STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

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

Permit Number:AC 24-131270
Expiration Date: July 1, 1988
County: Hamilton
Latitude/Longitude: 30° 26' 27"N/
82° 47' 16"W
Project: Sulfuric Acid Plant "D"

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 modification of the existing Sulfuric Acid Plant D by increasing the production capacity from 1800 TPD (tons per day) to 2000 TPD.

Construction shall be in accordance with the permit application and plans, documents and reference literature submitted unless otherwise stated in the General and Specific Conditions herein.

Attachments:

1. Occidental's application package dated February 25, 1987.
2. DER's letter of incompleteness dated March 25, 1987.
3. Occidental's response dated March 30, 1987.
4. Occidental's additional information dated April 17, 1987.
5. DER's letter dated May 14, 1987.
6. Occidental's response dated June 30, 1987.

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131270
Expiration Date: July 1, 1988

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)
(x) 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:

For Sulfuric Acid Plant "D"

1. The maximum production rate shall not exceed 2000 TPD (tons per day) based on 100% H_2SO_4.

2. The maximum annual operating hours shall not exceed 8520 (355 days/yr).

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131270
Expiration Date: July 1, 1988

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO_2) emissions shall not exceed:

   a. 4 lb/ton of 100% H_2SO_4 produced
   b. 334 lbs/hr
   c. 1420 TPY (tons per year)

4. Sulfuric acid mist emissions shall not exceed:

   a. 0.14 lb/ton of 100% H_2SO_4 produced
   b. 12 lbs/hr
   c. 50 TPY

5. Visible emissions shall not exceed 10% opacity.

6. The permittee shall comply with all the requirements of 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants.

7. Compliance tests shall be carried out in accordance with 40 CFR 60, Subpart H. The DER shall be notified 30 days in advance of the tests. Initial compliance tests shall be conducted for acid mist, SO_2, and visible emissions to determine compliance with the standards. Performance tests for nitrogen oxides to determine emissions shall be requested by DER when deemed necessary.

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

9. This permit shall replace previous permit(s) issued for Occidental's Sulfuric Acid Plant "D".

10. Sulfuric Acid Plants A and B shall each be restricted to the following:

   a. Maximum annual operating hours of 8520 (355 days)
   b. Maximum production rate of 800 TPD (100% H_2SO_4)
   c. SO_2 emissions not to exceed:
      i) 29 lbs/ton of 100% H_2SO_4 produced
      ii) 4118 TPY
   d. Sulfuric acid mist emissions not to exceed:
      i) 0.5 lb/ton of 100% H_2SO_4 produced
      ii) 71 TPY
   e. Visible emissions not to exceed 10% opacity

SPECIFIC CONDITIONS:

The current operating permit for A and B plants shall be amended to reflect the restrictions on the operating parameters.

11. When a start-up involving more than one acid plant occurs, a second (sequent) plant shall not be started up until the first (prior) plant is started and in compliance.

The permittee shall take all reasonable precautions possible to avoid violations of ambient air standards.

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, FAC)

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 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. (Rule 17-4, FAC).

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, FAC)

PERMITTEE:
Occidental Chemical Agricultural
Products, Inc.

Permit Number: AC 24-131270
Expiration Date: July 1, 1988

SPECIFIC CONDITIONS:

Issued this 30 day of Sept., 1987

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

Dale Twachtmann

Dale Twachtmann, Secretary

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

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

Permit Number:AC 24-131271
Expiration Date: July 1, 1988
County: Hamilton
Latitude/Longitude: 30° 26' 27"N/
82° 47' 16"W
Project: Sulfuric Acid Plant "C"

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 modification of the existing Sulfuric Acid Plant C by increasing the production capacity from 1800 TPD (tons per day) to 2000 TPD.

Construction shall be in accordance with the permit application and plans, documents and reference literature submitted unless otherwise stated in the General and Specific Conditions herein.

Attachments:

1. Occidental's application package dated February 25, 1987.
2. DER's letter of incompleteness dated March 25, 1987.
3. Occidental's response dated March 30, 1987.
4. Occidental's additional information dated April 17, 1987.
5. DER's letter dated May 14, 1987.
6. Occidental's response dated June 30, 1987.

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131271
Expiration Date: July 1, 1988

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)
(x) 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:

For Sulfuric Acid Plant "C"

1. The maximum production rate shall not exceed 2000 TPD (tons per day) based on 100% H_2SO_4.

2. The maximum annual operating hours shall not exceed 8520 (355 days/yr).

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO_2) emissions shall not exceed:

   a. 4 lb/ton of 100% H_2SO_4 produced
   b. 334 lbs/hr
   c. 1420 TPY (tons per year)

4. Sulfuric acid mist emissions shall not exceed:

   a. 0.14 lb/ton of 100% H_2SO_4 produced
   b. 12 lbs/hr
   c. 50 TPY

5. Visible emissions shall not exceed 10% opacity.

6. The permittee shall comply with all the requirements of 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants.

7. Compliance tests shall be carried out in accordance with 40 CFR 60, Subpart H. The DER shall be notified 30 days in advance of the tests. Initial compliance tests shall be conducted for acid mist, SO_2, and visible emissions to determine compliance with the standards. Performance tests for nitrogen oxides to determine emissions shall be requested by DER when deemed necessary.

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

9 . This permit shall replace previous permit(s) issued for Occidental's Sulfuric Acid Plant "D".

10. Sulfuric Acid Plants A and B shall each be restricted to the following:

   a. Maximum annual operating hours of 8520 (355 days)
   b. Maximum production rate of 800 TPD (100% H_2SO_4)
   c. SO_2 emissions not to exceed:
      i) 29 lbs/ton of 100% H_2SO_4 produced
      ii) 4118 TPY
   d. Sulfuric acid mist emissions not to exceed:
      i) 0.5 lb/ton of 100% H_2SO_4 produced
      ii) 71 TPY
   e. Visible emissions not to exceed 10% opacity

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131271
Expiration Date: July 1, 1988

SPECIFIC CONDITIONS:

The current operating permit for A and B plants shall be amended to reflect the restrictions on the operating parameters.

11. When a start-up involving more than one acid plant occurs, a second (sequent) plant shall not be started up until the first (prior) plant is started and in compliance.

The permittee shall take all reasonable precautions possible to avoid violations of ambient air standards.

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, FAC)

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 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. (Rule 17-4, FAC).
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, FAC)

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131271
Expiration Date: July 1, 1988

SPECIFIC CONDITIONS:

Issued this 30 day of Sept., 1987

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Dale Twachtmann

Dale Twachtmann, Secretary

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

To: _____ Locth: _____
To: _____ Locth: _____
To: _____ Locth: _____
From: _____ Date: _____

TO: Dale Twachtmann

THRU: Howard Rhodes

FROM: Clair Fancy

DATE: September 29, 1987

SUBJ: Approval of Construction Permits Nos. AC 24-131270 and AC 24-131271
Occidental Chemical Agricultural Products, Inc.

Attached for your approval and signature are construction permits to modify the existing Sulfuric Acid Plants C and D, at the Suwannee River Complex in White Springs, Hamilton County, Florida. There were no comments received during the public notice period.

Day 90 after which these permits will be issued by default is November 21, 1987.

The Bureau recommends approval and signature.

CHF/MJ/s

attachment

RECEIVED
SEP 29 1987
Office of the Secretary

File

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. Hudson C. Smith
General Manager
Occidental Chemical Agricultural
Products, Inc.
Post Office Box 300
White Springs, Florida 32096

October 2, 1987

Enclosed are ~~construct~~ion permits Nos. AC 24-131270 and AC 24-131271 to modify the existing Sulfuric Acid Plants C and D, at Suwannee River Chemical Complex in Hamilton County. These permits are issued pursuant to Section 403, Florida Statutes.

Any Party to these permit has the right to seek judicial review of the permits pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date these permits are 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

Copy furnished to:

J. B. Koogler, Ph.D., P.E.
B. Steward, NE Dist.
Wayne Aronson, EPA
Miguel Flores, NPS

Final Determination

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

Sulfuric Acid Plants C and D
Permit Nos. AC 24-131270, 131271

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

September 29, 1987

Final Determination

Occidental's applications to modify the existing Sulfuric Acid Plants C and D, at Suwannee River Chemical Complex in White Springs, Hamilton County, Florida, have been reviewed by the Bureau of Air Quality Management. Public Notice of the Department's Intent to Issue the permits was published in The Jasper News on August 13, 1987.

