Sulfur Melter	0.01	0.03	0.03
Wind Erosion	6.86	0.15	0.30
Total			8.28

The hydrogen sulfide emissions at the sulfur facility will amount to about 7.5 tons per year.

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-61435
Expiration Date:December 31, 1989

SPECIFIC CONDITIONS:

Note:

(1) Suspended particles are less than 30 micrometers in diameter.
(2) Total particles include particles up to 300 micrometers in diameter.
(3) Maximum emissions at wind speed of 18 mph.
(4) Annual average using average parameters.

3. Visible emissions shall not exceed 10% opacity from any source or activity involving solid sulfur and shall not exceed 20% opacity from any source or activity involving molten sulfur in the sulfur facility, as determined by DER Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources.

4. The permittee shall maintain a record of the range of the Hydrogen Sulfide/Hydrogen Polysulfide content of the molten sulfur received for vatting at the Swift Creek Chemical Complex, from each supplier.

5. All applicable emission limiting precautions and procedures specified in this permit application and in Rule 17-2.600(11), FAC, shall be followed at all times.

6. Initial and annual compliance tests shall be conducted using DER Method 9, for all sources in the sulfur facility.

7. Compliance tests shall be conducted at 90-100% of the permitted equipment capacity.

8. A 15 day notice shall be given to DER's Northeast District office of the compliance testing dates.

9. The permittee shall submit a Sulfur Deposition and an Ambient Air Monitoring Plan to the Central Air Permitting (CAPS) office for approval, within 90 days of issuance of this permit. These monitoring plans shall be implemented for a minimum of 2 years from the date of issuance of the initial operating permit. Monitoring may be required beyond the initial 2 years should the department deem it necessary at the end of the initial monitoring period.

10. The following shall be submitted for approval to DER's District office within 45 days of completion of compliance tests, and a minimum of 90 days before the expiration date of this permit (copy to CAPS):

SPECIFIC CONDITIONS:

a) Compliance test results of DER Method 9.

b) Initial sulfur deposition monitoring report conducted according to Rule 17-2.753(2), FAC (DER Reference Method for Monitoring the Deposition of Sulfur Particulate).

11. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Department must be notified in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09, FAC)

12. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the Department's District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (Rules 17-4.22 and 17-4.23, FAC)

13. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application. (Rule 17-4.10, FAC)

14. Upon obtaining an operating permit the permittee will be required to submit annual reports, unless otherwise requested by DER, on the actual operation and emissions of the sources to the DER's District office.

15. Any change in the method of operation, equipment, or operating hours shall be submitted for approval to the Department's District office.

16. This permit shall replace any previous permit issued to the permittee for the construction of the sulfur vatting and reclaiming facility.

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-61435
Expiration Date: December 31, 1989

SPECIFIC CONDITIONS:

Issued this 6 day of May, 1986

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

ATTACHMENT 4

PROPOSED MODIFICATIONS TO THE TECHNICAL REVIEW AND PRELIMINARY DETERMINATION FOR THE OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC. SULFUR VATTING AND RECLAIMING FACILITY, PERMIT NO. AC24-61435

SHOLTES & KOOGLER
Environmental Consultants
1213 NW 6TH ST ■ GAINESVILLE, FL 32601 ■ 904-377-5822

PROPOSED MODIFICATIONS TO THE TECHNICAL REVIEW AND PRELIMINARY DETERMINATION FOR THE OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC. SULFUR VATTING AND RECLAIMING FACILITY, PERMIT NO. AC24-61435

APRIL 2, 1986

Sholtes & Koogler,
Environmental Consultants
1213 N.W. 6th Street
Gainesville, Florida 32601
(904) 377-5822

PROPOSED MODIFICATIONS TO THE
TECHNICAL REVIEW AND PRELIMINARY DETERMINATION
FOR THE
OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.
SULFUR VATTING AND RECLAIMING FACILITY,
PERMIT NO. AC24-61435

I. Cover Page

Proposed Modification

The applicant's name "Occidental Chemical Company" should be changed to Occidental Chemical Agricultural Products, Inc.

II. Technical Evaluation and Preliminary Determination

Section I

Proposed Modification

Change the applicant's name from "Occidental Chemical Company" to Occidental Chemical Agricultural Products, Inc.

Section I.C.(e)

Proposed Modification

Recovery ~~of~~ from reclaimed sulfur pile.

Rationale

The word "reclaimed" is added to clarify that the activity specifically addresses the recovery of reclaimed sulfur from the short-term reclaimed sulfur storage pile.

Section I.C.

Proposed Modification

The applicant's name should be changed from "Occidental Chemical Company" to Occidental Chemical Agricultural Products, Inc.

Section IV.A

Proposed Modification

~~The~~ Occidental Chemical ~~Company~~ Agricultural Products, Inc. is proposing to modify an existing permit to build two 75,000 ton solid sulfur storage vats . . .

Rationale

The sentence is modified to clarify the fact that Occidental presently has a Construction Permit to build and reclaim two 75,000 ton solid sulfur storage vats and that proposed Permit No. AC24-61435 addresses only modifications to the existing permit.

Section V.

Proposed Modification

In the first and third paragraphs of this section, the applicant's name should be changed from "Occidental Chemical Company" to Occidental Chemical Agricultural Products, Inc. Additionally, the first paragraph should be modified as follows:

The Occidental Chemical ~~Company~~ Agricultural Products, Inc. has applied ~~for~~ a to modify an existing permit to construct two 75,000 ton solid sulfur vats along with the associated sulfur handling facilities.

Rationale

The modification is to clarify the fact that Occidental currently has a permit to construct and reclaim solid sulfur storage vats and that Permit No. AC24-61435 addresses only modifications to this existing permit.

III. Proposed Permit No. AC24-61435

Pages 1-9

(a) Proposed Modification

The applicant's name should be changed from "Occidental Chemical Company" to Occidental Chemical Agricultural Products, Inc. on

each of the nine pages of the proposed permit. Also, the permit expiration date should be changed from January 1, 1989 to December 31, 1989 on each of the nine pages of the proposed permit.

Rationale

Due to the present price schedule for sulfur on the U.S. and world market, it is not feasible for Occidental to completely establish the two 75,000 ton sulfur storage vats by January 1, 1989. The extension of the proposed permit to December 31, 1989 is requested to provide Occidental additional flexibility to evaluate the sulfur market and to select the optimum time to establish the two proposed sulfur vats.

(b) Page 5, Specific Condition No. 1

Proposed Modification

a) Railcar Unloading **. . .

** Refers to railcar unloading rates and operating time for sulfur vatting activities only.

Rationale

Specific Condition No. 1 defines the operating hours and sulfur handling rates for all of the activities proposed for the sulfur

vatting and reclamation facility. The proposed footnote clarifies the fact that the railcar unloading rate addressed in Specific Condition No. 1 applies only to the molten sulfur railcar unloading rates and times associated with sulfur vatting activities and not to molten sulfur railcar unloading activities associated with the normal supply of molten sulfur to existing sulfuric acid plants at the Swift Creek Chemical Complex.

(c) Page 6, Specific Condition No. 2

Proposed Modification

Only 75,000 TPY of molten sulfur, for the first two years, shall be received in addition to the existing molten sulfur supply. The ~~main~~ primary emissions from the sulfur vatting and reclaiming facility shall not exceed 10 TPY for sulfur particulate, and 10 TPY for hydrogen sulfide.

Rationale

The term "of molten sulfur" is added to clarify the fact that the 75,000 TPY applies to molten sulfur. The term "main" is changed to "primary" for clarity. The term is meant to define the

Florida Department of Environmental Regulation (Department) intent to limit the emissions only from the sources addressed in Specific Condition No. 2 to less than ten TPY of particulate matter and less than ten TPY of hydrogen sulfide.

(d) Page 7, Specific Condition No. 3

Proposed Modification

Visible emissions shall not exceed 10% opacity from any ~~source~~ activity involving solid sulfur and shall not exceed 20% opacity from any activity involving molten sulfur in the sulfur facility, as determined by DER Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources.

Rationale

There is no specific visible emission limiting standard for sulfur vatting contained in Rule 17-2.600(11)c, FAC, entitled Sulfur Vatting and Sulfur Vat Reclamation Facilities. The modified visible emission limits suggested for proposed Specific Condition No. 3 therefore, were selected from analogous sections of the Sulfur Storage and Handling Rule.

The visible emission limit of 20 percent opacity proposed for activities involving molten sulfur were based upon the visible emission limit established in Section 17-2.600(11)(a)7, FAC, for molten sulfur storage facilities in particulate matter attainment areas. It is reasoned that since the Department established a 20 percent opacity limit for molten sulfur storage tanks in particulate matter attainment areas, that it would also be reasonable to establish 20 percent opacity limit for molten sulfur being poured to the vat and for emissions from molten sulfur in a static sulfur melter pan for facilities in a particulate matter attainment area. The proposed Occidental vatted sulfur storage and reclamation facility will be located in Hamilton County which the Department has classified as a particulate matter attainment area.

The opacity limit of 10 percent suggested for all activities involving solid sulfur is based upon the emission limit of 10 percent opacity established in Section 17-2.600(11)(b)5, FAC, for visible emissions from any point in a solid sulfur facility located in a particulate matter attainment area. It is reasoned that since the Department established the 10 percent opacity limit for the handling of pelletized solid sulfur in a particulate matter attainment area, it would be reasonable to

( ) establish an opacity limit of 10 percent for reclaiming solid sulfur from vats and the subsequent handling of the reclaimed sulfur in an attainment area.

(e) Page 7, Specific Condition No. 4

Proposed Modification

The permittee shall maintain a record from each supplier of molten sulfur of the range of the hydrogen sulfide/hydrogen polysulfide content of the molten sulfur received at the Swift Creek Chemical Complex for vatting.

Rationale

The rationale clarifies the fact that a record provided by the supplier of molten sulfur of the range of hydrogen sulfide/hydrogen polysulfide content of the molten sulfur to be used for vatting will satisfy the intent of this Specific Condition and to clarify that it is not the Department's intent for Occidental to sample each shipment of molten sulfur received. The modification also clarifies the fact that records of the hydrogen sulfide/hydrogen polysulfide content of the molten sulfur need to be maintained only for molten sulfur that will be vatted; and not for molten sulfur that is normally received and immediately consumed in existing sulfuric acid plants.

(f) Page 7, Specific Condition No. 6

Proposed Modification

Initial compliance tests shall be conducted using:

~~a. DER Method 5, Determination of Particulate Emissions From Stationary Sources, for emissions from the melter.~~

~~b.~~ DER Method 9, for all sources in the sulfur facility.

Rationale

The proposed modification eliminates the necessity of determining the mass emission rate of particulate matter from the sulfur melter proposed by Occidental. Particulate matter emissions from the sulfur melter have been estimated to be 0.01 pounds per hour and 0.03 tons per year (see Specific Condition No. 2 of proposed Permit No. AC24-61435). The annual sulfur particle emission rate of 0.03 tons per year is 30 times less than the one ton per year exempting emission limit set forth in Section 17-2.600(11)(e)2, FAC. This rule exempts from weight emission limiting standards any source having an annual sulfur particle emission rate of less than one ton per year.

Since the sulfur melter proposed by Occidental is expected to have an emission rate 30 times less than the one ton per year exempt limit, no provision has been made to confine emissions from the melter and to vent them through a point source. The requirement to conduct a Method 5 particulate matter emissions test on the melter would therefore require the enclosure of the complete lower section of the melter for purposes of an initial compliance test only. The effort and expenses to enclose the melter and to conduct the proposed test is unwarranted in view of the extremely low emission rate from the melter

In summary, since the proposed sulfur melter will be exempt from weight emission limiting standards of the Sulfur Storage and Handling Rule in accordance with 17-2.600(11)(e)2, FAC, and since no provisions have been made to confine and vent emissions from the melter through a point source, there appears to be no technical justification for requiring the determination of particulate matter emissions from the melter using DER Method 5. For these reasons, the proposed modification is requested.

(g) Page 7, Specific Condition No. 11

Proposed Modification

~~The following shall be submitted for approval to DER's District office within 45 days of completion of compliance tests, and a minimum of 90 days before the expiration date of this permit (copy to CAPS):~~

~~a) Compliance test results of DER Method 5 and DER Method 9.~~

~~b) Initial sulfur deposition monitoring report conducted according to Rule 17-2.753(2), FAC (DER Reference Method for Monitoring the Deposition of Sulfur Particulate).~~

Within 45 days of completion of compliance tests, and a minimum of 90-days before the expiration date of this permit, the permittee shall submit for approval to DER's District Office (with a copy to CAPS) the results of all compliance tests conducted in accordance with DER Method 9.

Rationale

The requirement to submit compliance test results of DER Method 5 tests has been eliminated since the requirement for all such testing (originally in Specific Condition No. 6) has been

determined to be unnecessary. Further, the requirement to submit initial sulfur deposition monitoring reports has been eliminated as a requirement of the Construction Permit since Specific Condition No. 10 of proposed Permit No. AC24-61435 specifically states that the sulfur monitoring plan will be implemented on the date of issuance of the initial Operating Permit.

(h) Page 8, Specific Condition No. 13

Proposed Modification

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the Department's District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the Construction Permit until its expiration date. Unless a timely and sufficient application to renew this Construction Permit is filed with the Department pursuant to Section 120.60(6), Florida Statutes, Ooperation beyond Construction Permit expiration date requires a valid permit to operate. (Rules 17-4.22 and 17-4.23, FAC)

Rationale

The added language assures Occidental that the statutorily created authority in Section 120.60(6), Florida Statutes, to the right to renew the construction permit is not waived or otherwise abrogated by the specific conditions of this permit.

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ LOCTN: _____
To: _____ LOCTN: _____
To: _____ LOCTN: _____
FROM: _____ DATE: _____

TO: Victoria J. Tschinkel

FROM: Clair Fancy

DATE: May 6, 1986

SUBJ: Approval of Attached Air Construction Permit

Attached for your approval and signature is one Air Construction Permit to Occidental Chemical Agricultural Products, Inc. for the construction of a sulfur vatting and reclaiming facility in White Springs, Hamilton County, Florida.

The waiver date, after which the permit would be issued by default, is May 9, 1986.

The Bureau recommends your approval and signature.

DER
MAY 8 1986
BAQM

CF/pa

Attachment

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 next to the article number.

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. J. B. Munroe, V.P.
Oxychem
P.O. Box 300
White Springs, Fl
32096

4a. Article Number
P 832 538 965

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

7. Date of Delivery
SEP 30 1991

5. Signature (Addressee)

6. Signature (Agent)

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

PS Form **3811**, October 1990 ☆U.S. GPO: 1990—273-861 **DOMESTIC RETURN RECEIPT**

P 832 538 965

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

UNITED STATES POSTAL SERVICE

Sent to J. B. Munroe	
Street & No. Oxychem	
P.O., State & ZIP Code White Springs, Fl	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	$
Postmark or Date 9-26-91	

AC 24-61435
119008

PS Form **3800**, June 1990

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 26, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. J. B. Munroe, Vice President
OxyChem
Post Office Box 300
White Springs, Florida 32096

Re: Hamilton County - A.P.
OxyChem - Construction Permit Extensions
AC 24-61435 (Sulfur Vats)
AC 24-119008 (Sulfur Pellet Facility)

Dear Mr. Munroe:

The Department is in receipt of your letter dated September 11, 1991, requesting an extension of the expiration date for the above referenced projects, from December 31, 1991 to December 31, 1994. The Department cannot extend the expiration date for these permits for three more years, but will agree to a final extension until July 1, 1992. Some of the reasons for this extension are as following:

1. A construction permit for sulfur vats (AC 24-61435) was originally issued on September 16, 1983 with an expiration date of August 31, 1985. On May 15, 1985, OxyChem requested an extension of the expiration date of this permit. The Department granted OxyChem's request and extended the expiration date of this permit from August 31, 1985 to August 31, 1986. The Department received a modification permit application on July 15, 1985 for this facility. A construction permit was re-issued on May 6, 1986 with an expiration date of December 31, 1989. Again, OxyChem requested an extension of the expiration date. The Department granted OxyChem's request and extended the expiration date from December 31, 1989 to December 31, 1991.

2. A construction permit for sulfur pellet storage and handling facility (AC 24-119008) was issued on February 2, 1987 with an expiration date of December 31, 1989. On October 5, 1989, OxyChem requested an extension of the expiration date. The Department granted an extension of the expiration date until December 31, 1991.

3. Since the original permit was issued in 1983 (for Vats) and in 1987 (for sulfur pellet facility) with several extensions, the Department has determined that this facility has had adequate time to commence construction.

The Department hereby extends the expiration date of these permits from December 31, 1991 to July 1, 1992. If construction commences within the next six months, the Department may grant further extensions, if requested, to allow you sufficient time to complete these projects.

Should construction not commence on these projects by July 1, 1992, the Department will not grant further extensions and you must re-apply.

Your cooperation in this matter will be appreciated.

Sincerely,

STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management

SS/MB/plm

c: A. Kutyna, NED
Charles Pults, P.E.

OxyChem®

September 11, 1991

Mr. Clair Fancy, P.E.
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

re: Sulfur Vats - SC AC24-61435
ID # 31JAX24000511
Sulfur Pellet System - SC AC24-119008
ID # 31JAX24000514

Dear Mr. Fancy:

By this letter, Occidental Chemical Corporation is requesting an extension of the expiration date for both of the referenced permits to December 31, 1994.

This request is based on the fact that the market price of sulfur over the past several years has not made it economically feasible to proceed with construction of the sulfur pelleting and vatting facilities. OxyChem believes that future market conditions will justify completion and operation of this project. A three year extension is requested to allow evaluation of trends in the sulfur market and to complete construction.

If, during the term of this extension, changes in the sulfur market allow this project to become economically viable OxyChem will notify the FDER of its intention to proceed. Upon completion we will apply for a standard operating permit as soon as required testing is completed.

A check for $500.00 ($250.00 per permit) is enclosed to cover processing costs for this determination.

Sincerely,

Charles B. Pults, P. E.
Sr. Environmental Engineer

CBP:gmc

cc: W. M. Miller
R. E. McNeill
M. Berg
A. G. Kutyna, DER, Jax
J. Cole, DER, Jax

Enclosures

001031

RECEIVED
DER - MAIL ROOM
1991 SEP 13 AM 8:56

Occidental Chemical Corporation
Agricultural Products - Florida Operations
County Road 137, P.O. Box 300, White Springs, Florida 32096
904/397-8101

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To:	Location:
To:	Location:
To:	Location:
From:	Date:

Interoffice Memorandum

TO: Steve Smallwood

FROM: For Clair Fancy Preston Lewis

DATE: September 25, 1991

SUBJ: Construction Permit Amendments, OxyChem
AC 24-61435 (Sulfur Vats)
AC 24-119008 (Sulfur Pellet Facility)

Attached for your approval and signature is a letter extending the expiration dates for the above referenced projects.

The Bureau recommends approval of this amendment.

CF/MB/plm

OxyChem®

September 11, 1991

Mr. Clair Fancy, P.E.
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

re: Sulfur Vats - SC AC24-61435
ID # 31JAX24000511
Sulfur Pellet System - SC AC24-119008
ID # 31JAX24000514

Dear Mr. Fancy:

By this letter, Occidental Chemical Corporation is requesting an extension of the expiration date for both of the referenced permits to December 31, 1994.

This request is based on the fact that the market price of sulfur over the past several years has not made it economically feasible to proceed with construction of the sulfur pelleting and vatting facilities. OxyChem believes that future market conditions will justify completion and operation of this project. A three year extension is requested to allow evaluation of trends in the sulfur market and to complete construction.

If, during the term of this extension, changes in the sulfur market allow this project to become economically viable OxyChem will notify the FDER of its intention to proceed. Upon completion we will apply for a standard operating permit as soon as required testing is completed.

A check for $500.00 ($250.00 per permit) is enclosed to cover processing costs for this determination.

Sincerely,

Charles B. Putts, P. E.
Sr. Environmental Engineer

CBP:gmc

cc: W. M. Miller
R. E. McNeill
M. Baig
A. G. Kutyna, DER, Jax
J. Cole, DER, Jax

Enclosures

001031

RECEIVED
DER - MAIL ROOM
1991 SEP 13 AM 8:56

Occidental Chemical Corporation
Agricultural Products - Florida Operations
County Road 137, P.O. Box 300, White Springs, Florida 32096
904/397-8101

VAN HORN STATE BANK
VAN HORN, TEXAS 79855

OCCIDENTAL CHEMICAL CORPORATION
SUWANNEE RIVER PHOSPHATE DIV
P.O. BOX 300 • WHITE SPRINGS, FLORIDA 32096

CHECK NUMBER 35518
88-1334/1123

DATE	AMOUNT
08/21/91	$5

FIVE HUNDRED DOLLARS AND NO CENTS

PAY TO THE ORDER OF DEPARTMENT OF ENVIRONMENTAL REGULATION
2600 BLAIR STONE RD.
TALLAHASSEE, FL 32399

GENERAL ACCOUN
NOT VALID AFTER 180 DA

BY _____
AS DISBURSING AGENTS FOR THE COMPANY

⑈035518⑈ ⑆113313342⑆ 96⑈60607⑈

Dear Mr. Fancy:

By this letter, Occidental Chemical Corporation is requesting an extension of the expiration date for both of the referenced permits to December 31, 1994.

This request is based on the fact that the market price of sulfur over the past several years has not made it economically feasible to proceed with construction of the sulfur pelleting and vatting facilities. OxyChem believes that future market conditions will justify completion and operation of this project. A three year extension is requested to allow evaluation of trends in the sulfur market and to complete construction.

If, during the term of this extension, changes in the sulfur market allow this project to become economically viable OxyChem will notify the FDER of its intention to proceed. Upon completion we will apply for a standard operating permit as soon as required testing is completed.

A check for $500.00 ($250.00 per permit) is enclosed to cover processing costs for this determination.

Sincerely,

Charles B. Pults, P. E.
Sr. Environmental Engineer

CBP:gmc

cc: W. M. Miller
R. E. McNeill
A. G. Kutyna, DER, Jax
J. Cole, DER, Jax

Enclosures

001031

RECEIVED
DER-MAIL ROOM
1991 SEP 13 AM 8:56

Occidental Chemical Corporation
Agricultural Products - Florida Operations
County Road 137, P.O. Box 300, White Springs, Florida 32096
904/397-8101

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. *(Extra charge)*
2. ☐ Restricted Delivery *(Extra charge)*

3. Article Addressed to:

Mr. Hudson C. Smith
Occidental Chemical Corp.
P. O. Box 300
White Springs, FL 32096

4. Article Number

P 938 762 753

Type of Service:

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature — Address

X

6. Signature — Agent

X

7. Date of Delivery

11-20-89

8. Addressee's Address *(ONLY if requested and fee paid)*

PS Form **3811**, Mar. 1988 ★ U.S.G.P.O. 1988-212-865 **DOMESTIC RETURN RECEIPT**

PS Form 3800, June 1985

RECEIPT FOR CERTIFIED MAIL
NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL
(See Reverse)

P 938 762 753

Sent to Mr. Hudson C. Smith, Occidental Chemical Corp
Street and No. P. O. Box 300
P.O. State and ZIP Code White Springs, FL 32096

Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$

Postmark or Date
Mailed: 11-17-89
Permit: AC 24-61435

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

November 7, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Hudson C. Smith
Occidental Chemical Corp.
Post Office Box 300
White Springs, Florida 32096

Dear Mr. Smith:

Re: Permit Expiration Date Extension
Sulfur Vatting Permit, AC 24-61435

The Department is in agreement with your request dated October 2, 1989, for an extension of the expiration date of the above permit. The following shall be changed and added to the permit:

Expiration Date:

From: December 31, 1989
To: December 31, 1991

Attachment to be Added:

5. Koogler & Associates letter received October 5, 1989.

This letter must be attached to the above mentioned permit and shall become a part of that permit.

Sincerely,

Dale Twachtmann

Dale Twachtmann
Secretary

DT/kt

cc: M. Benjamin, NE District
R. Tedder, P.E.

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION
Office of the Secretary

Interoffice Memorandum

For Routing To Other Than The Addressee	
To:	Location:
To:	Location:
To:	Location:
From:	Date:

TO: Dale Twachtmann

FROM: Steve Smallwood

DATE: November 6, 1989

SUBJ: Permit Expiration Date Extension
Occidental Chemical Corp.
Sulfur Vat Permit, AC 24-61435

Attached for your approval and signature is a permit expiration date extension prepared by the Bureau of Air Regulation for Occidental Chemical Corp.'s sulfur vatting facility located in Hamilton County, Florida.

I recommend your approval and signature.

attachment

SS/pr

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

KA 102-86-04

October 2, 1989

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

Subject: Request for Construction Permit Extensions
Occidental Chemical Corporation
Hamilton County, Florida
AC24-119008 - Sulfur Pellets Facility
AC24-61435 - Sulfur Vats and Reclamation Facility

Dear Mr. Fancy:

On behalf of Occidental Chemical Corporation, I would like to request that the expiration dates of the above air construction permits be extended from December 31, 1989 to December 31, 1991.

This request is based upon the fact that the market price of sulfur over the past several years has not made it economically feasible to proceed with construction of the sulfur pellet and vatting facilities. Occidental Chemical Corporation believes, however, that future market conditions will justify completion of the project. A two-year extension is needed to properly evaluate future market trends and to complete the construction.

Thank you for your consideration in this matter. Please feel free to call me if you have any questions.

Sincerely,

KOOGLER & ASSOCIATES

Richard B. Tedder, P.E.

RBT:mab

cc: Charles Pults, Occidental Chemical Corporation

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

July 10, 1986

Mr. J. D. Boone Kuersteiner
Post Office Box 1794
Tallahassee, Florida 32302

Dear Mr. Kuersteiner:

Re: Sulfur Vatting and Reclaiming Facility Permit No. AC 24-61435, Issued to Occidental Chemical Agricultural Products Inc. (Oxy) on May 9, 1986

The department has reviewed your letter dated June 18, 1986, on the interpretation of Specific Conditions No. 4 and 12 of the above referenced permit.

The department is in agreement with your interpretation but would like to further clarify Specific Condition No. 4. A test report will be acceptable to the department regardless of whether Oxy does it or whether a sulfur supplier provides it. However, it will be required that the testing facility be competent, reliable, and acceptable to the department, and furthermore, that the sample tested be reasonably representative of a given shipment.

Should you have any further questions, please contact Pradeep Raval at (904)488-1344 or write to me at the above address.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/PR/s

cc: Wes Atwood
John Koogler
Bill Stuart
Gary Early

HUEY, GUILDAY, KUERSTEINER & TUCKER, P. A.
ATTORNEYS AT LAW
SUITE 510, FIRST FLORIDA BANK BUILDING
POST OFFICE BOX 1794
TALLAHASSEE, FLORIDA 32302
(904) 224-7091
TELECOPY 9042222593

THOMAS J. GUILDAY
DAVID P. HOPSTETTER
J. MICHAEL HUEY
J. D. BOONE KUERSTEINER
GEOFFREY B. SCHWARTZ
J. KENDRICK TUCKER

RALPH A. DEMEO
MARK E. HOLCOMB
LAUREL D. LANDRY
J. STEPHEN MENTON
MARY K. SIMPSON

June 18, 1986

BY HAND DELIVERY THIS DATE

Pradeep A. Raval
Review Engineer
Bureau of Air Quality
Management
Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Re: Sulfur Vatting and Reclamation Facilities
Construction Permit Modification
Occidental Chemical Agricultural Products, Inc.
Department of Environmental Regulation
Permit No. AC24-61435

Dear Pradeep:

On Tuesday, May 20, 1986, our office received a copy of the Florida Department of Environmental Regulation ("Department") Notice of Permit and Final Determination dated May 9, 1986 therein authorizing construction modification of the sulfur vatting and reclamation facilities proposed by our client, Occidental Chemical Agricultural Products, Inc. ("Occidental"). Accordingly, by this correspondence we wish to confirm our understanding concerning the intent of the Department regarding Special Condition Nos. 4 and 12 of the above-referenced construction permit based on our earlier telephone conversation of Wednesday, May 7, 1986.

Based upon our prior discussion, it is our understanding that a record provided by the supplier of molten sulfur of the range of Hydrogen Sulfide/Hydrogen Polysulfide content of the molten sulfur in each shipment received at the Swift Creek Chemical Complex that will be used for vatting, will satisfy the intent of Special Condition No. 4. Further, it is not the Department's intent that Occidental sample each shipment of the molten sulfur that is received for vatting purposes to document the Hydrogen Sulfide/Hydrogen Polysulfide content of the molten sulfur.

We also specifically discussed the Department's intent with regard to Occidental's right to request a timely renewal of the subject construction permit prior to the expiration date of December 31, 1989. Based upon our discussion, it is our understanding that the Department's intent in Special Condition No. 12 is not to preclude Occidental from submitting a timely and sufficient application to the Department to renew the subject permit under the authority of Section 120.60(6), Florida Statutes.

On behalf of Occidental, we would like to express our appreciation for your cooperation and assistance in completing the construction permitting of the proposed modification to the sulfur vatting and reclamation facilities proposed for the Occidental Swift Creek Chemical Complex in Hamilton County, Florida. We would request that you contact our office in writting if we have inadvertently misstated the substance of the Department's intent with regard to matters set forth above.

Sincerely yours,

HUEY, GUILDAY, KUERSTEINER
& TUCKER, P.A.

J. D. Boone Kuersteiner

JDBK/mss

cc: D. T. Sawyer
Assistant General Counsel
Occidental Chemical Agricultural
Products, Inc.

R. E. McNeill
Director
Safety, Health & Environmental
Control
Occidental Chemical Agricultural
Products, Inc.

W. W. Atwood
Manager
Environmental Control
Occidental Chemical Agricultural
Products, Inc.

Carl J. Axelson, Jr.
Manager
Supplies & Distribution
Occidental Chemical Agricultural
Products, Inc.

Laszlo Takacs, Ph.D.
Manager
Air Quality
Environment, Health & Safety
Occidental Chemical Agricultural
Products, Inc.

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

Gary Early
Assistant General Counsel
Florida Department of Environmental
Regulation

HUEY, GUILDAY, KUERSTEINER & TUCKER, P. A.
ATTORNEYS AT LAW
SUITE 510, FIRST FLORIDA BANK BUILDING
POST OFFICE BOX 1794
TALLAHASSEE, FLORIDA 32302
(904) 224-7091
TELECOPY 9042222593

THOMAS J. GUILDAY
DAVID P. HOPSTETTER
J. MICHAEL HUEY
J. D. BOONE KUERSTEINER
GEOFFREY B. SCHWARTZ
J. KENDRICK TUCKER

RALPH A. DEMEO
MARK E. HOLCOMB
LAUREL D. LANDRY
J. STEPHEN MENTON
MARY K. SIMPSON

March 7, 1986

DER
MAR 7 1986
BAQM

BY HAND DELIVERY THIS DATE

Mrs. Victoria J. Tschinkel, Secretary
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

ATTENTION: C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Re: Sulfur Vatting and Reclaiming Facilities
Construction Permit Modification
Occidental Chemical Agrico Products, Inc.
Department of Environmental
Regulation Permit No. AC24-61435

Dear Clair:

Please be advised that our client Occidental Chemical Agricultural Products, Inc. ("Occidental"), hereby agrees to an extension of the time period for final agency action on the modification of the above-referenced construction permit under Section 120.60(2), Florida Statutes.

As indicated by the enclosed executed Waiver of 90 Day Time Limit ("Waiver"), [DER Form 17-1.121(17), F.A.C.], Occidental agrees to an extension of the time period for final agency action by the Department of Environmental Regulation ("Department") on the pending application to modify the permit to construct the sulfur vatting and reclaiming facilities at the Swift Creek Chemical Complex until and through the close of the business date on Friday, April 11, 1986. Occidental has agreed to extend the time period for final agency action to allow the Department an additional twenty-nine (29) days to complete its final agency review of the subject construction permit modification.

On behalf of our client, Occidental, we would like to express our appreciation for the continued cooperation and assistance of your office in reviewing the foregoing matter. It is our understanding that final agency action must be taken by the Department on the subject application for modification of construction permit on or before Friday, April 11, 1986.

Sincerely,

HUEY, GUILDAY, KUERSTEINER
& TUCKER, P.A.

J. D. Boone Kuersteiner

JDBK/mss

cc: D. T. Sawyer
Assistant General Counsel
Occidental Chemical Agricultural
Products, Inc.

R. E. McNeill
Director
Safety, Health & Environmental
Control
Occidental Chemical Agricultural
Products, Inc.

W. W. Atwood
Manager
Environmental Control
Occidental Chemical Agricultural
Products, Inc.

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

WAIVER OF 90 DAY TIME LIMIT

UNDER SECTION 120.60(2), FlORIDA STATUTES

Permit Application No. AC24-61435
Applicant's Name: Occidental Chemical Agricultural Products, Inc.

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

With regard to the above-referenced permit application, Occidental Chemical Agricultural Products, Inc. hereby with full knowledge and understanding of its rights under Section 120.60(2), Florida Statutes, waives the right under Section 120.60(2), 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 Section 120.60(2), Florida Statutes. Said waiver is made freely and voluntarily by Occidental Chemical Agricultural Products, Inc., is in 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 Friday, the 11th day of April, 1986.