No comments were received in response to the Public Notice. The final action of the Department will be to issue the permits as proposed in the preliminary determination.

PS Form 3811, July 1983 447-845

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

3. Article Addressed to: Hudson C. Smith
Occidental Chemical Agricultural Products, Inc.
P.O. Box 300
White Springs, FL 32096

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

Article Number: P 274 007 671

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature – Addressee
X

6. Signature – Agent
X Clarence Rogers

7. Date of Delivery
10-9-87

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

DOMESTIC RETURN RECEIPT

P 274 007 671

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

Sent to Hudson C. Smith, ~~Occidental Chemical Agr. Prod.~~	
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: 10/8/87 Permit: AC 24-131270 24-131271	

PS Form 3800, June 1985 ★ U.S.G.P.O. 1985-480-794

PM
3-30-87
Jax, FL

File Copy

DER

MAR 31 1987

BAQM

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

March 30, 1987

3-31-87

~~Clair~~ ~~Bill~~ 4/1

I have cc'd Pradeep + Bill Stewart (NE Dist)

Mr. 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, FL 32301-8241

Re: Application Nos. AC24-131270 and 131271

Dear Mr. Fancy:

We received your letter requesting additional information regarding the above referenced applications. It is presumed that the purpose of this request is to establish an "actual emission" base for sulfuric acid plants "A","B","C" and "D". Occidental would like to point out that the Department has the authority under 40 CFR51.165 (a)(1)(xii)(C) and Rule 17-2.100(2)(b), FAC (copies attached) to "presume that source-specific federally enforceable allowable emissions for a source are equivalent to the actual emissions of the source." This is the presumption that Occidental made when calculating sulfur dioxide, acid mist and nitrogen oxide emission rate increases and decreases for the "A","B","C" and "D" sulfuric acid plants included in the construction permit applications submitted to the Department for the rate increases for the C and D plants and the rate decreases for the A and B plants.

The emission rates from these plants are federally enforceable because they have all been included in PSD construction permits. The C and D plants were constructed under a federally issued PSD construction permit and the emission rates for the A and B plants were included in the air quality review for this construction permit. Subsequent to that time the emission rates of all four sulfuric acid plants have been included in PSD construction permits for the construction of Occidental's Swift Creek Chemical Complex, for a rate increase for the E and F sulfuric acid plants at Swift Creek and for a fuels switch at the Suwannee River Chemical Complex.

In view of the above, Occidental is of the opinion that the 1982-1986 operating records for the "A", "B", "C", and "D" sulfuric acid plants requested by the Department should have no bearing on the rate increases/ decreases requested for these four plants. In spite of its opinion, Occidental is submitting the requested operating records for the Department's review. The requested information (operating hours, rates and acid mist) has been taken from Annual Reports that Occidental has submitted to the Department and is summarized in the attached table.

The following responds by item number to specific items 1 through 4.

Item 1. Checks payable to FDER in the amount of $900 each to cover the applications fees.

Item 2. See Table I, Summary of Annual Operating Rates (1) "A", "B", "C" and "D" sulfuric acid plants, Occidental Chemical Ag Products, Inc. Suwannee River Chemical Complex 1982 - 1986.

Item 3. No physical changes to the plants are anticipated. The only modification is the addition of 11,000 lieters of catalyst to the existing beds.

Item 4. The latitude and longitude of the plants are:

Latitude	30°	26'	27" N
Longitude	82°	47'	16" W

If you have further questions or need additional information, please contact our office.

Sincerely,

Marvin Miller

W. Marvin Miller
Environmental Coordinator

WMM/psb

enclosures

cc: Pradeep Ravel, FDER - Tallahassee, FL
Larry George, FDER - Tallahassee, FL
Bill Stewart, FDER - JAX, FL 3-31-87 RPR

SUMMARY OF ANNUAL OPERATING RATES (1)

"A", "B", "C" AND "D" SULFURIC ACID PLANTS

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.

SUWANNEE RIVER CHEMICAL COMPLEX 1982 - 1986

YEAR	RATES	SRCC Sulfuric Acid Plants "A"	"B"	"C"	"D"
1986	Operating Hours	8,467	8,366	8,350	7,375
	Rate (TPD)	949	949	1,820	1,820
	Actual Emissions				
	SO_2 (TPY)	4,316	4,000	1,137	973
	Mist (TPY)	22	28	22	14
1985	Operating Hours	4,697	6,496	7,612	8,279
	Rate (TPD)	977	976	1,817	1,817
	Actual Emissions				
	SO_2 (TPY)	2,511	3,318	1,098	1,219
	Mist (TPY)	18	27	20	16
1984	Operating Hours	7,841	8,434	7,997	7,862
	Rate (TPD)	950	957	1,856	1,858
	Actual Emissions				
	SO_2 (TPY)	4,099	3,689	1,073	1,220
	Mist	43	27	31	21
1983	Operating Hours	3,377	3,326	6,233	7,106
	Rate (TPD)	910	913	1,581	1,583
	Actual Emissions				
	SO_2 (TPY)	1,754	1,472	719	830
	Mist (TPY)	8	18	16	19
1982	Operating Hours	7,762	7,980	8,383	8,450
	Rate (TPD)	856	860	1,428	1,261
	SO_2 (TPY)	3,795	3,168	816	832
	Mist (TPY)	17	46	10	22

(1) From Annual Reports submitted to FDER by Occidental.

(1) Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source; and

(2) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(B) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs before the date that the increase from the particular change occurs;

(C) An increase or decrease in actual emissions is creditable only if:

(*1*) It occurs within a reasonable period to be specified by the reviewing authority; and

(*2*) The reviewing authority has not relied on it in issuing a permit for the source under regulations approved pursuant to this section which permit is in effect when the increase in actual emissions from the particular change occurs.

(D) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(E) A decrease in actual emissions is creditable only to the extent that:

(*1*) The old level of actual emission or the old level of allowable emissions whichever is lower, exceeds the new level of actual emissions;

(*2*) It is federally enforceable at and after the time that actual construction on the particular change begins; and

(*3*) The reviewing authority has not relied on it in issuing any permit under regulations approved pursuant to 40 CFR Part 51 Subpart I or the state has not relied on it in demonstrating attainment or reasonable further progress;

(*4*) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(F) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(vii) "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the the Act.

(viii) "Secondary emissons" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purpose of this section, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction of operation of the major stationary source of major modification. Secondary emissions do not include any emissions which come directly from a mobile source such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(ix) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.

(x) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutions, a rate of emissions that would equal or exceed any of the following rates:

Pollutant Emissions Rate

Carbon monoxide: 100 tons per year (tpy)
Nitrogen oxides: 40 tpy

Sulfur dioxide: 40 tpy
Particulate matter: 25 tpy
Ozone: 40 tpy of volatile organic compounds
Lead: 0.6 tpy

(xi) "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(A) The applicable standards set forth in 40 CFR Part 60 or 61;

(B) Any applicable State Implementation Plan emissions limitation including those with a future compliance date; or

(C) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

(xii)(A) "Actual emissions" means the actual rate of emissions of a pollutant from an emissions unit as determined in accordance with paragraphs (a)(1)(xii)(B) through (D) of this section.

(B) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two-year period which precedes the particular date and which is representative of normal source operation. The reviewing authority shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(C) The reviewing authority may presume that the source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.

(D) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(xiii) "Lowest achievable emission rate" means, for any source, the more stringent rate of emissions based on the following:

(A) The most stringent emissions limitation which is contained in the implementation plan of any State for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

(B) The most stringent emissions limitation which is achieved in practice by such class or category of stationary sources. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within or stationary source. In no event shall the application of the term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

(xiv) "Federally enforceable" means all limitations and conditions which are enforceable by the Administrator,

17-2.100 Definitions. The following words and phrases when used in this chapter shall, unless content clearly indicates otherwise, have the following meanings:

(1) "Acid Mist" - Liquid drops of any size of any acid including but not limited to sulfuric acid and sulfur trioxide, hydrochloric acid and nitric acid as measured by test methods approved by the Department.