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

Signature

DER

MAR 7 1986

BAQM

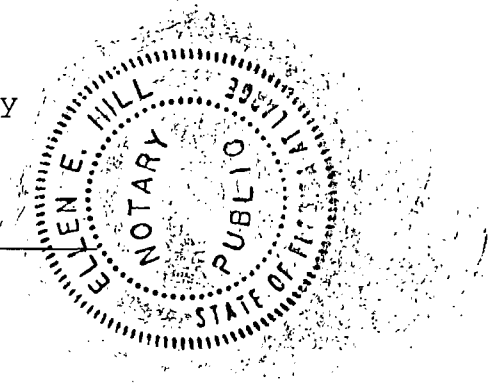
J. D. Boone Kuersteiner
HUEY, GUILDAY, KUERSTEINER
& TUCKER, P.A.
Post Office Box 1794
Tallahassee, Florida 32302

Attorneys for OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.

Date: March 7, 1986

Sworn to and subscribed before me this 7th day of March, 1986.

Notary Public, State of Florida
My Commission Expires Nov. 13, 1988
Bonded Thru Troy Fain-Insurance, Inc.



DER

FEB 5 1986

BAQM

State of Florida
Department of
Environmental Regulation
Notice of Proposed Agency
Action on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a modification to a permit to construct a sulfur vatting and reclaiming facility at the applicant's existing chemical complex in White Springs, Hamilton County, Florida. A determination of best available control technology (BACT) was not required.

Persons 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 conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application 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:

Dept. of Environmental Regulation, Bureau of Air Quality Management, 2600 Blair Stone Road Tallahassee, Florida 32301.

Dept. of Environmental Regulation, Northeast District, 3426 Bills Road, Jacksonville, Florida 32206.

Any person may send written comments on the proposed action to Mr. Bill Thomas 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.

Jan. 30, 1986

The Jasper News

PUBLISHED WEEKLY

Jasper, Hamilton County, Florida

State Of Florida
County Of Hamilton

Before the undersigned authority, personally appeared LINDA K. CASON..... who on oath says ~~he~~ she is the LEGAL SECRETARY... of THE JASPER NEWS, a newspaper published at Jasper, in Hamilton County, Florida; that the attached copy of advertisement, being a NOTICE.....

in the matter
PROPOSED AGENCY ACTION ON
PERMIT APPLICATION.....

In the

HAMILTON COUNTY.....

Court, was published in

THE JASPER NEWS.....

said newspapers in the issues of JANUARY 30,..

1986.....

Affiant further says that the said The Jasper News is a newspaper published at Jasper, in said Hamilton County Florida, and that the said newspaper has heretofore been continuously published in said Hamilton County, Florida each Thursday and has been entered as second class matter at the Post Office in Jasper, in said Hamilton 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.

Linda K. Cason
Signature

Sworn to and subscribed before me this ...4th..

day of..FEBRUARY,..... 19..86.....

Notary Public

(SEAL)

Notary Public, Florida, State at Large
My Commission Expires March 29, 1988

PS Form 3811, July 1983

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:
Mr. M. P. McArthur
Occidental Chemical Co.
Post Office Box 300
White Springs, FL 32096

4. Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Article Number
P 408 533 654

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X Clarence Rogers

7. Date of Delivery
1-16-86

8. Addressee's Address *(ONLY if requested and fee paid)*

PS Form 3800, Feb. 1982

P 408 533 654

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DOMESTIC RETURN RECEIPT

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

January 13, 1986

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. M. P. McArthur
Occidental Chemical Company
Post Office Box 300
White Springs, Florida 32096

Dear Mr. McArthur:

Attached is one copy of the Technical Evaluation and Preliminary Determination, and proposed modified permit to construct a sulfur vatting and reclaiming facility at your chemical complex in White Springs, Florida.

Before final action can be taken on your draft permit, you are required by Florida Administrative Code Rule 17-103.150 to publish the attached Notice of Proposed Agency Action in the legal advertising section of a newspaper of general circulation in Hamilton County no later than fourteen days after receipt of this letter. The department must be provided with proof of publication within seven days of the date the notice is published. Failure to publish the notice may be grounds for denial of the permits.

Please submit, in writing, any comments which you wish to have considered concerning the department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/pa

Attachments

cc: John Koogler
Johnny Cole

State of Florida
Department of Environmental Regulation
Notice of Proposed Agency Action
on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a modification to a permit to construct a sulfur vatting and reclaiming facility at the applicant's existing chemical complex in White springs, Hamilton County, Florida. A determination of best available control technology (BACT) was not required.

Persons 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 conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

The application 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:

Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32301

Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32206

Any person may send written comments on the proposed action to Mr. Bill Thomas 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.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of Application for Permit by:	)	
Occidental Chemical Company P. O. Box 300 White Springs, Florida 32096	)	DER File No. AC 24-61435

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its Intent to Issue, and proposed order of issuance for, a permit pursuant to Chapter 403, Florida Statutes, for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Occidental Chemical Company, applied on July 19, 1985, to DER for a modification to a permit to construct a sulfur vatting and reclaiming facility at the applicant's existing chemical complex in White Springs, Hamilton County, Florida

The Department has permitting jurisdiction under Chapter 403, Florida Statutes and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The applicant was officially notified by the Department that an air construction permit was required for the proposed work.

This intent to issue shall be placed before the Secretary for final action unless an appropriate petition for a hearing pursuant to the provisions of Section 120.57, Florida Statutes, is filed within fourteen (14) days from receipt of this letter or

publication of the public notice (copy attached) required pursuant to Rule 17-103.150, Florida Administrative Code, whichever occurs first. The petition must comply with the requirements of Section 17-103.155 and Rule 28-5.201, Florida Administrative Code (copy attached) and be filed pursuant to Rule 17-103.155(1) in the Office of General Counsel of the Department of Environmental Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32301.

Petitions which are not filed in accordance with the above provisions are subject to dismissal by the Department. In the event a formal hearing is conducted pursuant to Section 120.57(1), all parties shall have an opportunity to respond, to present evidence and argument on all issues involved, to conduct cross-examination of witnesses and submit rebuttal evidence, to submit proposed findings of facts and orders, to file exceptions to any order or hearing officer's recommended order, and to be represented by counsel. If an informal hearing is requested, the agency, in accordance with its rules of procedure, will provide affected persons or parties or their counsel an opportunity, at a convenient time and place, to present to the agency or hearing officer, written or oral evidence in opposition to the agency's action or refusal to act, or a written statement challenging the grounds upon which the agency has chosen to justify its action or inaction, pursuant to Section 120.57(2), Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition, may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of

Administrative Hearings, 2009 Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

Executed the 14 day of January, 1986, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

Mr. M. P. McArthur
Mr. John Koogler, P.E.
Mr. Johnny Cole

CERTIFICATION

This is to certify that the foregoing Intent to Issue and all copies were mailed before the close of business on 14 Jan, 1986.

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
2600 Blair Stone Road
Tallahassee, Florida 32301

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to §120.52(9), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Patricia G. Adams
Clerk

January 14, 1986
Date

RULES OF THE ADMINISTRATIVE COMMISSION
MODEL RULES OF PROCEDURE
CHAPTER 28-5
DECISIONS DETERMINING SUBSTANTIAL INTERESTS

28-5.15 Requests for Formal and Informal Proceedings

(1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.

(2) All petitions filed under these rules should contain:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name and address of the petitioner or petitioners;

(c) All disputed issues of material fact. If there are none, the petition must so indicate;

(d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;

(e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;

(f) A demand for the relief to which the petitioner deems himself entitled; and

(g) Such other information which the petitioner contends is material.

Technical Evaluation
and
Preliminary Determination

Occidental Chemical Company
White Springs, Hamilton County, Florida

Sulfur Vatting and Reclaiming Facility

Permit No. AC24-61435

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

January 10, 1986

I. Application

A. Applicant

Occidental Chemical Company
P.O. Box 300,
White Springs, Florida 32096

B. Project and Location

The applicant proposes to modify a permit to construct a sulfur vatting facility at their existing plant in Hamilton County at Swift Creek Chemical Complex (SCCC). The project will involve receiving molten sulfur from railcars, pumping the sulfur through a collection pit and a surge storage system to a vatting area at up to a maximum rate of 1500 tons per day (TPD), reclaiming vatted sulfur (as required) by excavators and payloaders at up to a maximum rate of 1680 TPD, and remelting this sulfur in a 1680 TPD static melter to supply molten sulfur to the existing, on-site, sulfuric acid plants. The existing permit allows for sulfur reclamation using an in-situ melter whereas the modification will allow for mechanical reclamation, using an escavator and payloader, and the melting of sulfur using a static melter. Over an initial two year period, 75,000 tons per year of molten sulfur will be received in addition to the present supply, in order to build up an inventory by vatting sulfur.

The UTM coordinates of this facility are Zone 17, 231.30 km E and 3369.83 km N.

C. Sources Reviewed

The main sources reviewed in this technical evaluation will be:

a) Railcar Unloading
b) Sulfur Vatting
c) Mechanical Reclamation
d) Recovery of Reclaimed Sulfur
e) Recovery of Sulfur Pile
f) Traffic
g) Melter
h) Wind Erosion

Occidental Chemical Company applied for the modification of their current permit on July 19, 1985. The application was deemed complete on November 8, 1985.

D. Facility Category

The facility at Occidental is classified under the Standard Industrial Classification (SIC) Code as Group No. 20, Chemical and Allied Products, and Industry No. 2819, Sulfuric Acid Contact Process. The SCCC is a major facility, however, the proposed project is a minor modification therein.

II. Project Description

A. Process

Under normal operating conditions, the sulfur, as received in the railroad tank cars, will be heated by steam and bottom dumped into a molten sulfur receiving pit at the rail yard. This pit will feed into a surge storage system. The molten sulfur that is to be vatted will be pumped from the molten sulfur receiving pit and vatted at up to a maximum rate of 600 gallons per minute, or 270 tons per hour (TPH). The maximum daily vatting rate will be 1,500 tons of elemental sulfur per day. The two vats, eventually formed, will have a maximum storage capacity of 75,000 tons each and will measure about 250 feet on a side by about 20-30 feet in height.

Vatted sulfur will be reclaimed from inventory by mechanical reclamation at the rate of 210 tons per hour, during one 8-hour shift per day. This will result in a maximum daily reclamation rate of 1,680 tons per day (TPD). This new reclamation rate represents the amount of sulfur required to operate the two 2,500 tons per day sulfuric acid plants at the SCCC. The reclaimed sulfur will be recovered by front-end loaders at up to a maximum rate of 210 tons per hour and placed in a short-term recovered sulfur storage pile located near the reclamation area. The recovered sulfur will be transferred from the short-term sulfur storage pile by front-end loaders at a maximum rate of 70 tons per hour, 24 hours per day, directly to a static sulfur melter. The molten sulfur from the melter will be transferred through the existing molten sulfur system into the surge storage system and subsequently to the sulfuric acid plants. A maximum of 300,000 tons of sulfur could be thus processed (vatted or reclaimed) annually.

During the first two years, however, a maximum of 375,000 tons of sulfur may be placed into storage each year, with a maximum annual reclamation rate of 300,000 tons. This procedure could result in a 150,000 ton inventory of vatted sulfur at the end of the 2 year period.

B. Operating Hours and Rates

The maximum operating hours and rates for the primary activities in sulfur facility will be:

Operation	TPH	TPD	TPY	HRS/DAY
Railcar Unloading	270	1500	375,000	6
Vatting	270	1500	375,000	6
Storage (vat) Total	-	-	150,000	-
Reclaiming	210	1680	300,000	8
Recovering	210	1680	300,000	8
Melting	70	1680	300,000	24

III. Rule Applicability

The proposed modified project will emit the pollutants sulfur particulate matter (PM) and hydrogen sulfide (H_2S), and is therefore subject to preconstruction review in accordance with Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC), and Chapter 403 of the Florida Statutes.

The project will be located in an area designated as attainment for all pollutants, in Hamilton County, in accordance with Rule 17-2.420, FAC. The proposed project will be a minor modification in an existing major facility. The project is not subject to Prevention of Significant Deterioration (PSD) Review Requirements in accordance with Rule 17-2.500(2)(d)4, FAC.

The project will be subject to the Source Specific New Source Review Requirements in accordance with Rule 17-2.540(2), FAC, Sulfur Storage and Handling Facilities. The requirements include:

1) Preconstruction Ambient Air Quality Analysis.
2) Preconstruction Sulfur Deposition Analysis.
3) Post-construction Ambient Air Monitoring.
4) Post-construction Sulfur Deposition Monitoring.

The project will be subject to Specific Source Emission Limiting Standards, in accordance with:

1) Rule 17-2.600(11)(a), FAC, Molten Sulfur Handling
2) Rule 17-2.600(11)(b), FAC, Solid Sulfur Handling
3) Rule 17-2.600(11)(c), FAC, Sulfur Vatting

These standards specify reasonable emission limiting measures to be implemented and also a 10% opacity limit for visible emissions from any source in the sulfur facility.

The applicant will be required to conduct annual compliance tests using DER Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources, in accordance with Rule 17-2.700(6)(a)9, FAC, for all sources within the sulfur facility.

An initial compliance test using DER Method 5, Determination of Particulate Emissions from Stationary Sources will be conducted to determine particulate emissions from the static melter, in accordance with Rule 17-2.700(6)(a)5, FAC.

The applicant will be required to file reports of compliance tests in accordance with Rule 17-2.700(7), FAC.

IV. Ambient Air Quality and Deposition Analysis

A. Introduction

The Occidental Chemical Company is proposing to build two 75,000 ton solid sulfur vats at their Swift Creek Chemical Complex (SCCC) located in Hamilton County, Florida. The construction of these vats is subject to Rule 17-2.540, FAC - Source Specific New Source Review Requirements. These requirements include:

- o Preconstruction Ambient Air Quality Analysis;
- o Preconstruction Sulfur Deposition Analysis, and;
- o Postconstruction Monitoring.

The applicant has submitted the required preconstruction analysis. Based on these analyses, the department has reasonable assurance that the proposed sulfur vatting, along with the associated sulfur handling, as described in this report and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any ambient air quality standard or prevention of significant deterioration (PSD) increment. A discussion of the modeling methodology and required analyses follows.

B. Modelng Methodology

The EPA-approved Industrial Source Complex (ISC) model, in both its short-term (ISCST) and long-term (ISCLT) forms, were used to predict 24-hour and annual particulate sulfur ambient concentrations, and monthly and annual average sulfur deposition. The ISCST model was used for the short-term (24-hour) concentration estimates using sequential, hourly meteorological data. The ISCLT model was used to predict annual average ambient concentration, and monthly and annual average deposition using joint frequencies of wind direction, wind speed, and atmospheric stability.

The ISC models allow for various options to be selected based on the geographical area and source characteristics of the industrial facility. These options include: distinguishing between point, area, and volume type sources; urban or rural geography; building induced downwash; and gravitational settling of large particulates. In addition, the model allows for the variation of the emission rate with hour of the day or wind

speed. The applicant has used these options to more accurately reflect sources which run only eight hours per day or sources with emissions that vary with windspeed, such as wind erosion from piles.

The individual sources of particulate sulfur associated with the proposed project are listed in Table 1. The initial plume dispersion for the volume type sources were calculated in accordance with the guidelines contained in the ISC Users Manual. All of the sources associated with the handling and storage of sulfur were modeled as volume type sources. These sources represent the only significant quantifiable particulate matter emissions at the facility. Table 2 lists the particulate matter emission rates used in the models. The detailed calculation of these rates can be found in the permit application.

The meteorological data used for the analyses consisted of the five-year period (1972-1976) of hourly surface weather observations from the National Weather Service station in Valdosta, Georgia. The upper air data for this same period were obtained from Waycross, Georgia. Since five years of data were used, the highest, second-high short-term predicted concentrations were compared with the appropriate ambient standards. For the long-term (monthly and annual) predicted concentrations and deposition, these same data were processed into joint frequency distributions of wind speed, wind direction, and atmospheric stability.

The particulate deposition rate analysis required the applicant to define the particle size distribution. The applicant separated the total particulate emissions into 10 size categories, each of equal mass. The gravitational settling velocity and surface reflection coefficient for each size category were calculated as specified in the ISC Users Manual. The ISCLT model used this information to calculate the maximum monthly and annual deposition rates. The applicant also included deposition in the determination of the predicted concentrations. Five size categories were used for the less than 30 micrometer particles.

A post-processing computer program was used to adjust the short-term average concentrations when calm wind conditions occurred within the averaging period. The purpose of this post processing was to adjust for the artificial persistence of wind direction in the processed hourly meteorological data set. Long-term predicted concentrations and deposition rates were not adjusted for calm conditions.

Receptor locations used in the analysis were arranged in three concentric rings at distances of 500, 700, and 2000 meters from the center located at the southwest corner of the sulfur

Table 1

Source Data

Source	Type	Location x(m)	Location y(m)	Height (m)	Initial Plume Dispersion vertical(m)	Initial Plume Dispersion horizontal(m)
Sulfur Reclamation (1)	Volume	35	120	3.8	3.5	17.7
Sulfur Recovery (1)	Volume	35	120	3.8	3.5	17.7
Suflur to Melter	Volume	52	63	6.0	1.4	1.4
Traffic Reclaim (1)	Volume	35	120	3.8	3.5	17.7
Traffic-Melter	Volume	35	120	3.8	3.5	17.7
Sulfur Melter	Volume	52	63	4.0	3.6	1.1
Wind Erosion 1	Volume	35	120	3.8	3.5	17.7
Wind Erosion 2	Volume	115	120	3.8	3.5	17.7

(1) Occurs only 8 hours per day.

Table 2

Emission Data

Source	Suspended Particulate 24-hour (g/s)	Suspended Particulate Annual (g/s)	Total Particulate Monthly (g)	Total Particulate Annual (g)
Sulfur Reclamation	0.190	0.021	2.30 E5	1.37 E6
Sulfur Recovery	0.063	0.007	0.78 E5	0.46 E6
Sulfur to Melter	0.011	0.005	0.52 E5	3.14 E5
Traffic-Reclaim	0.302	0.029	3.26 E5	1.95 E6
Traffic Melter	0.330	0.029	3.26 E5	1.95 E6
Sulfur Melter	0.001	0.001	4.54 E3	2.72 E4
Wind Erosion 1	0.384	0.002	3.18 E4	1.38 E5
Wind Erosion 2	0.384	0.002	3.18 E4	1.38 E5

storage facility. The 700 meter ring represents the distance to the nearest property boundary, and the 2000 meter ring represents the nearest distance to which the public would generally have access. The receptors were spaced at 10 degree intervals around each ring.

The modeling methodology used by the applicant, as outlined above and explained in greater detail in the applicant's air quality report, followed the procedures and guidelines of the department.

C. Analysis of Existing Air Quality

The total ambient impact to an area is determined by adding the maximum predicted modeled impacts to the existing background concentration. The existing background level is often estimated from air quality monitoring data located near the proposed new or modified facility. The background concentration should account for all sources not included in the dispersion modeling calculations.

One particulate matter monitor is located near the Swift Creek facility. The monitor is approximately 2000 meters from the sulfur handling area and has a six year record of data. Using the second-highest measured concentration from this monitor in the most recent year (1984) to represent the 24-hour background and the annual geometric mean for 1984 to represent the annual background, the background values used are 107 ug/m^3, 24-hour average and 38 ug/m^3, annual average.

D. PSD Increment Analysis

The Swift Creek facility is located in an area designated as "attainment" for meeting the ambient air quality standards for particulate matter. As such, increased emissions of this pollutant occurring after the baseline date must not cause ambient concentration to increase beyond specified amounts known as PSD increments. All of the sulfur handling processes are subject to these PSD limitations.

The modeling results for these sources indicate that neither the allowed 24-hour increment of 37 ug/m^3 or the allowed annual increment of 19 ug/m^3 will be exceeded at or beyond the boundary of the plant property. Table 3 summarizes the facilities impact on PSD increments.

E. Ambient Air Quality Standards Analysis

Given the existing air quality in the area of the Swift Creek Chemical Complex, emissions from the proposed sulfur vatting and handling operation are not expected to cause or contribute to a violation of an ambient air quality standard.

Table 3

PSD Increment Analysis

Pollutant	Averaging Period	Predicted Increment Consumption (ug/m^3)	Max. Allowed Consumption (ug/m^3)
Particulate Matter	24-hour	15	37
	Annual	1	19

The results of the ambient standards analysis are contained in Table 4.

F. Additional Air Quality Impacts

The amount of H_2S estimated to be emitted by this project is 7.5 TPY (based on 100% emission of H_2S at 100 ppm in the sulfur received). The significant limit according to 17-2.500, Table 2, FAC, is 10 TPY. This significant emission limit will not be exceeded as long as the H_2S concentration in the sulfur supply is below 130 ppm.

G. Particulate Deposition Rate Analysis

The results of the sulfur particulate deposition analyses are contained in Table 5. The maximum monthly deposition rate predicted was 0.0055 g/m^2 (0.121 lb/hectare). The maximum annual deposition rate was 0.0413 g/m^2 (0.910 lb/hectare). These results are applicable at the nearest plant boundary, a distance of 700 meters.

V. Conclusion

The Occidental Chemical Company has applied for a permit to construct two 75,000 ton solid sulfur vats along with the associated sulfur handling facilities. The facilities will be located at their Swift Creek Chemical Complex in Hamilton County, Florida. The applicant currently rails in molten sulfur for use in their sulfuric acid plants. As part of this permit the applicant will rail in an additional amount of molten sulfur during the first two years to create the sulfur vats. The applicant will then utilize the stored solid sulfur as needed by remelting it and routing it to the sulfuric acid plants.

The applicant has submitted along with the application an analysis of the impacts predicted to occur on the ambient air as a result of constructing and working the sulfur vats. This analysis addressed the requirements of Rule 17-2.540, FAC for an air quality impact analysis.

Based on this information, submitted by Occidental Chemical Company, the department has reasonable assurance that the construction of the new sulfur handling and vatting facility, as described in this report and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of an ambient air quality standard or PSD increment, or any other provision of Chapter 17-2, FAC.

A summary of emissions at SCCC are contained in Table 6.

Table 4

Ambient Air Quality Impacts

Pollutant	Averaging Time	Maximum Impact Proposed Project (ug/m^3)	Total Impact (1) (ug/m^3)	Florida AAQS (ug/m^3)
Particulate Matter	24-hour	15	122	150
	Annual	1	39	60

(1) Includes estimated background concentrations of 107 ug/m^3, 24-hour average and 38 ug/m^3, annual average.

Table 5

Sulfur Particulate Deposition

Period	Maximum Deposition (1) (g/m^2)	(lb/hectare)
January	0.0018	0.040
February	0.0023	0.051
March	0.0039	0.086
April	0.0043	0.095
May	0.0055	0.121
June	0.0041	0.090
July	0.0038	0.084
August	0.0037	0.082
September	0.0046	0.101
October	0.0021	0.046
November	0.0021	0.046
December	0.0031	0.068
Annual	0.0413	0.910

(1) At plant boundary

Table 6

Summary of Emissions

Source	Suspended Particulate (1) 24-hour (3) (lb/hr)	Suspended Particulate (1) Annual (4) (tons)	Total Particulate (2) Annual (tons)
Railcar Unloading	0.01	0.01	0.01
Sulfur Vatting	7.25	1.28	1.28
Sulfur Reclamation	5.21	0.72	1.51
Sulfur Recovery	1.51	0.24	0.50
Sulfur to Melter	0.09	0.17	0.35
Traffic	5.02	2.05	4.30
Sulfur Melter	0.01	0.03	0.03
Wind Erosion	6.86	0.15	0.30
Total			8.28

The hydrogen sulfide emissions at the sulfur facility will amount to a total of 7.5 tons per year.

Note:

(1) Suspended particles are less than 30 micrometers in diameter.
(2) Total particles include particles up to 300 micrometers in diameter.
(3) Maximum emissions at wind speed of 18 mph.
(4) Annual average using average parameters.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:
Occidental Chemical Company
P. O. Box 300
White Springs, Florida 32096

Permit Number:AC 24-61435
Expiration Date: January 1, 1989
County: Hamilton
Latitude/Longitude: 30° 25' 56"N/ 83° 47' 51"W
Project: Sulfur Vatting and Reclaiming Facility

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 drawings, 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 sulfur vatting and reclaiming facility consisting of a railcar unloading system, a molten sulfur receiving pit, surge storage tanks, molten sulfur pouring arms, two 75,000 ton vats, rubber tired payloaders and escavating equipment, a 70 tons per hour static melter, and the sulfur facility water spray system.

Construction shall be in accordance with the attached permit application unless otherwise stated in the General and Specific Conditions herein.

Attachments are as follows:

1. Occidental's application package dated July 19, 1985.

2. DER's letter dated August 20, 1985.

3. Occidental's response dated November 7, 1985.

PERMITTEE:
Occidental Chemical Company

Permit Number: AC 24-61435
Expiration Date: January 1, 1989

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and department rules, unless specifically authorized by an order from the department.

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the department, may be used by the department as evidence in any enforcement case arising under the Florida Statutes or department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or department rules.

11. This permit is transferable only upon department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. This permit also constitutes:

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

14. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the department, during the course of any unresolved enforcement action.

GENERAL CONDITIONS:

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The maximum operating hours and rates of sulfur processing activities shall not exceed:

Activity	TPH	TPD	TPY	Hrs/Day
a) Railcar Unloading	270	1500	375,000*	6
b) Vatting	270	1500	375,000*	6
c) Storage			150,000T	24
d) Reclaiming	210	1680	300,000	8
e) Recovering	210	1680	300,000	8
f) Melting	70	1680	300,000	24

SPECIFIC CONDITIONS:

*375,000 for the first two years only, and 300,000 for subsequent years.

Note:

i) TPH, tons per hour; TPD, tons per day; TPY, tons per year.
ii) 150,000T is storage capacity of two sulfur vats at their maximum.
iii) Railcar unloading and vat reclamation activities will not be conducted simultaneously.

2. Only 75,000 TPY, for the first 2 years, shall be received in addition to the existing molten sulfur supply. The main emissions from the sulfur vatting and reclaiming facility shall not exceed 10 TPY for sulfur particulate, and 10 TPY for hydrogen sulfide.

Summary of Emissions

Source	Suspended Particulate (1) 24-hour (3) (lb/hr)	Annual (4) (tons)	Total Particulate (2) Annual (tons)
Railcar Unloading	0.01	0.01	0.01
Sulfur Vatting	7.25	1.28	1.28
Sulfur Reclamation	5.21	0.72	1.51
Sulfur Recovery	1.51	0.24	0.50
Sulfur to Melter	0.09	0.17	0.35
Traffic	5.02	2.05	4.30
Sulfur Melter	0.01	0.03	0.03
Wind Erosion	6.86	0.15	0.30
Total			8.28

The hydrogen sulfide emissions at the sulfur facility will amount to about 7.5 tons per year.

Note:

(1) Suspended particles are less than 30 micrometers in diameter.
(2) Total particles include particles up to 300 micrometers in diameter.
(3) Maximum emissions at wind speed of 18 mph.
(4) Annual average using average parameters.

SPECIFIC CONDITIONS:

3. Visible emissions shall not exceed 10% opacity from any source in the sulfur facility, as determined by DER Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources.

4. The permittee shall maintain a record of the Hydrogen Sulfide/Hydrogen Polysulfide content of the sulfur received at the Swift Creek Chemical Complex.

5. All applicable emission limiting precautions and procedures specified in this permit application and in Rule 17-2.600(11), FAC, shall be followed at all times.

6. Initial compliance tests shall be conducted using:

a) DER Method 5, Determination of Particulate Emissions from Stationary Sources, for emissions from the melter.

b) DER Method 9, for all sources in the sulfur facility.

7. Annual compliance tests shall be conducted for all the sources in the sulfur facility using DER Method 9, unless other tests are also deemed necessary based on the results obtained in the initial compliance tests.

8. Compliance tests shall be conducted at 90-100% of the permitted equipment capacity.

9. A 15 day notice shall be given to DER's Northeast District office of the compliance testing dates.

10. The permittee shall submit a Sulfur Deposition and an Ambient Air Monitoring Plan to the Central Air Permitting (CAPS) office for approval, within 90 days of issuance of this permit. These monitoring plans shall be implemented for a minimum of 2 years from the date of issuance of the initial operating permit. Monitoring may be required beyond the initial 2 years should the department deem it necessary at the end of the initial monitoring period.

11. The following shall be submitted for approval to DER's District office within 45 days of completion of compliance tests, and a minimum of 90 days before the expiration date of this permit (copy to CAPS):

a) Compliance test results of DER Method 5 and DER Method 9.

b) Initial sulfur deposition monitoring report conducted according to Rule 17-2.753(2), FAC (DER Reference Method for Monitoring the Deposition of Sulfur Particulate).

12. The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Department must be notified in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit. (Rule 17-4.09, FAC)

13. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and Certificate of Completion, to the Department's District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate. (Rules 17-4.22 and 17-4.23, FAC)

14. If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application. (Rule 17-4.10, FAC)

15. Upon obtaining an operating permit the permittee will be required to submit annual reports, unless otherwise requested by DER, on the actual operation and emissions of the sources to the DER's District office.

16. Any change in the method of operation, equipment, or operating hours shall be submitted for approval to the Department's District office.

17. This permit shall replace any previous permit issued to the permittee for the construction of the sulfur vatting and reclaiming facility.

PERMITTEE:
Occidental Chemical Company

Permit Number: AC 24-61435
Expiration Date: January 1, 1989

SPECIFIC CONDITIONS:

Issued this_____day of_____, 19___

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

VICTORIA J. TSCHINKEL, Secretary

____ pages attached.

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

CENTRAL AIR PERMITTING

ACTION NO.

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)	INITIAL / DATE
ADAMS AMODIO FANCY GEORGE	
2. HANKS HERON HOLLADAY KING	INITIAL / DATE
3. MITCHELL, Becky MITCHELL, Bruce	INITIAL / DATE
4. PALAGYI POWELL ROGERS SVEC THOMAS	INITIAL / DATE

INFORMATION
- REVIEW & RETURN
- REVIEW & FILE
- INITIAL & FORWARD

DISPOSITION
- REVIEW & RESPOND
- PREPARE RESPONSE
- FOR MY SIGNATURE
- FOR YOUR SIGNATURE
- LET'S DISCUSS
- SET UP MEETING
- INVESTIGATE & REPT
- INITIAL & FORWARD
- DISTRIBUTE
- CONCURRENCE
- FOR PROCESSING
- INITIAL & RETURN

REMARKS:

10/23/85

Left message that site inspection ~~will~~ at Occidental by Tom Rogers and Pradeep Kavel will be on 10/29/85 at 1PM. Asked him to confirm this is ok. Brian has not confirmed as of 10/24/85

FROM:

DATE 10-23-85

To Bill Thomas

Date 23 Time 12:03

WHILE YOU WERE OUT

M Boone Kuersteiner

of

Phone 224 - 7097

Area Code Number Extension

X	TELEPHONED	X	PLEASE CALL
	CALLED TO SEE YOU		WILL CALL AGAIN
	WANTS TO SEE YOU		URGENT
			RETURNED YOUR CALL

Message Whats site inspection of Occidental 29 on 30 Oct.

1 PM

Operator

Akerman, Senterfitt & Eidson
Attorneys and Counsellors at Law
(A PARTNERSHIP INCLUDING PROFESSIONAL ASSOCIATIONS)

SUITE SIO LEWIS STATE BANK BUILDING
POST OFFICE BOX 1794
TALLAHASSEE, FLORIDA 32302
(904) 224-7091

SEVENTEENTH FLOOR, CNA BUILDING
POST OFFICE BOX 231
ORLANDO, FLORIDA 32802
(305) 843-7860

SUITE 405 THE BRICKELL CONCOURS
1401 BRICKELL AVENUE
MIAMI, FLORIDA 33131
(305) 372-1364

CABLE ADDRESS-AKER SENT
TELEX 56-4335
TELECOPY (305) 843-6610

HAND DELIVERY

November 7, 1985 REPLY TO: Tallahassee

C.H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
Department of Environmental
Regulation
2600 Blairstone Road
Tallahassee, Florida 32301

Re: Review of Application to Modify AC 24-61435,
Sulfur Vatting and Reclaiming Project

Dear Mr. Fancy:

In response to the request from your office dated August 20, 1985, and on behalf of our client, Occidental Chemical Agricultural Products, Inc., we are submitting the enclosed booklet entitled "Occidental Chemical Agricultural Products, Inc. Reply to Request for Additional Information by Florida Department of Environmental Regulation Dated August 20, 1985 Application to Modify Permit No. AC24-61435," for consideration by the Florida Department of Environmental Regulation.

We trust this information will be sufficient for your consideration of the above-referenced application. If you have any questions or are in need of additional material, please contact our office. Thank you for your attention to this matter.

Sincerely,

AKERMAN, SENTERFITT & EIDSON

Ralph A. DeMeo

J.D. Boone Kuersteiner
Ralph A. DeMeo

RAD:cad
Enclosures

cc: Edward T. Huck
Environmental Engineer
Bureau of Air Quality Management
Florida Department of Environmental
Regulation

D.T. Sawyer
Assistant General Counsel
Occidental Chemical Agricultural
Products, Inc.

Russell A. Bowman, Director
Regulatory Affairs
Occidental Chemical Agricultural
Products, Inc.

Laszlo Takacs, Ph.D.
Manager, Air Quality
Environment, Health & Safety
Occidental Chemical Agricultural
Products, Inc.

W.W. Atwood, Manager
Environmental Control
Occidental Chemical Agricultural
Products, Inc.

Carl J. Axelson, Jr., Manager
Supply & Distribution
Occidental Chemical Agricultural
Products, Inc.