(2) "Actual Emissions" - The actual rate of emission of a pollutant from a source as determined in accordance with the following provisions:

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the source actually emitted the pollutant during a two year period which precedes the particular date and which is representative of the normal operation of the source.

The Department may allow the use of a different time period upon a determination that it is more representative of the normal operation of the source. Actual emissions shall be calculated using the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

(b) The Department may presume that source specific federally enforceable allowable emissions for a source are equivalent to the actual emissions of the source.

(c) For a source which has not completed start-up and testing on a particular date, actual emissions shall equal the potential emissions of the source on that date.

(3) "Administrator" - The Administrator of the United States Environmental Protection Agency or the Administrator's designee.

(4) "Adverse Impact on Visibility" - An impairment to visibility which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of a Federal Class I area. This determination shall be made on a case-by-case basis, utilizing EPA-approved methods of visibility impairment analysis, if available, and taking into account such factors as the geographic extent, intensity, duration, frequency, and time of visibility impairments, and how these factors correlate with the times of visitor use of the Federal Class I area and the frequency and timing of natural conditions that reduce visibility.

(5) "Affected Pollutant" - In a nonattainment area or area of influence the pollutant for which the area is designated nonattainment is the affected pollutant except in the case of ozone nonattainment areas where the affected pollutant is volatile organic compounds (VOC).

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

APRIL 1, 1987

ISSUES:

1) Heater Treater Firing Time
2) Heater Treater Capacity
3) Flare Operation
4) Exclusion of NO_x, VOC, CO and PM in Flare Emissions
5) Basis for 95% Loading of Engines
6) Engine Emission Factors
7) Fuel Consumption Estimate
8) BTU Content of Fuel Gas
9) Heater Treater Specific Gravity Estimate
10) Fugitive Emission Calculation Method
11) SO_2 Emission Factor for Engines
12) Exclusion of Methane and Ethane from Emission Calculations

AAB[6b]

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #1

Heater Treater Firing Time

REPLY

- Minimum amount of freewater produced (500 barrels/day = maximum) total field
- Required heating temperature is low due to higher ambient temperature
- Inlet emulsion heat exchanger increases heating efficiency
- Turbulator deflects heat from flame to walls of firetube, which increases efficiency 8-10%
- Most heater treaters in our operations are fired a maximum of 12 hrs/day

CONCLUSION

- 12 hours/day runtime for the heater treater is a good estimate

AAB[7b]

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #2

Heater Treater Capacity

REPLY

- Rates quoted on manufacturer's data are general guidelines
- Since low levels of water will be produced (500 barrels/day maximum), more oil can be treated effectively
- If heater treater does not function effectively, separator will be converted to a three-phase separator

CONCLUSION

- Heater treater selected in facility design is satisfactory

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #3

Flare Operation

REPLY

- No steam goes to flare
- Flare is smokeless, self-aspirating

CONCLUSION

- Opacity limit (20%) will be met under normal operating conditions

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #4

Exclusion of NO_X, VOC, CO and PM in Flare Emissions

REPLY

- Flare efficiency assumed to be approximately 100% with a gas heat value of at least 1000 BTU/FT^3
- NO_X*: Formation of NO_X is insignificant in a temperature range of 1000°F to 1600°F
- VOC: VOC emissions are negligible, with 100% combustion efficiency
- CO*: At combustion efficiencies greater than 98%, CO emissions are negligible
- PM*: Natural gas burns very clean, and particulate emissions are negligible

*There is no method to calculate NO_X, CO and PM emissions for flares

CONCLUSION

- NO_X, VOC, CO and PM emissions can be excluded from flare emission calculations

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #5

Basis for 95% Loading of Engines

REPLY

- Larger horsepower engines than are actually needed have been selected
- 95% loading reduces operating costs and maintenance costs

CONCLUSION

- 95% loading on all engines is a conservative assumption

AAB[11b]

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #6

Engine Emission Factors

REPLY

- Engine emission factors represent total hydrocarbons (see Footnote AP-42; Table 3.3.2-1)

CONCLUSION

- Emission factors used for engines are correct

AAB[12b]

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #7

Fuel Consumption Estimate

REPLY

- 7500 BTU/hp·hr is an estimate of average fuel consumption assuming approximately 30% efficiency

CONCLUSION

- 7500 BTU/hp·hr is a conservative estimate for the average fuel consumption of an engine

AAB[13b]

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #8

BTU Content of Fuel Gas

REPLY

- BTU content given in the application was from an analysis run during the first 33-1 production test (4/18/86)
- The latest gas analysis composition (10/9/86) is given in the application
- The wet BTU content of the latest analysis = 1006.53 BTU/FT^3

CONCLUSION

- The BTU content in the application can be changed from 1161.98 BTU/FT^3 to 1006.53 BTU/FT^3

AAB[14b]

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #9

Heater Treater Specific Gravity Estimate

REPLY

- Heater treater specific gravity = .95 is a representative value calculated from field data
- Stock tank specific = 1.1465 and separator specific gravity = .7854; .95 is an estimate of heater treater specific gravity

CONCLUSION

- Use .95 as heater treater specific gravity until gas analysis can be obtained after construction of facility

AAB[15b]

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #10

Fugitive Emission Calculation Method

REPLY

- Approximate method of calculating fugitive emissions from API #4322 was used since no other method was available
- Onshore facility emission factors are estimates derived from individual equipment factors

CONCLUSION

- Use approximate fugitive emission calculation for construction application

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #11

SO_2 Emission Factor for Engines

REPLY

- Calculations of SO_2 emission factor for engines are one decimal place off

CONCLUSION

- Change SO_2 emission factor for engines from .000125 to .0000125 (LB/hp·hr)

AAB[17b]

McLELLAN FIELD DEVELOPMENT
FLORIDA DER AIR PERMIT REVIEW

FLORIDA DER ISSUE #12

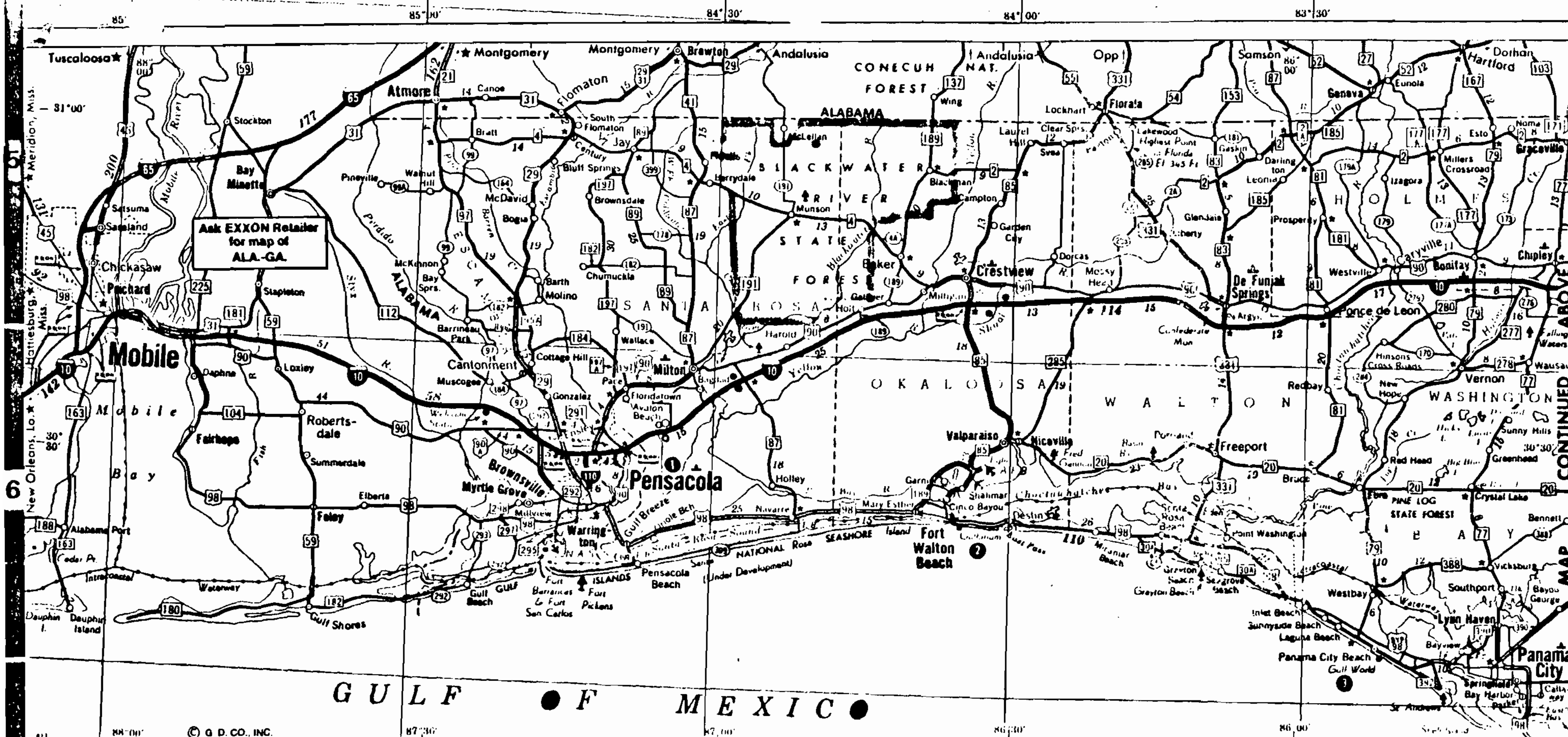
Exclusion of Methane and Ethane from Emission Calculations