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

Chatten Cowherd, Jr., Ph.D.
Midwest Research Institute

PS Form 3811, July 1983

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:

Mr. W. W. Atwood
Occidental Chemical Company
Post Office Box 300
White Springs, FL 32096

4. Type of Service:	Article Number
☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail	P 408 533 616

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee

X

6. Signature – Agent

X Clarence Rogers

7. Date of Delivery

10-7-85

8. Addressee's Address *(ONLY if requested and fee paid)*

DOMESTIC RETURN RECEIPT

P 408 533 616

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED–
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to	Mr. W. W. Atwood
Street and No.	
P.O., State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return Receipt Showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date	10/1/85

PS Form 3800, Feb. 1982

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

September 23, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. W. Atwood
Occidental Chemical Company
Post Office Box 300
White Springs, Florida 32096

Dear Mr. Atwood:

Re: Extension of Permit No. AC 24-61435, Sulfur Vatting and Melting Facility

The department has received and reviewed your letter dated May 13, 1985, for an extension of the expiration date of the above referenced permit.

The department is in agreement with your request for an extension and the following changes and additions should be incorporated in the permit.

Expiration Date Change:

From: August 31, 1985
To: August 31, 1986

Specific Condition No. 16 Change:

From: Should the department adopt any new rule that establishes a performance standard for the storage and handling of elemental sulfur that would be applicable to the source authorized for construction by this permit, the permittee shall comply with such new performance standard within the time period established in the rule, or, if no time period is so specified, on a reasonable time schedule developed between the permittee and the department.

To: The applicant shall comply with Chapters 17-2 and 17-4, Florida Administrative Code.

Attachment to be Added:

No. 10. Letter from Occidental to Department of Environmental Regulation dated May 13, 1985.

This letter must be attached to your construction permit and shall be made a part of the permit.

Sincerely,

Victoria J. Tschinkel
Secretary

VJT/ks

cc: J. Koogler
J. Brown

OCCIDENTAL CHEMICAL COMPANY, FLORIDA OPERATIONS, Post Office Box 300, White Springs, Florida 32096, Telephone 904 397-8101

May 13, 1985

Mr. John Brown, P.E.
Florida Department of
Environmental Regulation
3426 Bills Road
Jacksonville, Florida 32207

Reference: AC24-61435
Sulfur Vat

Dear Mr. Brown:

This will respond to your letter of April 15, 1985 concerning referenced construction permit.

It is requested that this construction permit be extended to August 31, 1986 to allow for modifications required or allowed under the new Sulfur Rule.

We intend to submit such a modification request in June.

Sincerely,

OCCIDENTAL CHEMICAL
AGRICULTURAL PRODUCTS, INC.

for W.W. Atwood

WWA:net

cc: W. Thomas
✓E. Huck
J. Koogler

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

RECEIVED
SEP 24 1985
Office of the Secretary
DER
BAQM

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ Loctn: _____
To: _____ Loctn: _____
To: _____
From: _____ Date: _____

TO: Victoria J. Tschinkel

FROM: Clair Fancy

DATE: September 23, 1985

SUBJ: Request to Modify Permit No AC 24-61435
Occidental Chemical Company

Attached for your signature is a letter extending the expiration date of Permit No. AC 24-61435 to Occidental Chemical Company for their sulfur vatting and melting facility in Hamilton County, Florida. The Bureau of Air Quality Management recommends that the modification be approved.

CHF/pa

Attachment

PS Form 3811, July 1983

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.

1. ☐ Show to whom, date and address of delivery.
2. ☐ Restricted Delivery.

3. Article Addressed to:

Mr. M. P. McArthur
Occidental Chemical
P. O. Box 300
White Springs, FL 32096

4. Type of Service:	Article Number
☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail	P 085 152 637

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee

X

6. Signature – Agent

X Clarence Rogers

7. Date of Delivery

8-23-85

8. Addressee's Address *(ONLY if requested and fee paid)*

DOMESTIC RETURN RECEIPT

P 085 152 637

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Mr. M. P. McArthur	
Street and No.	
P.O., State and ZIP Code	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	$
Postmark or Date	8/21/85

★ U.S.G.P.O. 1984-446-014

PS Form 3800, Feb. 1982

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

August 20, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. M. P. McArthur
Vice President
Occidental Chemical Agricultural
Products, Inc.
P. O. Box 300
White Springs, Florida 32096

Dear Mr. McArthur:

Re: Review of Application to Modify AC 24-61435,
Sulfur Vatting and Reclaiming Project

The bureau has received the application package dated July 19, 1985. Before the status of the application can be determined, you must submit to the bureau the following data including all calculations, assumptions and reference material:

1. Railcars:

   (a) Is the railcar unloading operation conducted in an open area or in an enclosed area? If enclosed, are there any vents, or pollution control devices?

   (b) Submit a sketch of a railcar showing the max level of sulfur within it, dimensions of the car, vents and inspection holes.

   (c) Explain in detail the railcar unloading procedure.

2. Submit the following drawings:

   (a) Accurate process flow sheet, indicating sources and type(s) of pollutant(s) emitted.

   (b) Details of the static melter, wind walls, hopper, vent, and air pollution device.

3. Submit a comparative list of emission estimates for each source of H_2S and particulate for the sulfur facility, as permitted (with in-situ melter) versus as proposed (with static melter, and different material handling rates).

4. Submit literature/test results/research data to substantiate the quantity of H_2S contained in the type of sulfur you propose to utilize.

5. Do you propose any methods of control for H_2S from any source in the sulfur facility? If you do, please describe the method and control efficiency.

6. Submit information about the reclaimed sulfur storage pile including maximum dimensions, possible location(s), period of time exposed to wind erosion and emission calculations. If a method of control of particulate is to be adopted, please describe and substantiate control efficiencies utilized.

7. What control method for fugitives is to be adopted prior to availability of vat walls i.e., prior to completion of a vat? Please calculate the emissions for sources for which emission estimates change due to absence of vat walls.

8. Provide details of the water spray system, including flow sheet and material balances, types and number of nozzles to be utilized at different source locations etc. What surfactant will be used and in what ratio to water?

9. Please explain why wind data of two different cities was used for modeling and emission estimates.

10. In the modeling analysis, it is assumed that vatting and reclamation would not occur on the same day. If this is true and in fact 300,000 tons of sulfur is cycled through the vats in a year, then it would take a minimum of 200 days to vat this much sulfur at the requested rate of 1500 tons per day, and 179 days to reclaim this much sulfur at the requested rate of 1680 tons per day. It would thus require 379 days in a year to accomplish this. Either 300,000 tons per year is an over-estimate of the sulfur throughput of the vats or both vatting and reclamation will be occuring in the same day. Please clarify this apparent discrepancy and submit any further modeling that may be necessary.

11. In the modeling analysis for the railcar unloading (the results of which were not included) this source was assumed to be an area type source. How do the railcars act as an area source? Where on the railcars are the emissions actually released from? What were the maximum concentrations predicted to occur from the railcar unloading and the sulfur vatting?

12. As a related question to the railcar unloading, how is the 5 ft^2 vent size of the railcars related to the 5,675 ft^2 top surface area of a molten sulfur tank? Wouldn't the top surface area of the molten sulfur within the railcar be the proper comparative? Please explain.

13. Also, 300,000 tons of molten sulfur is being railcarred in to be vatted each year (375,000 tons for each of the first two years). This is only enough sulfur to run the sulfuric acid plants approximately half the year at full capacity. Assuming the sulfuric acid plants will run more than half a year, what is the total amount of sulfur unloaded? Or, how much sulfur that is unloaded goes directly to the sulfuric acid plants? These emissions should be included in any modeling along with all other particulate emissions existing at the facility.

14. In the modeling analysis, the particulate emissions associated with traffic (i.e., the front end loaders) have a release height of 12 feet. Not all of this traffic will remain within the confines of the vat walls. In addition, the vat walls themselves will not be at their full height for some period of time. A correction should be made to account for those conditions.

15. In the modeling analysis, wind erosion is assumed to occur only three hours per day, always for hours 1:00 p.m., 2:00 p.m., and 3:00 p.m. For any particular 24 hour period, the wind may remain above the wind erosion threshold of 12 mph for more than three or four hours. We suggest that one way to deal with wind erosion is to screen the meteorological data for days in which the wind speed is always less than 12 mph and run the model with no wind erosion. Then run the model again for the rest of the days in which at least one hour has a wind speed greater than 12 mph. During this run assume wind erosion occurs every hour of the day. If the maximum concentration from the second run is less than that of the first run then the results of the first run would provide the proper modeling results. If the maximum concentration from the second run is higher than the first run,

then rerun the maximum day allowing for wind erosion on the actual hours having a wind speed greater than 12 mph. Continue this process until the concentration drops below the first run (i.e., the less than 12 mph run) or until the highest, second-highest value is greater than the first run.

16. In the modeling analysis, the predicted concentrations used to compare with the ambient standard were selected from the receptors located at the nearest plant property line. In general, the maximum concentrations will not necessarily occur at the nearest receptor on a plant property line, depending on meteorological conditions. Please provide a map of the facility showing the plant property lines and indicate what physical barriers preclude the general public from entering on the this property (show dimensions). It should be noted that the short-term PSD increment is nearly exceeded at 500 meters.

17. The most recent data, 1984, from the particulate monitoring site 1660-015 indicates a high, second-high 24-hour average concentration of 107 ug/m^3 and an annual geometric mean of 38 ug/m^3. The background values used in the modeling analysis were 90 ug/m^3, 24-hour average, and 33 ug/m^3 annual average. Since no other existing sources were included in the modeling, these background values were presumably accounting for those sources. This cannot be done because the monitor is probably not measuring the maximum impact from the existing sources. All existing and proposed sources should be included in the modeling. The most recent year of monitoring data should then be used as background to be added to the modeled results. If need be, the monitoring data may be screened to delete data which includes the impact of the facility.

If there are any questions please call Pradeep Raval or Tom Rogers at (904)488-1344 or write to me at the above address.

Sincerely,

for C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/PR/s

cc: John Koogler
John Brown

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

August 20, 1985

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. M. P. McArthur
Vice President
Occidental Chemical Agricultural
Products, Inc.
P. O. Box 300
White Springs, Florida 32096

Dear Mr. McArthur:

Re: Review of Application to Modify AC 24-61435,
Sulfur Vatting and Reclaiming Project

The bureau has received the application package dated July 19, 1985. Before the status of the application can be determined, you must submit to the bureau the following data including all calculations, assumptions and reference material:

1. Railcars:

   (a) Is the railcar unloading operation conducted in an open area or in an enclosed area? If enclosed, are there any vents, or pollution control devices?

   (b) Submit a sketch of a railcar showing the max level of sulfur within it, dimensions of the car, vents and inspection holes.

   (c) Explain in detail the railcar unloading procedure.

2. Submit the following drawings:

   (a) Accurate process flow sheet, indicating sources and type(s) of pollutant(s) emitted.

   (b) Details of the static melter, wind walls, hopper, vent, and air pollution device.

3. Submit a comparative list of emission estimates for each source of H_2S and particulate for the sulfur facility, as permitted (with in-situ melter) versus as proposed (with static melter, and different material handling rates).

4. Submit literature/test results/research data to substantiate the quantity of H_2S contained in the type of sulfur you propose to utilize.

5. Do you propose any methods of control for H_2S from any source in the sulfur facility? If you do, please describe the method and control efficiency.

6. Submit information about the reclaimed sulfur storage pile including maximum dimensions, possible location(s), period of time exposed to wind erosion and emission calculations. If a method of control of particulate is to be adopted, please describe and substantiate control efficiencies utilized.

7. What control method for fugitives is to be adopted prior to availability of vat walls i.e., prior to completion of a vat? Please calculate the emissions for sources for which emission estimates change due to absence of vat walls.

8. Provide details of the water spray system, including flow sheet and material balances, types and number of nozzles to be utilized at different source locations etc. What surfactant will be used and in what ratio to water?

9. Please explain why wind data of two different cities was used for modeling and emission estimates.

10. In the modeling analysis, it is assumed that vatting and reclamation would not occur on the same day. If this is true and in fact 300,000 tons of sulfur is cycled through the vats in a year, then it would take a minimum of 200 days to vat this much sulfur at the requested rate of 1500 tons per day, and 179 days to reclaim this much sulfur at the requested rate of 1680 tons per day. It would thus require 379 days in a year to accomplish this. Either 300,000 tons per year is an over-estimate of the sulfur throughput of the vats or both vatting and reclamation will be occuring in the same day. Please clarify this apparent discrepancy and submit any further modeling that may be necessary.

11. In the modeling analysis for the railcar unloading (the results of which were not included) this source was assumed to be an area type source. How do the railcars act as an area source? Where on the railcars are the emissions actually released from? What were the maximum concentrations predicted to occur from the railcar unloading and the sulfur vatting?

12. As a related question to the railcar unloading, how is the 5 ft^2 vent size of the railcars related to the 5,675 ft^2 top surface area of a molten sulfur tank? Wouldn't the top surface area of the molten sulfur within the railcar be the proper comparative? Please explain.

13. Also, 300,000 tons of molten sulfur is being railcarred in to be vatted each year (375,000 tons for each of the first two years). This is only enough sulfur to run the sulfuric acid plants approximately half the year at full capacity. Assuming the sulfuric acid plants will run more than half a year, what is the total amount of sulfur unloaded? Or, how much sulfur that is unloaded goes directly to the sulfuric acid plants? These emissions should be included in any modeling along with all other particulate emissions existing at the facility.

14. In the modeling analysis, the particulate emissions associated with traffic (i.e., the front end loaders) have a release height of 12 feet. Not all of this traffic will remain within the confines of the vat walls. In addition, the vat walls themselves will not be at their full height for some period of time. A correction should be made to account for those conditions.

15. In the modeling analysis, wind erosion is assumed to occur only three hours per day, always for hours 1:00 p.m., 2:00 p.m., and 3:00 p.m. For any particular 24 hour period, the wind may remain above the wind erosion threshold of 12 mph for more than three or four hours. We suggest that one way to deal with wind erosion is to screen the meteorological data for days in which the wind speed is always less than 12 mph and run the model with no wind erosion. Then run the model again for the rest of the days in which at least one hour has a wind speed greater than 12 mph. During this run assume wind erosion occurs every hour of the day. If the maximum concentration from the second run is less than that of the first run then the results of the first run would provide the proper modeling results. If the maximum concentration from the second run is higher than the first run,

then rerun the maximum day allowing for wind erosion on the actual hours having a wind speed greater than 12 mph. Continue this process until the concentration drops below the first run (i.e., the less than 12 mph run) or until the highest, second-highest value is greater than the first run.

16. In the modeling analysis, the predicted concentrations used to compare with the ambient standard were selected from the receptors located at the nearest plant property line. In general, the maximum concentrations will not necessarily occur at the nearest receptor on a plant property line, depending on meteorological conditions. Please provide a map of the facility showing the plant property lines and indicate what physical barriers preclude the general public from entering on the this property (show dimensions). It should be noted that the short-term PSD increment is nearly exceeded at 500 meters.

17. The most recent data, 1984, from the particulate monitoring site 1660-015 indicates a high, second-high 24-hour average concentration of 107 ug/m^3 and an annual geometric mean of 38 ug/m^3. The background values used in the modeling analysis were 90 ug/m^3, 24-hour average, and 33 ug/m^3 annual average. Since no other existing sources were included in the modeling, these background values were presumably accounting for those sources. This cannot be done because the monitor is probably not measuring the maximum impact from the existing sources. All existing and proposed sources should be included in the modeling. The most recent year of monitoring data should then be used as background to be added to the modeled results. If need be, the monitoring data may be screened to delete data which includes the impact of the facility.

If there are any questions please call Pradeep Raval or Tom Rogers at (904)488-1344 or write to me at the above address.

Sincerely,

for C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/PR/s

cc: John Koogler
John Brown

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301-8241

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

August 16, 1985

Mr. Chatten Cowherd
Midwest Research Institute
425 Volker Boulevard
Kansas City, Missouri 64110

Dear Mr. Cowherd:

Enclosed is a copy of volume 2 of the report submitted by Occidental, to modify their existing sulfur handling permit.

Of major interest to me are the methods of estimating emissions from the sulfur facility.

Your continued support and assistance to the Department of Environmental Regulations is truly appreciated.

Looking forward to talking to you.

Sincerely,

Pradeep Raval
Engineer
Bureau of Air Quality
Management

PR/ks

TO: BILL THOMAS
FROM: GARY EARLY
RE: OCCIDENTAL DRAFT PERMIT
DATE: JULY 26, 1985

THE DEPARTMENT HAS RECENTLY BEEN REQUESTED TO PROVIDE A COPY OF THE OXY DRAFT PERMIT. THE REQUEST WAS MADE DURING NORMAL BUSINESS HOURS AT THE BAQM OFFICE. THE DRAFT HAS BEEN LOCATED.