REPLY

- Federal Register, Volume 42, July 1977 states that methane and ethane have negligible photochemical reactivity in forming oxidants and, therefore, should not be inventoried or controlled by state implementation plans 510(2)(a) 2.210(permits) VOC 100(209)+(7)
- Preconstruction review requirements (FDER Regulations) require the owner/operator of a new facility to demonstrate that federally enforceable allowable emissions will not violate any ambient air quality standard. Methane and ethane are not federally enforceable emissions
- Under Table 500-2 (FDER Regulations), ozone is defined as a "regulated air pollutant". Methane and ethane do not form ozone (according to the EPA) and, therefore, should not be regulated
- Previous air permits approved by the FDER did not include methane and ethane emissions. New FDER regulations stating methane and ethane emissions will now be inventoried have not been sent to us

CONCLUSION

It is not necessary to include methane and ethane emissions in the permit application



Points of Interest

When seeking diversion close to home or en route, look on the map for these red number symbols ❶. Corresponding numbers below describe these attractions. Admission free unless noted and frequently reduced for children. Facts were up-to-date at publication but are subject to change.

Other points of interest are located by ■ or ● and principal public recreation areas by ♦ (see chart for facilities).

❶ **PENSACOLA** (C-6). Self-guided tours of **U.S. Naval Air Station** daily 9-5. On grounds is Naval Aviation Museum. Near tip of Santa Rosa Island is **Fort Pickens,** a coastal defense relic (1834), part of **Gulf Islands Nat. Seashore,** which preserves strip of coastal islands. Auto fee $1. In city center a marked auto route **passes sites in** two Historical Districts.

❷ **GULFARIUM** (D-6). Porpoise, sea lion and "living sea" shows, **marine life** exhibits. Daily 9-dusk. $3.

❸ **GULF WORLD** (F-6). Native Gulf sea life and a coral reef with tropical fish can be observed in windowed tanks. Underwater shows, trained porpoise and sea lion acts. Daily March-Oct. Fee.

❹ **FLORIDA CAVERNS STATE PARK** (B-1). Guided tours of underground caverns are

㉕ **CITRUS TOWER** (J-6). Offers panoramic view of citrus-growing area from top. Elevator. Daily. $1.50.

㉖ **WALT DISNEY WORLD** (J-6). Highlighted by "Magic Kingdom" entertainment complex which includes six theme lands: Main Street, U.S.A., Adventureland, Frontierland, Liberty Square, Fantasyland and Tomorrowland; Space Mountain. Daily 9-7, to 1 a.m. in summer. Fee.

㉗ **ORLANDO** (K-5). Family entertainment centered around performing dolphin, penguin, whale and seal shows at **Sea World of Florida;** Japanese village, marine life exhibits, animal petting areas. Daily 9-6, to 8 in summer. $5.50.

About 180 re-created performers in 100 memorable movie and TV scenes in **Stars Hall of Fame** nearby. Open daily. $3.95.

㉛ **MYAKKA RIVER STATE PARK** (H-8). Extensive preserve with appearance of African veldt is a wildlife sanctuary where wild birds and animals roam free. Daily. 25c. Tours (fee) by trackless train and boat available.

㉜ **HAPPINESS TOWER** (K-8). Panoramic view from top. Elevator. Daily 8-6. $1.

㉝ **ELLIOTT MUSEUM** (M-8). Contains collection of antique horse-drawn and automotive vehicles; old-time shops, old country store, art gallery. Daily 1-5. $1. **House of Refuge Museum,** restored 1875 life-saving station; turtle aquarium. Daily 1-5. 50c.

㉞ **PALMDALE** (K-9). Cypress Knee Museum, first cypress knee factory, has catwalk into cypress swamp. Daily 8-dusk. $1.

㉟ **SEMINOLE INDIANS.** Reservations are

Principal Public Recreation Areas

RED symbols on the map shown thus ♦ locate principal recreation areas that are listed below. Facts were up-to-date at publication but are subject to change.

☐ Available

♦ Trailers permitted
∘ Trailer hookups available
■ Boats for hire

▲ Boat ramps
△ Historic interest
● Reservations required

FLORIDA	Index	Bathing	Boating	Camping	Fishing	Lodging	Picnicking
Alfred B. Maclay Gardens	D-1		▲				
Anastasia	K-3			♦∘			
Bahia Honda	K-13		■▲	♦∘			
Basin Bayou	E-6			♦∘			
Bill Baggs (Cape Florida) △	M-11						
Blackwater River	D-5			♦∘			
Blackwater River St. For.	D-5			♦∘			
Blue Springs	K-5		▲	♦∘			
Broward Beach	M-10		▲				

FLORIDA	Index	Bathing	Boating	Camping	Fishing	Lodging	Picnicking
Lake Griffin	J-5		▲	♦∘			
Little Talbot Island	K-2			♦∘			
Long Key	L-13			♦∘			
Manatee Springs	G-4		■▲	♦∘			
Mike Roess (Gold Head Branch)	J-3		■▲	♦∘		●	
Myakka River	H-8		■▲	♦∘		●	
Natural Bridge Battlefield △	D-2						
Ochlockonee River	C-2		▲	♦∘			
O'Leno	C-3		▲	♦∘			

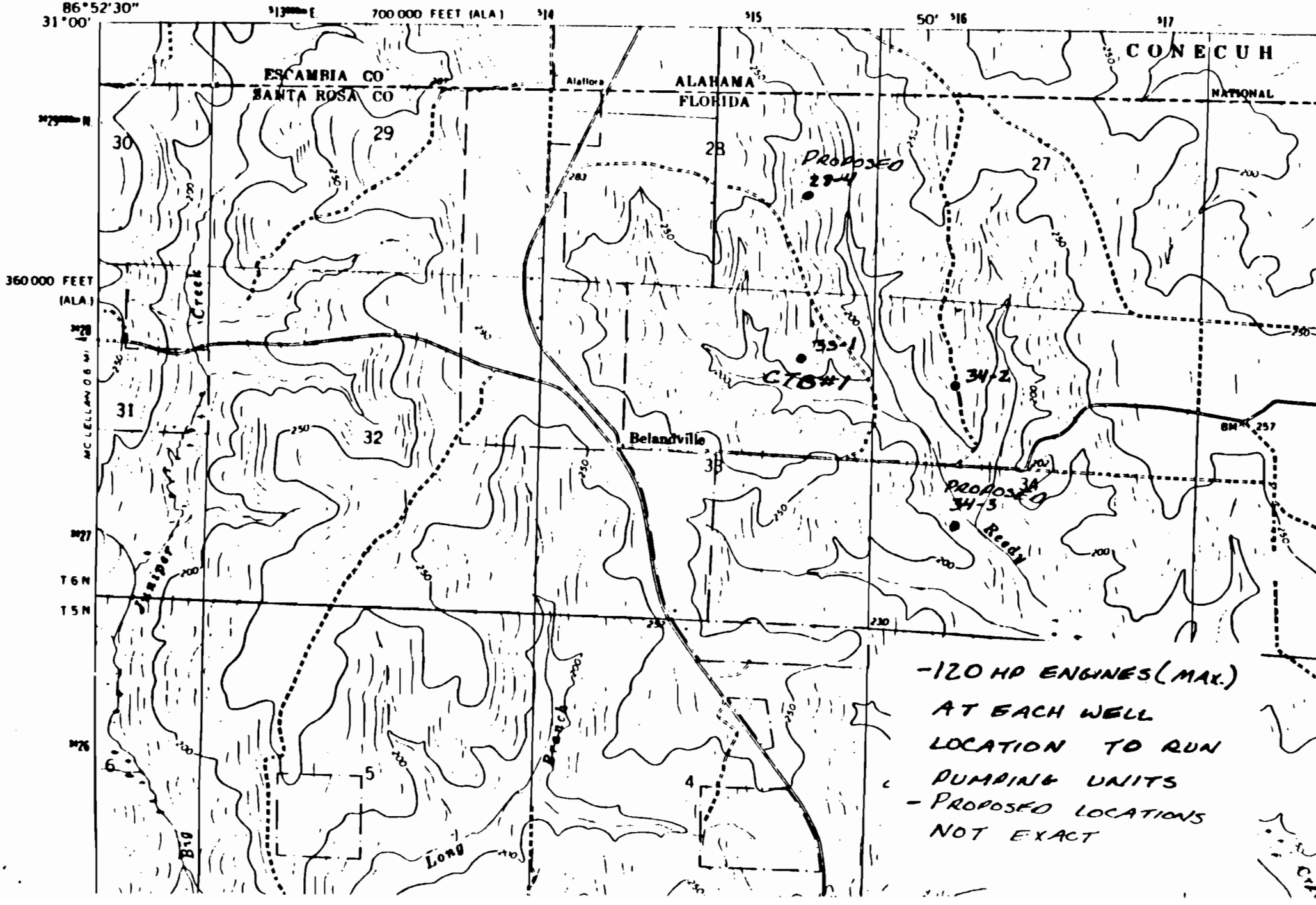
McLELLAN WELLS

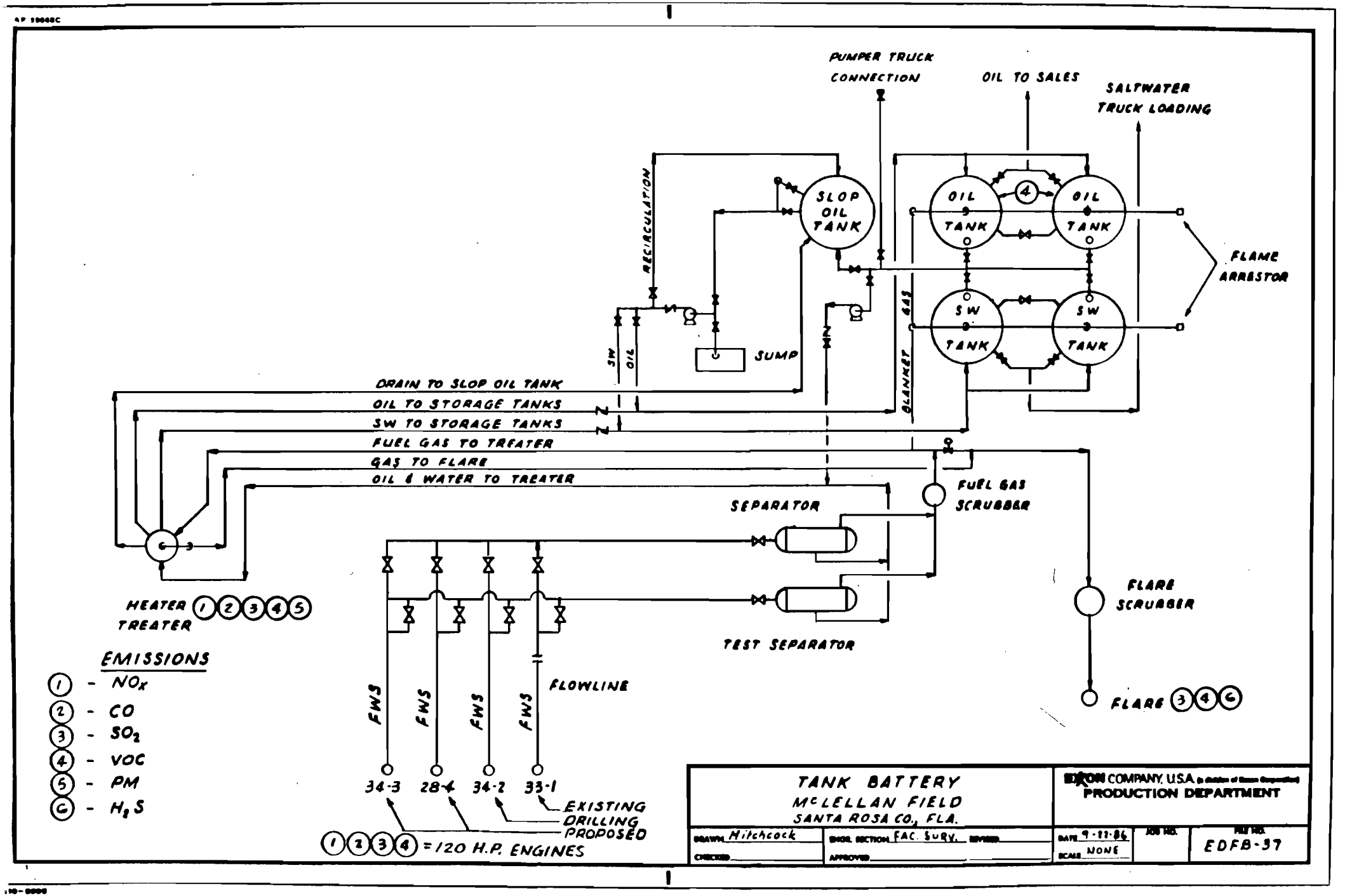
ILLUSTRATION V

BEST AVAILABLE COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

STATE




PUMPER TRUCK CONNECTION
OIL TO SALES
SALTWATER TRUCK LOADING
SLOP OIL TANK
OIL TANK
OIL TANK
SW TANK
SW TANK
FLAME ARRESTOR
RECIRCULATION
SUMP
SW
OIL
GAS BLANKET
DRAIN TO SLOP OIL TANK
OIL TO STORAGE TANKS
SW TO STORAGE TANKS
FUEL GAS TO TREATER
GAS TO FLARE
OIL & WATER TO TREATER
FUEL GAS SCRUBBER
SEPARATOR
HEATER TREATER 1 2 3 4 5
TEST SEPARATOR
FLARE SCRUBBER
FLARE 3 4 6
FWS
FWS
FWS
FWS
FLOWLINE
34-3
28-4
34-2
33-1
EXISTING
DRILLING
PROPOSED
1 2 3 4 = 120 H.P. ENGINES
EMISSIONS
1 - NOx
2 - CO
3 - SO2
4 - VOC
5 - PM
6 - H2S
TANK BATTERY
McLELLAN FIELD
SANTA ROSA CO., FLA.
EXXON COMPANY, U.S.A.
PRODUCTION DEPARTMENT
DRAWN Hitchcock
ENGR. SECTION FAC. SURV.
CHECKED
APPROVED
DATE 9-22-86
SCALE NONE
EDFB-37

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

March 25, 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Marvin Miller
Occidental Chemical Agricultural
Products Inc.
Post Office Box 300
White Springs, Florida 32096

Dear Mr. Miller:

Re: Completeness Review for Applications to Construct/Modify Air Pollution Sources: Nos. AC 24-131270 & -131271

The department has received and reviewed your application packages dated February 25, 1987, and have deemed them incomplete. Please submit the following information to help further process your application:

1. Both acid plants C and D are separate sources each with a potential emissions increase of over 100 tons per year. Therefore, the processing fee is $1000 for each source. Since you have forwarded $100 to the department already, the amount you need to now submit is $1900.