PURSUANT TO THE TERMS OF CHAPTER 119.07 F.S., WE MUST TURN OVER A COPY OF THE DRAFT. I UNDERSTAND THAT YOU, AS PERMITTING SUPERVISOR FOR THE PERMIT, HAVE NOT HAD THE OPPORTUNITY TO REVIEW THE PERMIT PRIOR TO THE REQUEST. HOWEVER, AS LONG AS THE REQUEST IS MADE AT A REASONABLE TIME AND PLACE, WE CANNOT REFUSE THE REQUEST. THEREFORE, I REQUEST THAT A COPY OF THE PERMIT BE MADE FOR ME AND I WILL FORWARD IT TO GARY STEPHENS.

rec'd Gary Stephens

Patty, file 7-26 FYI
We had to part with a copy of the draft PD for Agrico. It was stamped DRAFT all over.
PR.

SHOLTES & KOOGLER, ENVIRONMENTAL CONSULTANTS
1213 N.W. 6th Street Gainesville, Florida 32601 (904) 377-5822

SKEC 102-82-03

July 25, 1985

DER

JUL 26 1985

BAQM

Mr. Pradeep Raval
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Dear Mr. Raval:

In accordance with your telephone request of July 24, 1985, we are enclosing two copies each of "An Engineering Report in Support of an Application to Modify Air Pollution Source Construction Permit AC24-61435 for a Vatted Sulfur Storage and Handling System", Volumes 1 and 2. This report is submitted by Sholtes & Koogler on behalf of Occidental Chemical Agricultural Products, Inc., White Springs, Florida.

By copy of this letter we are also forwarding one copy of Volume 1 of the report (without the computer print-outs) to Mr. John Brown in the Jacksonville sub-district office.

If you have any questions or require any further information regarding this report, please do not hesitate to contact me.

Very truly yours,

SHOLTES & KOOGLER,
ENVIRONMENTAL CONSULTANTS

John B. Koogler

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

JBK:ssc
Enclosures

cc: Mr. John Brown

SHOLTES & KOOGLER, ENVIRONMENTAL CONSULTANTS
1213 N.W. 6th Street Gainesville, Florida 32601 (904) 377-5822

SKEC 102-82-03

July 19, 1985

Mr. Edward T. Huck
Environmental Engineer
Florida Department of
Environmental Regulation
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Subject: Occidental Chemical Agricultural Products, Inc.
Hamilton County - AP
Modification to Permit No. AC24-61435

Dear Ed:

Enclosed are four (4) copies of a Construction Permit Application to modify Construction Permit No. AC24-61435 issued to the Occidental Chemical Agricultural Products, Inc. (Occidental) for the construction of a vatted sulfur storage facility at Occidental's Swift Creek Chemical Complex (SCCC) in Hamilton County, Florida. Also enclosed are two (2) copies of the report entitled, An Engineering Report in Support of an Application to Modify Air Pollution Source Construction Permit AC24-61435 for a Vatted Sulfur Storage and Handling System, dated July 12, 1985 and one (1) copy of Appendices A, B, C and D for the above referenced report. Appendices A, B, C and D contain calculations of suspended and total particle emission rates for the modified sulfur storage facility and listings of the computer runs which are part of the Air Quality Review addressed in the referenced report.

As we have discussed with you, the attached permit application package addresses a modification to Occidental's vatted sulfur storage facility to allow the mechanical reclamation of sulfur from the vat as authorized in Section 17-2.600(11)(c), Florida Administrative Code. Additionally, the modification proposes to increase the maximum daily sulfur reclamation rate from 960 tons per day to 1680 tons per day. The modification does not change the sulfur vatting procedures defined

In Permit No. AC24-61435 nor does it modify the maximum allowable storage capacity or the annual sulfur throughput of the sulfur storage facility.

If, after reviewing the attached application package, you find that additional information is necessary to complete the review of the application, please do not hesitate to contact me.

Very truly yours,

SHOLTES & KOOGLER,
ENVIRONMENTAL CONSULTANTS

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

JBK:ssc
Enclosures

cc: Mr. Steve Smallwood
Mr. Russ Bowman (w/enc)
Mr. Carl Axelson (w/enc)
Mr. D. T. Sawyer (w/enc)
Mr. W. W. Atwood (w/enc)
Dr. Lazlo Takas (w/enc)
Mr. J.D.B. Kuersteiner (w/enc)
Dr. Chatten Cowherd (w/enc)

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT
BRANCH OFFICE

825 NORTHWEST 23rd AVENUE
SUITE G
GAINESVILLE, FLORIDA 32601

DER
JUL 22 1985
BAQM

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

APPLICATION TO ~~OPERATE~~/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Vatted Sulfur Storage Area [X] New[1] [ ] Existing[1]

APPLICATION TYPE: [ ] Construction [ ] Operation [X] Modification

COMPANY NAME: Occidental Chemical Agricultural Products, Inc. COUNTY: Hamilton

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Vatted sulfur storage at SCCC with mechanical reclamation.

SOURCE LOCATION: Street US 41 City White Springs

UTM: East (17) 231.30 km North 3369.83 km

Latitude ____° ____' ____"N Longitude ____° ____' ____"W

APPLICANT NAME AND TITLE: M. P. McArthur, Vice President and General Manager

APPLICANT ADDRESS: Post Office Box 300, White Springs, Florida 32096

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Occidental Chemical Agricultural Products, Inc.

I certify that the statements made in this application for a modified construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: _____

M. P. McArthur, Vice President & Gen. Manager
Name and Title (Please Type)

Date: _____ Telephone No. (904) 397-8101

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed _____

John B. Koogler, Ph.D., P.E.
Name (Please Type)

Sholtes & Koogler, Environmental Consultants
Company Name (Please Type)

1213 NW 6th Street, Gainesville, Florida 32601
Mailing Address (Please Type)

JOHN B. KOOGLER CERTIFICATE NO. 12925 STATE OF FLORIDA REGISTERED ENGINEER

Florida Registration No. 12925 Date: _____ Telephone No. (904)377-5822

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Modification to Construction Permit AC24-61435, to allow the mechanical reclamation of two sulfur vats, to modify the sulfur reclamation rate of sulfur, and to modify certain Specific Permit Conditions to be consistent with the recently adopted Sulfur Storage and Handling Rule. A complete description of the modifications is given in the Attached Engineering Report.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction August 1985 Completion of Construction August 1986

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

The majority of the fugitive particulate matter emission control will be the result of work practices which are difficult to define in terms of cost. The water spray system for the storage area is estimated to cost $10,000.00.

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

AC24-61435 issued 9/16/83 and expiring 8/31/85. An extension through 8/31/86 was requested by Occidental on 5/13/85.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;

if power plant, hrs/yr_____; if seasonal, describe:_____

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE MINOR SOURCE

1. Is this source in a non-attainment area for a particular pollutant?

   a. If yes, has "offset" been applied?

   b. If yes, has "Lowest Achievable Emission Rate" been applied?

   c. If yes, list non-attainment pollutants.

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII.

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?

H. Do "Ressonably Available Control Technology" (RACT) requirements apply to this source?

   a. If yes, for what pollutants?

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Sulfur	Part. Matter	5-11	See Note	To Storage - B Reclaim - C
NOTE: Sulfur to be placed into vatted storage at the maximum rate of 270 tph, 1500 tpd and 300,000 tpy(1). Reclamation of sulfur to be at the maximum rate of 210 tph, 1680 tpd and 300,000 tpy.				

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 540,000 lb/hr to storage (max.)

2. Product Weight (lbs/hr): 420,000 lb/hr reclamation rate (max.)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Suspended Part. Matter(2)	41.4	7.6	17-2.600(11)(c)	41.4	55.4	13.4	A-H
Total Part. Matter(2)	N/A	14.5	17-2.600(11)(c)	N/A	N/A	25.5	A-H
H_2S(3)	3.4	7.5	NA	3.4	3.4	7.5	A

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

(1) During the first two years of operation the permitted vatting rate is 375,000 tpy.
(2) Total emissions from all activities. See attached Engineering Report for emissions from individual activities and for method of calculating.
(3) Maximum annual emission of 7.5 tpy from AC24-61435 permit file assumed to be released over railcar unloading time of 17.6 hr/day, 250 day/yr (see Engineering Report.)

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Water Sprays	Part. Matter	50%	0-300 um	Estimate
Vat Walls	Part. Matter	20%	0-300 um	Estimate
Hopper Enclosure	Part. Matter	57%	0-300 um	Estimate
Other work practices	Part. Matter	undefined	0-300 um	----

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
None			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: NA Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average NA Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

Rainfall runoff from the storage area will be contained and used for the dust control and fire control systems associated with the storage area. Excess runoff will be treated and controlled prior to being discharged through an existing NPDES discharge point.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: NOT APPLICABLE: ALL EMISSIONS ARE UNCONFINED ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per atandard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (epecify) _____

Brief description of operating characteristics of control devices: _____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

SEE ATTACHED ENGINEERING REPORT

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design preasure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are eyplved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE - AIR QUALITY REVIEW REQUIRED BY 17-2.540(2) IS IN ATTACHED ENGINEERING REPORT

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ ( ) SO_2* _____ Wind spd/dir

Period of Monitoring _____ / _____ / _____ to _____ / _____ / _____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

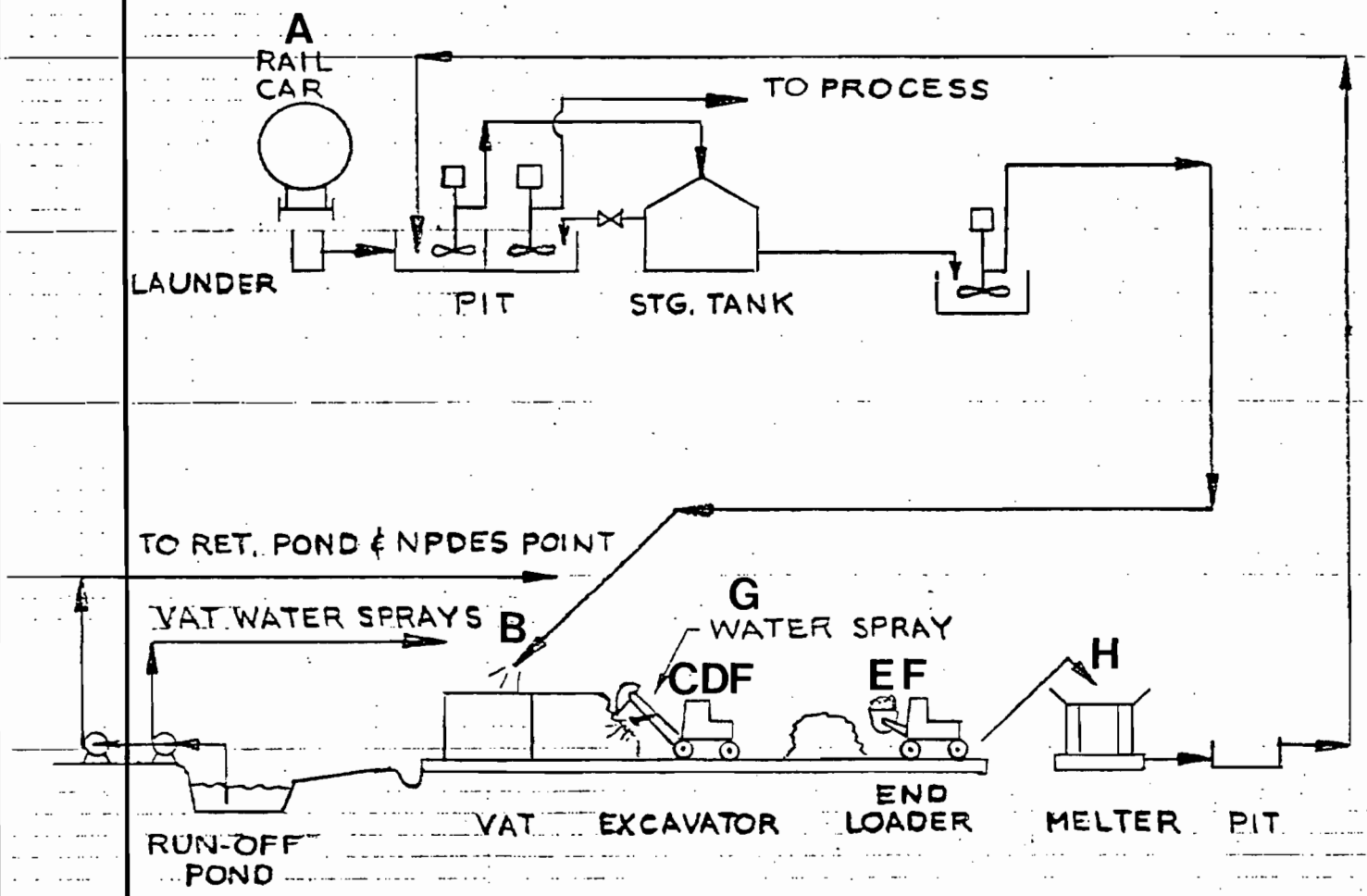
Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

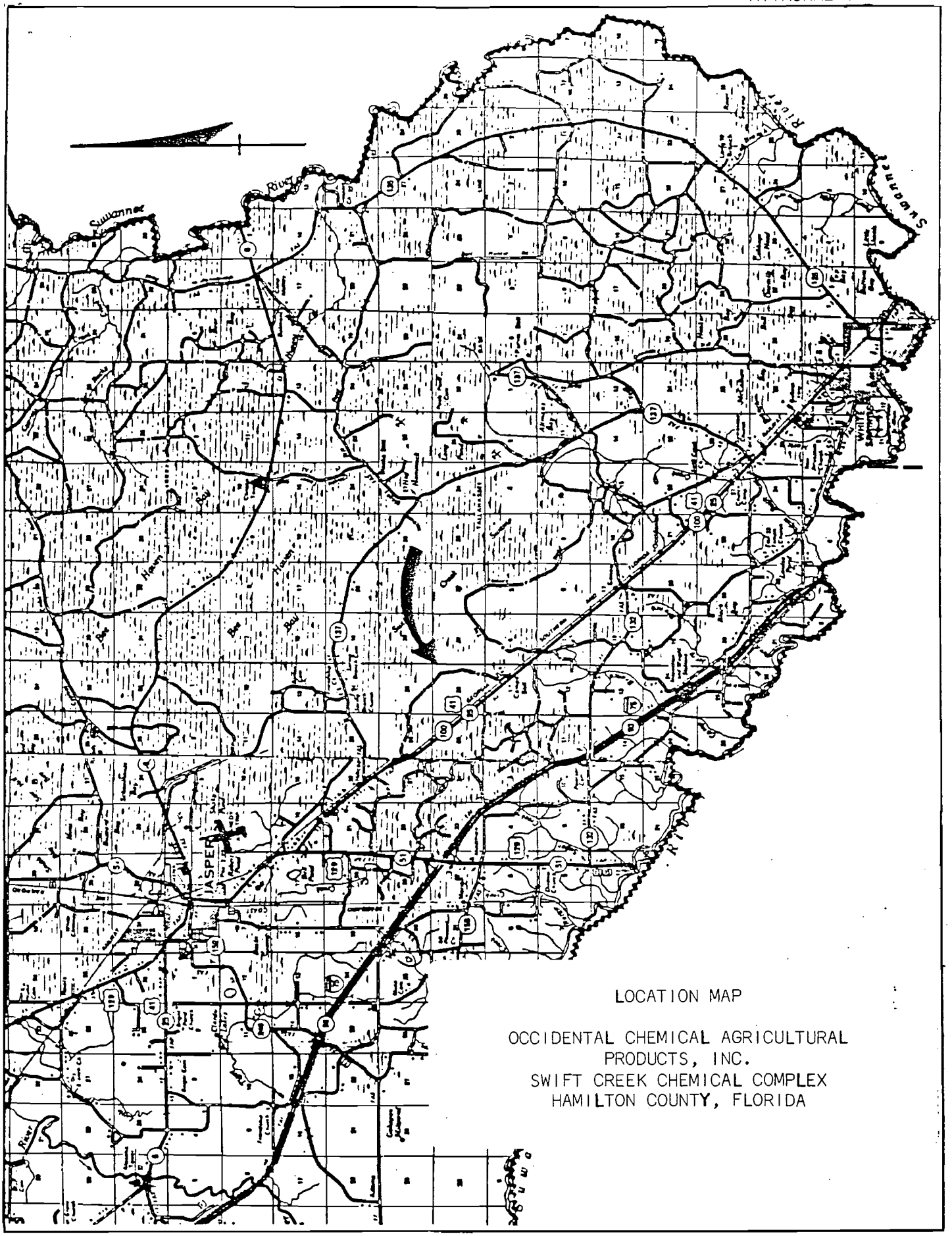
H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

ATTACHMENT 1



DRAWN BY FT STANFIELD	TITLE	OCCIDENTAL CHEMICAL CO.
DATE 9-21-82	VAT SULFUR HANDLING FLOW SHEET	
SCALE NONE		
REVISION		JOB NO OC 357 / REV NO 0
REVISION		CHARGE NO. / SKETCH NO.
REVISION		