2. Please provide operating reports pertaining to sulfuric acid plants A, B, C, and D, for the past five years, including operating hours, rates and actual emissions of sulfur dioxide and sulfuric acid mist.

3. Do you propose to make any physical changes in the C and D acid plants as a part of the modification project?

4. Please state the latitude/longitude coordinates for the sources to be modified.

If you have any questions, please call 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: J. Koogler
B. Stewart

P 408 530 527

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Marvin Miller Occidental Chem. Agri. Prod., Inc	
P.O., State and ZIP Code P.O.Box 300 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 3/25/87 AC 24-131270 -131271	

PS Form 3800, Feb. 1982

PS Form 3811, July 1983 447-845

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, [redacted]
2. ☐ Restricted Delivery.

3. Article Addressed to:
Marvin Miller
Occidental Chem. Agri. Prod., Inc.
P.O. Box 300
White Springs, FL 32096

4. Type of Service:	Article Number
☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail	P 408 530 527

Always obtain signature of addressee or agent and **DATE DELIVERED.**

5. Signature – Addressee
X

6. Signature – Agent
X Clarence Rogers

7. Date of Delivery
3-26-87

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

DOMESTIC RETURN RECEIPT

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

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

TO: Occidental File, Permit Nos. AC 24 131270 and 131271

THRU: Bill Thomas BT

FROM: Pradeep Raval PR

DATE: July 1, 1987

SUBJECT: Netting Out of Emissions in a PSD Review.

Increases in the production capacity of C & D Sulfuric Acid plants at Occidental's SRCC in White Springs, Florida, could potentially result in significant net emission increases for SO_2 and acid mist.

To keep the emission increases to below significant levels, Occidental is willing to accept more restrictive acid mist emission limits on C & D plants so that there will be no net increase in acid mist emission from increase in production.

To net out SO_2 increases, Occidental is willing to reduce production capacity and thereby SO_2 emissions from A and B acid plants.

Whereas the net SO_2 emissions increase by operating C & D plants at 2000 TPD, and A & B plants at 800 TPD (100% H_2SO_4) will be zero, the net acid mist emissions increase will be significant (based on the difference between proposed rates and previous actual emissions of A & B plants).

The Bureau feels that the "paper" significant net increase in acid mist emissions does not accurately reflect the actual proportionate reductions expected from the proposed reduction in permitted production capacity of the A & B plants (from 1000 TPD to 800 TPD).

For the above reason, acid mist emissions from A & B plants will not be addressed or considered in the review of the modification of C & D acid plants.

PR/ss

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)	
Bill Thomas, BAQM, CAPS	Initial
	Date
2.	Initial
	Date
3.	Initial
	Date
4.	Initial
	Date

REMARKS:

DER
JUN 15 1987
BAQM

6-15-87
Bruce,
Here BT policy on DiCal plt @ Occidental. Dist indicating that proof wrong has occurred. Suspect BT may give to me, ~~John~~, or enforcement after he reviews it.

[initials]

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 & Report
	Initial & Forward
	Distribute
	Concurrence
	For Processing
	Initial & Return

FROM: Johnny Cole

DATE 06-12-87

PHONE

File Copy

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

May 14, 1987

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Marvin Miller
Occidental Chemical Agricultural
Products, Inc.
P. O. Box 300
White Springs, Florida 32096

Dear Mr. Miller:

Re: Completeness Review for Application to Construct/Modify Air Pollution Sources, Sulfuric Acid Plants A, B, C, and D
Permit Nos. AC 24-131270 and -131271

The Department has received and reviewed your application packages dated April 15, 1987, and April 17, 1987, and have deemed them incomplete. Please submit the following information to help further process your application.

1. What emission limiting standards do you propose for SO_2 and acid mist for sulfuric acid plants A and B?

2. How many days/year or hours/year do you intend to operate the sulfuric acid plants A and B?

3. State the start-up procedures you intend to use to minimize ambient impacts of SO_2 and acid mist, for sulfuric acid plants A, B, C, and D. Will there be a specific sequence in start-up of the various plants relative to each other?

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

Sincerely,

Barry D. Andrews

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

CHF/PR/s

cc: J. Koogler
B. Stewart

P 408 531 185

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED—
NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to Marvin Miller Occidental Chem. Agri. Pro., Inc.	
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 AC 24-131270 -131271 5/15/87	

PS Form 3800, Feb. 1982

PS Form 3811, July 1983 447-845

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:
Marvin Miller
Occidental Chemical Agri. Pro., Inc.
P.O. Box 300
White Springs, FL 32096

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

Article Number
P 408 531 185

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X Clarence Rogers

7. Date of Delivery
5-18-87

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

DOMESTIC RETURN RECEIPT

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

February 19, 1988

DER

FEB 22 1988

BAQM

Mr. Ernie Frey
District Manager
Department of Environmental
Regulation
3426 Bills Road
Jacksonville, FL 32207

Dear Mr. Frey:

By this letter, Occidental Chemical Company is requesting a permit revision to allow operation at increased rates for the following plants:

°	"A" Sulfuric Acid	A024-103966	FROM 800 TPD to 1000 TPD
°	"C" Sulfuric Acid	A024-131271	FROM 2000 TPD to 2200 TPD
°	"D" Sulfuric Acid	A024-131270	FROM 2000 TPD to 2250 TPD

Stack testing on these plants will be conducted at the elevated rates as soon as permission is received from your office and the results of these tests will be submitted as soon as they are available.

The basis for this request is an emissions trade-off between the "A", "B", "C", and "D" Sulfuric Acid plants. The "B" Sulfuric Acid plant is currently permitted for operation at 800 TPD and emissions of 23,200 lb/day of SO_2 and 400 lb/day of acid mist. Although this plant could be started to meet the demand for additional sulfuric acid it would be economically and environmentally more desirable to shift this additional production capacity to our plants which are already operating. Although this shift in production capacity will cause an increase in the total emissions from the operating plants, the shifting of the bulk of the production to the more modern and efficient "C" and "D" plants will result in a net decrease in the total emissions. This is summarized in the attached table.

It is anticipated that there will be some modernization work performed at both "C" and "D" Acid plants within the next 12 to 18 months. After completion of that work it is anticipated that we will request permission to test and possibly modify the permits for operation at a 2300 TPD rate for each plant. This would complete the trade-off for production tonnage with the "B" Sulfuric Acid plant.

If FDER approves these permit modifications Occidental Chemical will benefit economically by not having to start up the "B" Sulfuric Acid plant and all the people of the State of Florida will benefit by a reduction in the total permitted air emissions to the environment. As shown in the accompanying table, this is a net reduction of approximately 15,000 lb/day of SO_2 and 220 lb/day of acid mist.

If I may provide additional information concerning this request, please do not hesitate to contact me.

Best Regards,

Charles B. Pults
Environmental Engineer

psb

cc: M. J. Fitzsimmons, FDER, Jacksonville, FL
W. P. Stewart, FDER, Jacksonville, FL
R. P. Vogh, FDER, Gainesville, FL
R. E. McNeill, OXY
W. M. Miller, OXY
M. E. Pauley, OXY

Copied: Pradeep Raval
CHF | BT
2/23/88

TABLE 1

EMISSION RATE COMPARISONS

	CURRENT PERMITTED RATE			PROPOSED MODIFICATIONS		
	TPD	SO_2 (lb/ton)	MIST (lb/ton)	TPD	SO_2 (lb/ton)	MIST (lb/ton)
"A" Sulfuric	800	29 (23200 PPD)	0.50 (400 PPD)	1000	29 (2900 PPD)	0.50 (500 PPD)
"B" Sulfuric	800	29 (23200 PPD)	0.50 (400 PPD)	0 0	0 0	0 0
"C" Sulfuric	2000	4 (8000 PPD)	0.14 (280 PPD)	2200	4 (8800 PPD)	0.14 (308 PPD)
"D" Sulfuric	2000	4 (8000 PPD)	0.14 (280 PPD)	2250	4 (9000 PPD)	0.14 (315 PPD)

CURRENTLY PERMITTED:

All plants (A + B + C + D) operating = 5600 TPD H_2SO_4
Maximum SO_2 Permitted = 62400 lb/day
Maximum Mist Permitted = 1360 lb/day

REQUESTED MODIFICATIONS:

Plants (A + C + D) operating = 5450 TPD H_2SO_4
Maximum SO_2 Permitted = 46800 lb/day
Maximum Mist Permitted = 1123 lb/day

EMISSION DIFFERENCES:

By shifting production to the currently operating plants a **NET REDUCTION** in total emissions to the environment occurs.