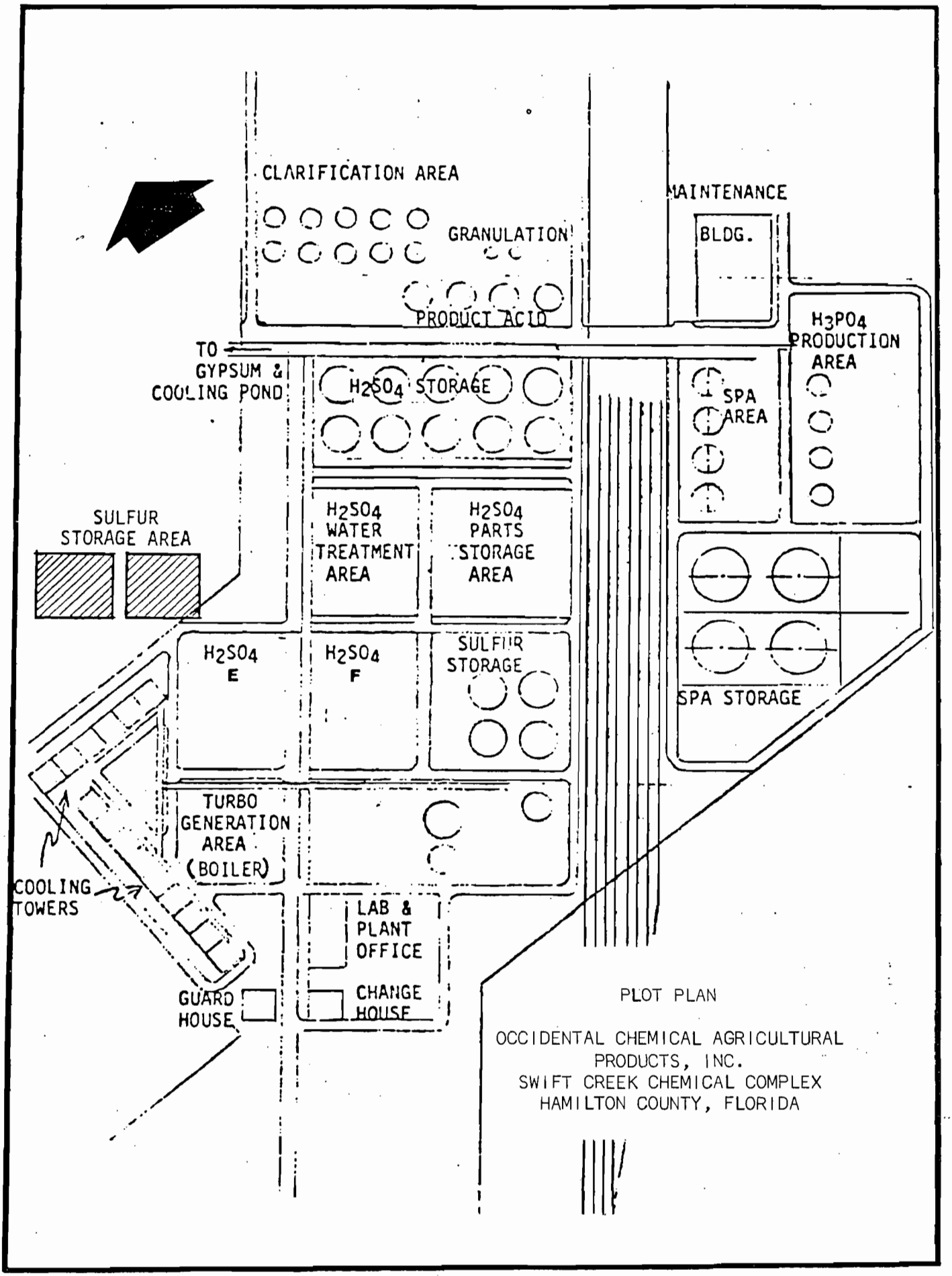
ATTACHMENT 2



LOCATION MAP

OCCIDENTAL CHEMICAL AGRICULTURAL
PRODUCTS, INC.
SWIFT CREEK CHEMICAL COMPLEX
HAMILTON COUNTY, FLORIDA

SHOLTES & KOOGLER



PLOT PLAN

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.
SWIFT CREEK CHEMICAL COMPLEX
HAMILTON COUNTY, FLORIDA

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT
BRANCH OFFICE
825 NORTHWEST 23rd AVENUE
SUITE G
GAINESVILLE, FLORIDA 32601

BOB GRAHAM
GOVERNOR
VICTORIA J TSCHINKEL
SECRETARY

APPLICATION TO ~~OPERATE~~/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Vatted Sulfur Storage Area [X] New[1] [ ] Existing[1]

APPLICATION TYPE: [ ] Construction [ ] Operation [X] Modification

COMPANY NAME: Occidental Chemical Agricultural Products, Inc. COUNTY: Hamilton

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Vatted sulfur storage at SCCC with mechanical reclamation.

SOURCE LOCATION: Street US 41 City White Springs

UTM: East (17) 231.30 km North 3369.83 km

Latitude ____° ____' ____"N Longitude ____° ____' ____"W

APPLICANT NAME AND TITLE: M. P. McArthur, Vice President and General Manager

APPLICANT ADDRESS: Post Office Box 300, White Springs, Florida 32096

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Occidental Chemical Agricultural Products, Inc.

I certify that the statements made in this application for a modified construction permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: M. P. McArthur

M. P. McArthur, Vice President & Gen. Manager
Name and Title (Please Type)

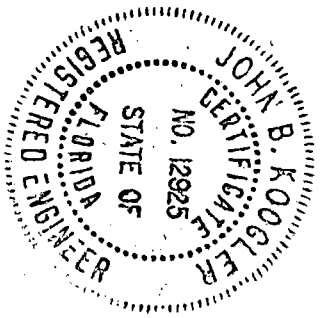
Date: _____ Telephone No. (904) 397-8101

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1] See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discharge an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.



Signed _____

John B. Koogler, Ph.D., P.E.
Name (Please Type)

Sholtes & Koogler, Environmental Consultants
Company Name (Please Type)

1213 NW 6th Street, Gainesville, Florida 32601
Mailing Address (Please Type)

Florida Registration No. 12925 Date: _____ Telephone No. (904)377-5822

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

Modification to Construction Permit AC24-61435, to allow the mechanical reclamation of two sulfur vats, to modify the sulfur reclamation rate of sulfur, and to modify certain Specific Permit Conditions to be consistent with the recently adopted Sulfur Storage and Handling Rule. A complete description of the modifications is given in the Attached Engineering Report.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction August 1985 Completion of Construction August 1986

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

The majority of the fugitive particulate matter emission control will be the result of work practices which are difficult to define in terms of cost. The water spray system for the storage area is estimated to cost $10,000.00.

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

AC24-61435 issued 9/16/83 and expiring 8/31/85. An extension through 8/31/86 was requested by Occidental on 5/13/85.

E. Requested permitted equipment operating time: hrs/day 24 ; days/wk 7 ; wks/yr 52 ;

if power plant, hrs/yr_____; if seasonal, describe:_____

F. If this is a new source or major modification, answer the following questions. (Yes or No)

NOT APPLICABLE MINOR SOURCE

1. Is this source in a non-attainment area for a particular pollutant?

   a. If yes, has "offset" been applied?

   b. If yes, has "Lowest Achievable Emission Rate" been applied?

   c. If yes, list non-attainment pollutants.

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII.

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source?

   a. If yes, for what pollutants?

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Sulfur	Part. Matter	5-11	See Note	To Storage - B Reclaim - C
NOTE: Sulfur to be placed into vatted storage at the maximum rate of 270 tph, 1500 tpd and 300,000 tpy(1). Reclamation of sulfur to be at the maximum rate of 210 tph, 1680 tpd and 300,000 tpy.				

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 540,000 lb/hr to storage (max.)

2. Product Weight (lbs/hr): 420,000 lb/hr reclamation rate (max.)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Suspended Part. Matter(2)	41.4	7.6	17-2.600(11)(c)	41.4	55.4	13.4	A-H
Total Part. Matter(2)	N/A	14.5	17-2.600(11)(c)	N/A	N/A	25.5	A-H
H_2S(3)	3.4	7.5	NA	3.4	3.4	7.5	A

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

(1) During the first two years of operation the permitted vatting rate is 375,000 tpy.
(2) Total emissions from all activities. See attached Engineering Report for emissions from individual activities and for method of calculating.
(3) Maximum annual emission of 7.5 tpy from AC24-61435 permit file assumed to be released over railcar unloading time of 17.6 hr/day, 250 day/yr (see Engineering Report.)

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Water Sprays	Part. Matter	50%	0-300 um	Estimate
Vat Walls	Part. Matter	20%	0-300 um	Estimate
Hopper Enclosure	Part. Matter	57%	0-300 um	Estimate
Other work practices	Part. Matter	undefined	0-300 um	----

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
None			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: NA Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average NA Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

Rainfall runoff from the storage area will be contained and used for the dust control and fire control systems associated with the storage area. Excess runoff will be treated and controlled prior to being discharged through an existing NPDES discharge point.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: NOT APPLICABLE: ALL EMISSIONS ARE UNCONFINED ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices: _____

_____

_____

_____

_____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

_____

_____

_____

_____

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

SEE ATTACHED ENGINEERING REPORT

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE - AIR QUALITY REVIEW REQUIRED BY 17-2.540(2) IS IN ATTACHED ENGINEERING REPORT

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ ( ) SO_2* _____ Wind spd/dir

Period of Monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

a. Was inctrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
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Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

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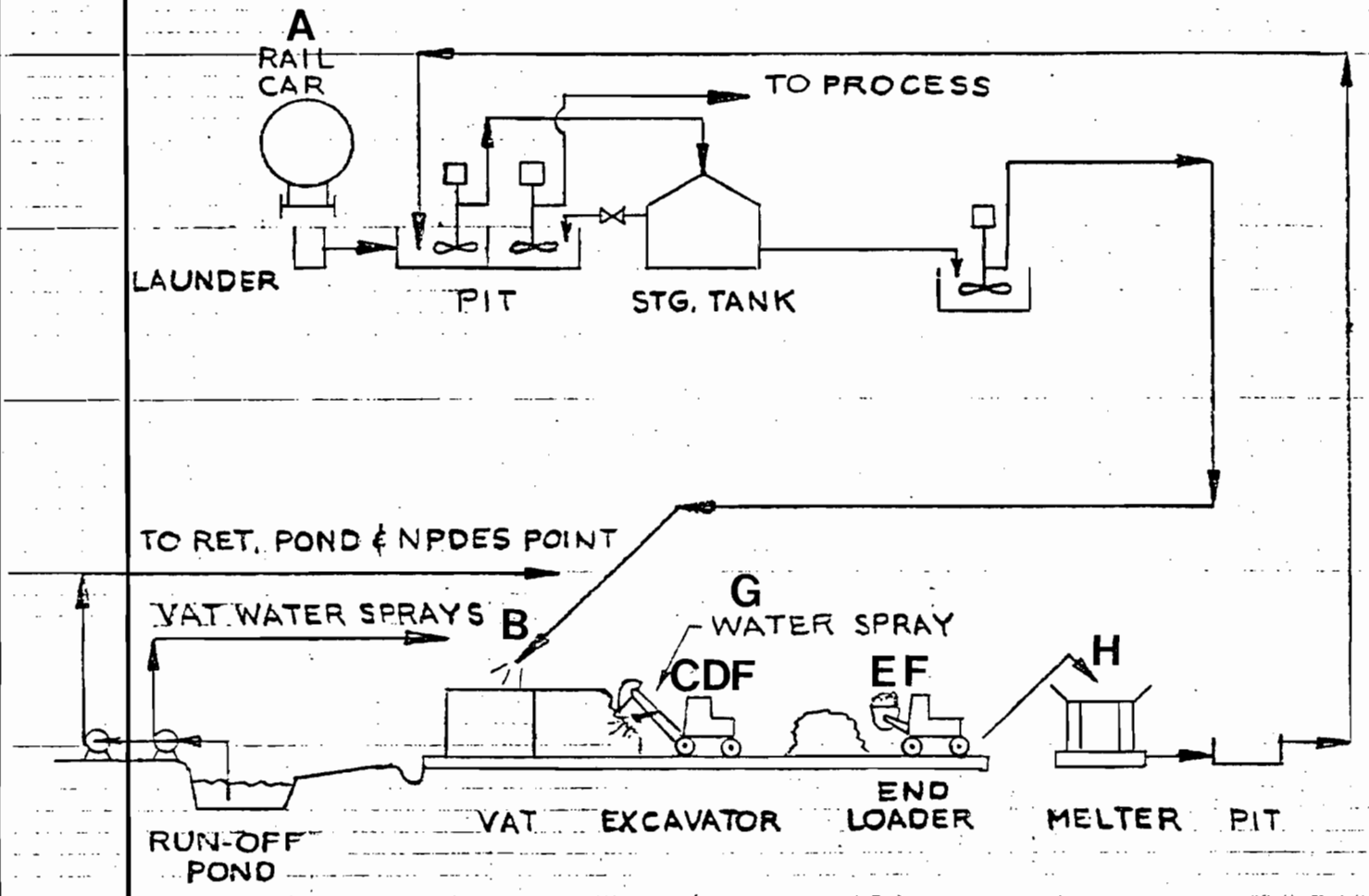

DRAWN BY FT STANFIELD	TITLE	OCCIDENTAL CHEMICAL CO.
DATE 9-21-82	VAT SULFUR HANDLING FLOW SHEET	
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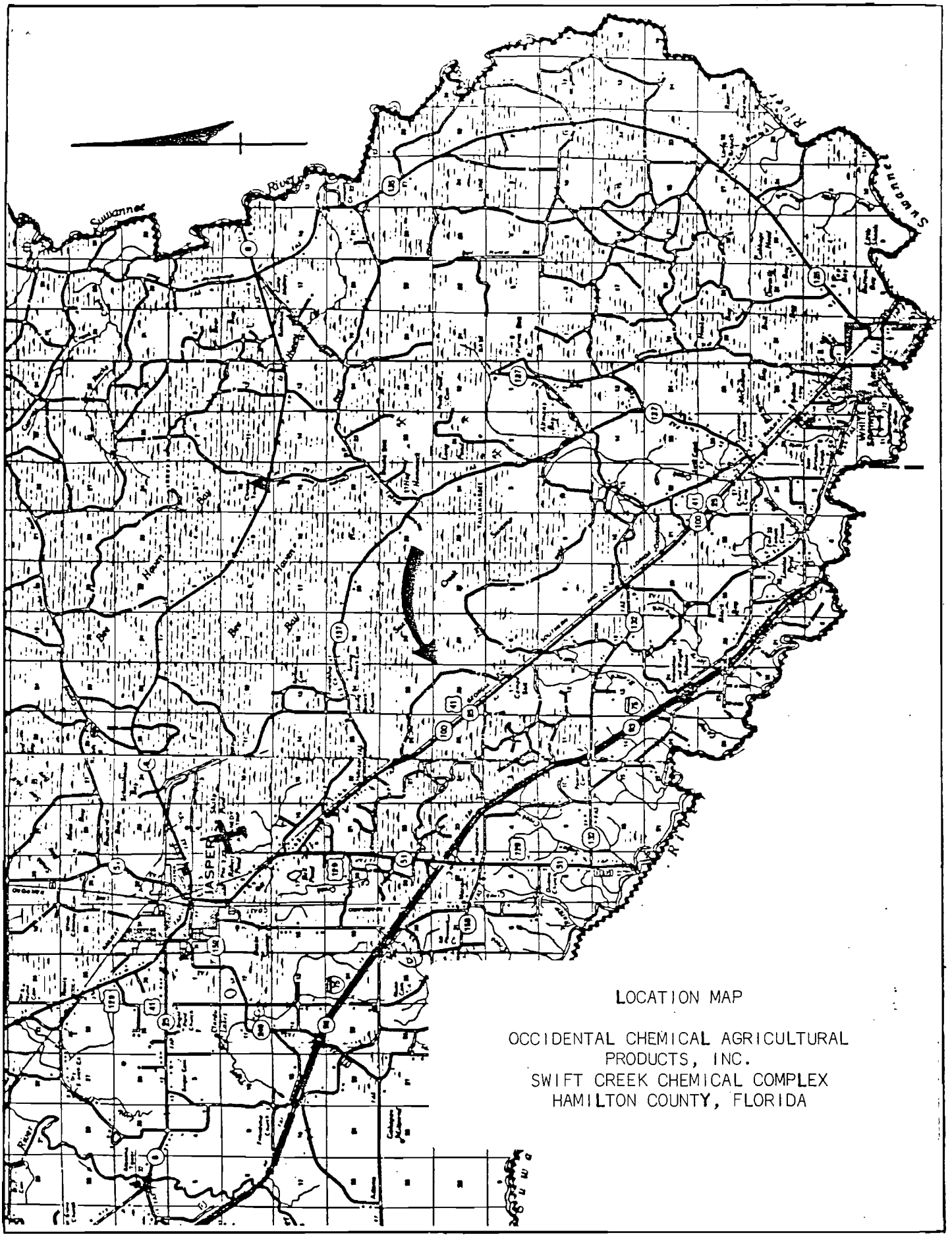

LOCATION MAP

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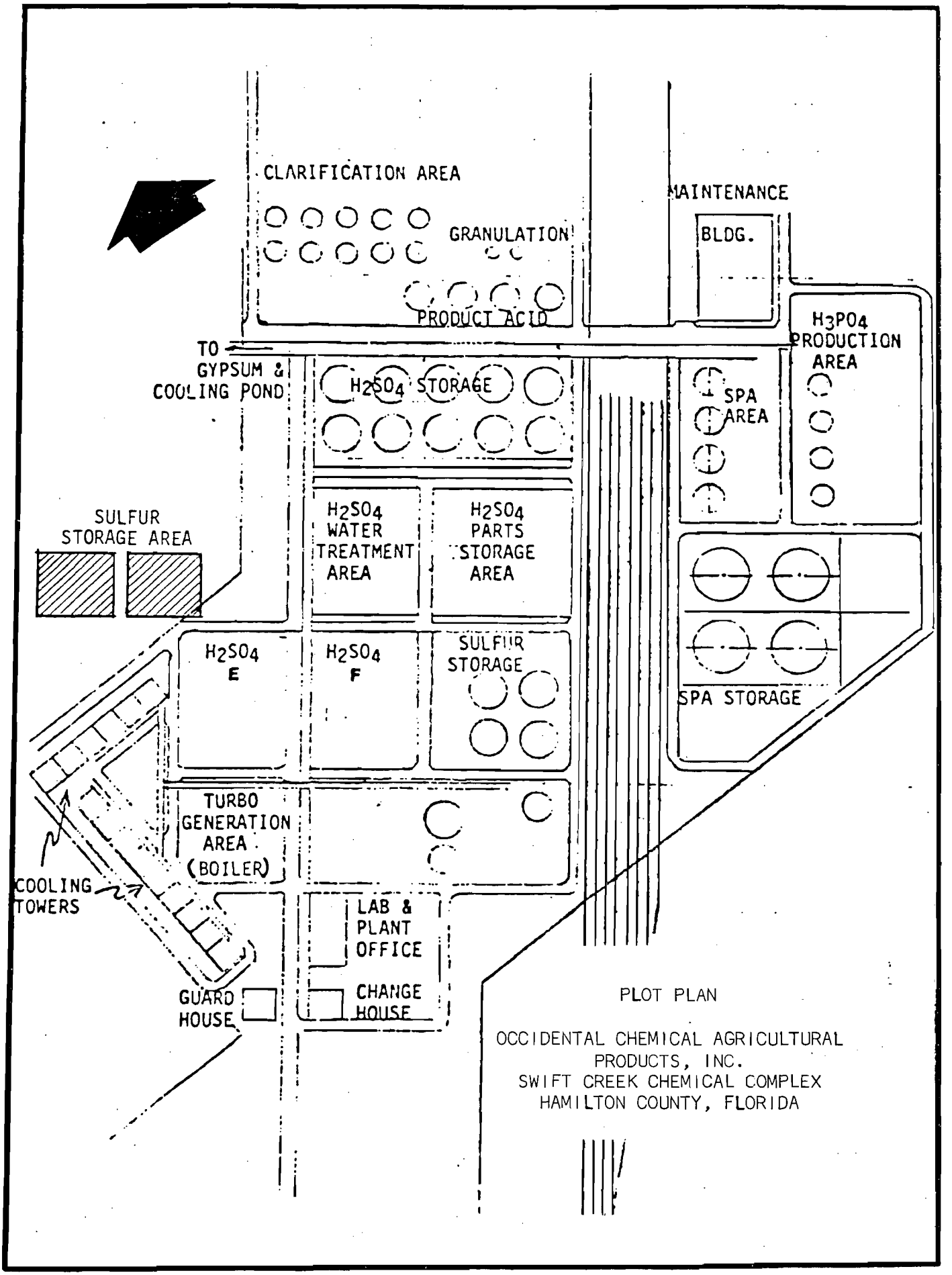
PRODUCTS, INC.
SWIFT CREEK CHEMICAL COMPLEX
HAMILTON COUNTY, FLORIDA



STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHEAST DISTRICT
BRANCH OFFICE
825 NORTHWEST 23rd AVENUE
SUITE G
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BOB GRAHAM
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APPLICATION TO ~~OPERATE~~/CONSTRUCT AIR POLLUTION SOURCES

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Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Vatted sulfur storage at SCCC with mechanical reclamation.

SOURCE LOCATION: Street US 41 City White Springs

UTM: East (17) 231.30 km North 3369.83 km

Latitude ____ ° ____ ' ____ "N Longitude ____ ° ____ ' ____ "W

APPLICANT NAME AND TITLE: M. P. McArthur, Vice President and General Manager

APPLICANT ADDRESS: Post Office Box 300, White Springs, Florida 32096

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Signed: _____

M. P. McArthur, Vice President & Gen. Manager
Name and Title (Please Type)

Date: _____ Telephone No. (904) 397-8101

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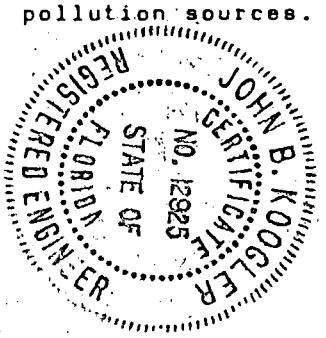

Signed _____

John B. Koogler, Ph.D., P.E.
Name (Please Type)

Sholtes & Koogler, Environmental Consultants
Company Name (Please Type)

1213 NW 6th Street, Gainesville, Florida 32601
Mailing Address (Please Type)

Florida Registration No. 12925 Date: _____ Telephone No. (904)377-5822

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1. Is this source in a non-attainment area for a particular pollutant?

   a. If yes, has "offset" been applied?

   b. If yes, has "Lowest Achievable Emission Rate" been applied?

   c. If yes, list non-attainment pollutants.

2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII.

4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source?

   a. If yes, for what pollutants?_____

   b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Sulfur	Part. Matter	5-11	See Note	To Storage - B Reclaim - C
NOTE: Sulfur to be placed into vatted storage at the maximum rate of 270 tph, 1500 tpd and 300,000 tpy(1). Reclamation of sulfur to be at the maximum rate of 210 tph, 1680 tpd and 300,000 tpy.				

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 540,000 lb/hr to storage (max.)

2. Product Weight (lbs/hr): 420,000 lb/hr reclamation rate (max.)

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Suspended Part. Matter(2)	41.4	7.6	17-2.600(11)(c)	41.4	55.4	13.4	A-H
Total Part. Matter(2)	N/A	14.5	17-2.600(11)(c)	N/A	N/A	25.5	A-H
H_2S(3)	3.4	7.5	NA	3.4	3.4	7.5	A

[1]See Section V, Item 2.

[2]Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3]Calculated from operating rate and applicable standard.

[4]Emission, if source operated without control (See Section V, Item 3).

(1) During the first two years of operation the permitted vatting rate is 375,000 tpy.
(2) Total emissions from all activities. See attached Engineering Report for emissions from individual activities and for method of calculating.
(3) Maximum annual emission of 7.5 tpy from AC24-61435 permit file assumed to be released over railcar unloading time of 17.6 hr/day, 250 day/yr (see Engineering Report.)

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Water Sprays	Part. Matter	50%	0-300 um	Estimate
Vat Walls	Part. Matter	20%	0-300 um	Estimate
Hopper Enclosure	Part. Matter	57%	0-300 um	Estimate
Other work practices	Part. Matter	undefined	0-300 um	----

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
None			

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: NA Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average NA Maximum _____

G. Indicate liquid or solid wastes generated and method of disposal.

Rainfall runoff from the storage area will be contained and used for the dust control and fire control systems associated with the storage area. Excess runoff will be treated and controlled prior to being discharged through an existing NPDES discharge point.

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

NOT APPLICABLE: ALL EMISSIONS ARE UNCONFINED

Stack Height: _____ ft. Stack Diameter: _____ ft.

Gas Flow Rate: _____ ACFM _____ DSCFM Gas Exit Temperature: _____ °F.

Water Vapor Content: _____ % Velocity: _____ FPS

SECTION IV: INCINERATOR INFORMATION

NOT APPLICABLE

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices: _____

_____

_____

_____

_____

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

_____

_____

_____

_____

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

SEE ATTACHED ENGINEERING REPORT

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should be made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

NOT APPLICABLE

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System:
2. Operating Principles:
3. Efficiency:*
4. Capital Costs:

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1]Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

NOT APPLICABLE - AIR QUALITY REVIEW REQUIRED BY 17-2.540(2) IS IN ATTACHED ENGINEERING REPORT

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ ( ) SO^2* _____ Wind spd/dir

Period of Monitoring ____/____/____ to ____/____/____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

*Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

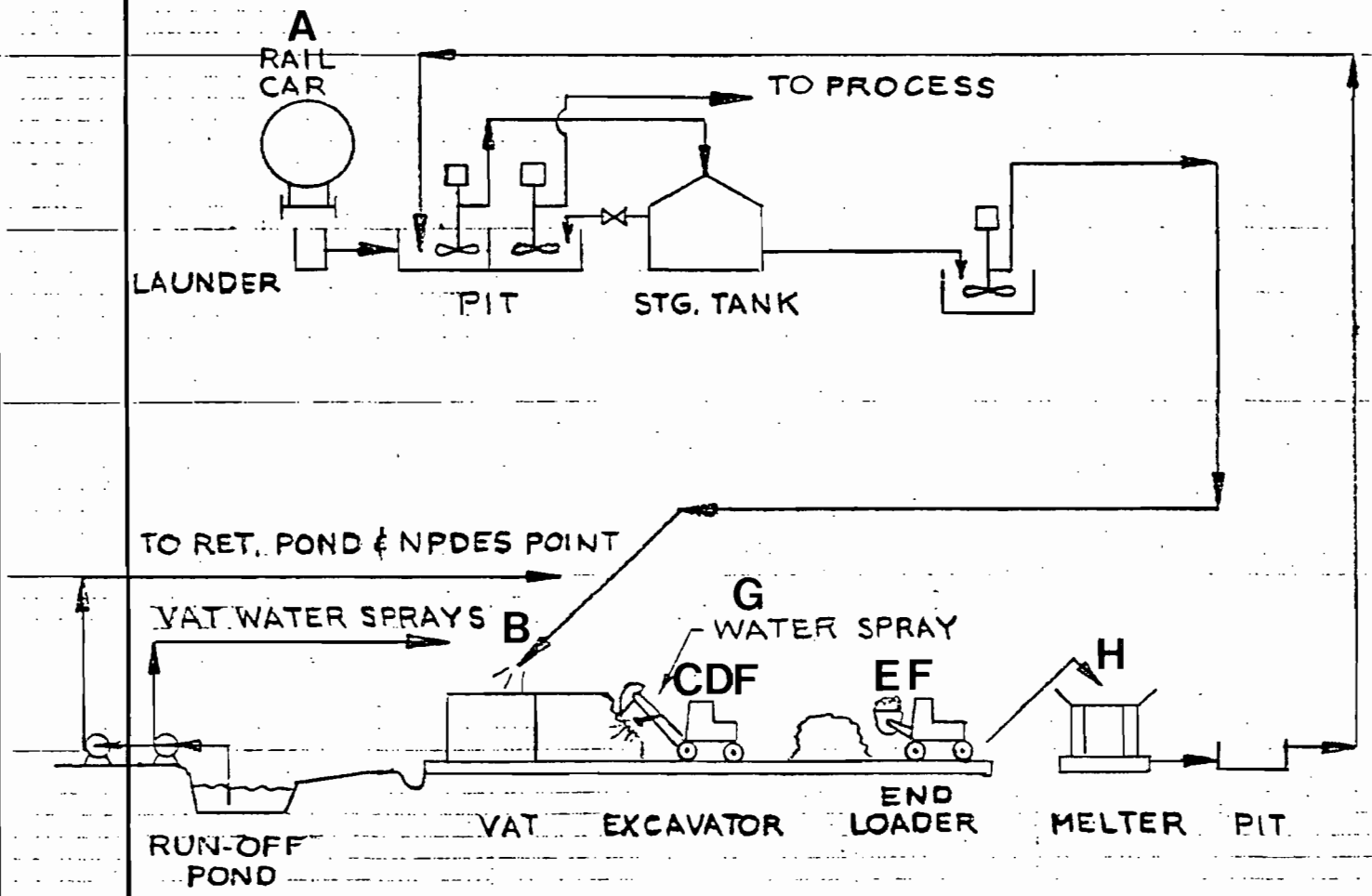
Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

ATTACHMENT 1

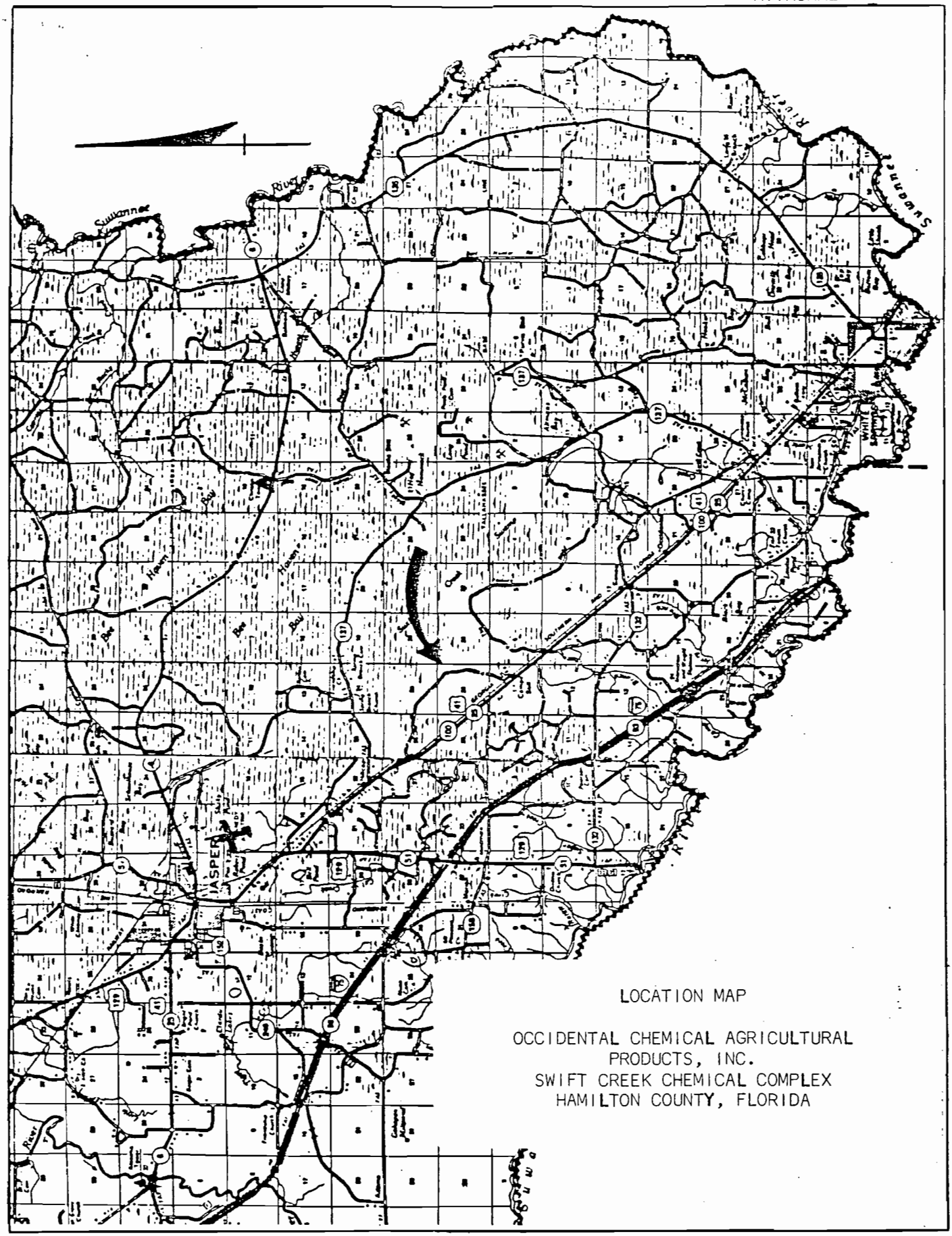


DRAWN BY FT STANFIELD	TITLE
DATE 9-21-82	VAT SULFUR HANDLING
SCALE NONE	FLOW SHEET
REVISION	
REVISION	
REVISION	

OCCIDENTAL CHEMICAL CO.

JOB NO. OC 357	REV NO. 0
CHARGE NO.	SKETCH NO.

ATTACHMENT 2



LOCATION MAP

OCCIDENTAL CHEMICAL AGRICULTURAL
PRODUCTS, INC.
SWIFT CREEK CHEMICAL COMPLEX
HAMILTON COUNTY, FLORIDA

SHOLTES & KOOGLER

ATTACHMENT 3