SO_2 (Max) 62400 - 46800 = **15600 lb/day**
Mist (Max) 1360 - 1123 = **237 lb/day**

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

February 25, 1987

Mr. Bill Thomas
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, FL 32301-8241

RE: "A" and "B" Sulfuric Acid Plants
"C" and "D" application fees

Dear Mr. Thomas:

We wish to thank you and Larry George for your time on February 13th. I know that your schedule was very tight that day.

As requested, the following figures reflect the operating hours, for "A" and "B" Sulfuric Acid Plants, excerpted from the Annual Fuels and Emissions Report for 1984, 1985 and 1986:

Year	Plant	Operating Hours
1984	A	7841
	B	8434
1985	A	4697
	B	6496
1986	A	8479
	B	8363

As you can see, 1985 was a typical year in that the plants did not operate the normal 8000 + average hours per year.

The reduced operating time for 1985, reflected in the report, was due to very sluggish market conditions.

I have also included the necessary checks for the "C" and "D" application fees. If you or Larry have any questions or need additional information, please contact either John Koogler or me.

We appreciate your expeditious handling of this matter as it will result in benefits to both Occidental and the environment.

Sincerely,

Marvin Miller

W. Marvin Miller
Environmental Coordinator

psb

enclosure

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.

A SUBSIDIARY OF OCCIDENTAL CHEMICAL CORPORATION
POST OFFICE BOX 300 WHITE SPRINGS, FLORIDA 32096

CHECK NO. 010034

BEST AVAILABLE COPY

MESA UNITED BANK
OF GRAND JUNCTION
GRAND JUNCTION, COLORADO 81501

Dep# 1717

[redacted]

DATE: 2/20/87 PAY PAY TO AND 00 CTS $**100.00**

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.
NOT VALID AFTER ~~180 DAYS~~

TO THE ORDER OF Department of Environmental Reg.
2600 Blair Stone Road
Tallahassee, FL

BY [signature]

AS DISBURSING AGENT(S) FOR THE COMPANY

[redacted]

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS. INC.

A SUBSIDIARY OF OCCIDENTAL CHEMICAL CORPORATION
POST OFFICE BOX 300 WHITE SPRINGS, FLORIDA 32096

CHECK NO. 010035

MESA UNITED BANK
OF GRAND JUNCTION
GRAND JUNCTION, COLORADO 81501

Dep# 1717

[redacted]

DATE: 2/20/87 PAY PAY TO AND 00 CTS $**100.00**

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.
NOT VALID AFTER ~~180 DAYS~~

TO THE ORDER OF Department of Environmental Reg.
2600 Blair Stone Road
Tallahassee, FL

BY [signature]

AS DISBURSING AGENT(S) FOR THE COMPANY

[redacted]

DETACH BEFORE DEPOSITING

DATE	THIS CHECK IS IN PAYMENT OF THE FOLLOWING		AMOUNT
2/20/87	Permit application for "D" Sulfuric Renewal	Co. 020200	$100.00

01081

DER

FEB 27 1987

AQM

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC. WHITE SPRINGS, FL 32096

CHECK NO. 010035

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No. 76150

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Occidental Chemical Agricultural Prod. Date March 4, 1987

Address PO Box 300 White Springs FL 32096 Dollars $ 200.00

Applicant Name & Address Same as above

Source of Revenue

Revenue Code 001031 Application Number AC 64-01270, AC 64-131277

By Patricia G. Adams

AC 24-131271

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803

DER

FEB 27 1987

BAQM

BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ALEX SENKEVICH
DISTRICT MANAGER

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

SOURCE TYPE: Double Absorption Sulfuric Acid [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) Sulfuric Acid Plant "C"

SOURCE LOCATION: Street SR 137 City

UTM: East (17) 328,320 North 3,368,820

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

APPLICANT NAME AND TITLE: Occidental Chemical Agricultural Products Inc.

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

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

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

I certify that the statements made in this application for a 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: Hudson C. Smith

Hudson C. Smith, General Manager
Name and Title (Please Type)

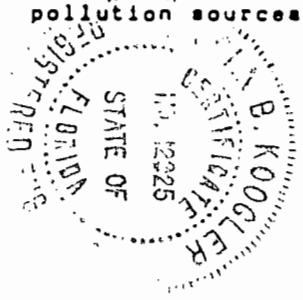
Date: 2/13/87 Telephone No. (904) 397-8101

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., PE
Name (Please Type)

KOOGLER & ASSOCIATES
Company Name (Please Type)

1213 N.W. 6th Street
Gainesville, Florida 32601
Mailing Address (Please Type)

Florida Registration No. 12925 Date: 2/11/87 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.

The production rates of the C and D sulfuric acid plants are being increased from 1800 to 2000 tons per day of 100% acid. The increased SO2, acid mist and NOx emissions will be offset by reducing the permitted production capacities of the A and B sulfuric acid plants from 1000 to 900 tons per day (see Attachment 1).

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

Start of Construction March 1987 Completion of Construction April 1987

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.)

Existing control system (double absorption towers and high efficiency mist eliminators) will be adequate to control emissions at the higher rate.

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

A024-34851 issued 12/23/81 and expiring 12/23/86

A024-125595 issued 12/12/86 and expiring 12/23/91

A024-2548 revised 3/1/76 and expiring 1/31/81
AC24-2131 issued 11/6/93 and expiring 6/30/75

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) Major modification with ofsetting emissions

1. Is this source in a non-attainment area for a particular pollutant? No

   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. No

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. No

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

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   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.

See Attachment 1

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	Ash	App. 0.005%	54,586	

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

1. Total Process Input Rate (lbs/hr): 54,586 (sulfur)

2. Product Weight (lbs/hr): 179.211 or 93% H2SO4

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	
Sulfur Dioxide	333.3	1460	17-2.600(2)(b)	333.3	333.3	1460	2
H2SO4 mist	12.5	55	17-2.600(2)(b)	12.5	225	985	2
VE	10%		17-2.600(2)(b)	10%			

[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).

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)
Double Absorption	SO2	99.7%	NA	Design & test
Contact H2SO4 Parsons				
Plant				
Brink ES mist	H2SO4 mist	94%	0-10	Tests
eliminators				

E. Fuels NOT APPLICABLE

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

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

Fuel Analysis:

Percent Sulfur: _____ 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 _____ Maximum _____

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

NONE

_____

_____

_____

_____

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

Stack Height: 150 ft. Stack Diameter: 9.0 ft.

Gas Flow Rate: 112,750 ACFM 93,750 DSCFM Gas Exit Temperature: 175 °F.

Water Vapor Content: 0 % Velocity: 29.5 FPS

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbege)	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 ATTACHMENTS 2-5)

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)

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

The increased emissions of SO2, acid mist and NOx resulting from increasing the capacities of the C and D sulfuric acid plants will be offset by reducing the production rates, and hence emissions, from the A and B sulfuric acid plants.

EMISSION RATE INCREASES

C and D as permitted under federally enforceable permit conditions at 1800 tpd

SO2: Hourly = 1800 tpd/24 hr/day x 4 lb/ton
= 300.0 lb/hr

Annual = 300 lb/hr x 8760 hr/yr x 1/2000 lb/ton
= 1314 tpy

MIST: Hourly = 1800 tpd/24 hr/day x 0.15 lb/ton
= 11.2 lb/hr

Annual = 11.2 lb/hr x 8760 hr/yr x 2000 lb/ton
= 49.3 tpy

NOx: at 67500 dscf/ton of acid and 2.1×10^{-6} lb NOx per dscf

Hourly = 1800/24 tph x 67500 ft^3/ton
x (2.1×10^{-6}) lb/ft^3
= 10.6 lb/hr

Annual = 10.6 x 8760/2000
= 46.6 tpy

C and D as proposed at 2000 tpd

SO2: Hourly = 2000 tpd/24 x 4 lb/ton
= 333.3 lb/hr.

Annual = 333.3 lb/hr x 8760 hr/yr x 1/2000 lb/ton
= 1460 tpy

MIST: Hourly = 2000 tpd/24 x 0.15 lb/ton
= 12.5 lb/hr.

Annual = 12.5 x 8760/2000
= 54.7 tpy

NOx: Hourly = 2000 tpd/24 x 67500 ft^3/ton
x (2.1×10^{-6}) lb/ft^3
= 11.8 lb/hr

Annual = 11.8 lb/hr x 8760/2000
= 51.7 tpy

Emission Rate Increase for C and D

SO2: = 1460 - 1314
= 146 tpy, each plant

MIST: = 54.7 - 49.3
= 5.4 tpy, each plant

NOx: = 51.7 - 46.6
= 5.1 tpy, each plant

EMISSION RATE DECREASES

A and B as permitted at 1000 tpd

SO2: Hourly = 1000 tpd/24 hr/day x 29.0 lb/ton
= 1208 lb/hr

Annual = 1208 lb/hr x 8760 hr/yr x 1/2000 lb/ton
= 5293 tpy

MIST: Hourly = 1000 tpd/24 hr/day x 0.5 lb/ton
= 20.8 lb/hr

Annual = 20.8 x 8760/2000
= 91.3 tpy

NOx: at 97500 dscf/ton of acid and 2.1×10^{-6} lb NOx per dscf

Hourly = 1000/24 tph x 97500 ft^3/ton
x (2.1×10^{-6}) lb/ft^3
= 8.5 lb/hr

Annual = 8.5 x 8760/2000
= 37.2 tpy

A and B as proposed at 950 tpd

SO2: Hourly = 950 tpd/24 x 29 lb/ton
= 1148 lb/hr.

Annual = 1148 x 8760/2000
= 5028 tpy

MIST: Hourly = 950/24 tph x 0.5 lb/ton
= 19.8 lb/hr.

Annual = 19.8 x 8760/2000
= 86.7 tpy

NOx: Hourly = 950/24 tpy x 97000 ft^3/ton
x (2.1×10^{-6}) lb/ft^3
= 8.1 lb/hr

Annual = 8.1 x 8760/2000
= 35.3 tpy

Emission Rate Reduction for A and B

SO2: = 5028 - 5293
= -265 tpy, each plant

MIST: = 86.7 - 91.3
= -4.6 tpy, each plant

NOx: = 35.3 - 37.2
= 1.9 tpy, each plant

NET EMISSION RATE CHANGES

Pollutant	C and D Increase (tpy)	A and B Decrease (tpy)	Net Change (tpy)	Significant Change (1) (tpy)
SO2	+292	-530	-238	40
MIST	+10.8	-9.2	+1.6	7
NOx	+10.2	-3.8	+6.4	40

(1) 17-2.500(2)(e)2, FAC

ATTACHMENT 2

CALCULATION FOR SECTION III A, B, C, AND D

PRODUCT: Sulfuric Acid as 93% H_2SO_4

PRODUCT RATE: 2,000 Short tons per day (STPD) of 100% H_2SO_4 as 93% H_2SO_4 -or-

179.211 lbs/hr (2,000/0.93 x 2,000/24) of 93% Sulfuric Acid

PROCESS LOSSES: 0.005% equivalent to ash content of sulfur (consider negligible). Recovery is 99.7% equivalent to emission of 4.0 pounds SO_2 per ton of 100% H_2SO_4 produced.

PROCESS INPUT:

SULFUR: 2,000 STPD of 100% H_2SO_4 equivalent to 653 STPD of sulfur (2,000 x 32/98) which at an efficiency of 99.7% requires 655 STPD of sulfur (653/0.997) -or-

54.586 lbs/hr (655 x 2,000/24)

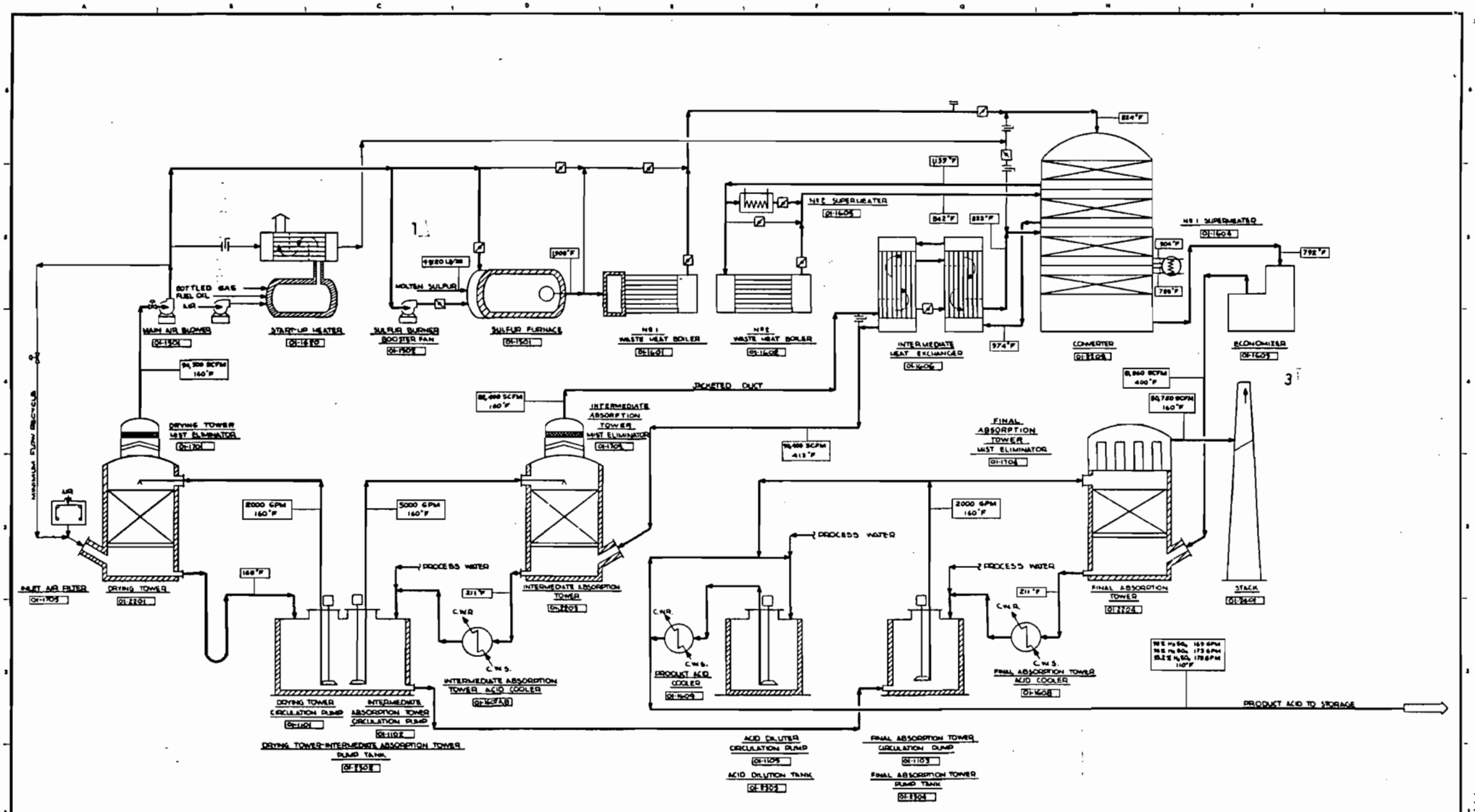
EMISSIONS:

SULFUR DIOXIDE: 333.3 lbs/hr (4 lb SO_2/ton 100% H_2SO_4 produced x 2,000 STPD/24) -or-

1.460 STPY (333.3 x 8,760/2,000)

H_2SO_4 MIST: 12.5 lbs/hr (0.15 lb H_2SO_4 Mist/ton 100% H_2SO_4 produced x 2,000 STPD/24) -or-

54.7 STPY (12.5 x 8,760/2,000)



CASE 2-79 SINGLE TRAIN 1800 STPD H_2SO_4
CASE 2-79 TWO(2)-1800 STPD H_2SO_4

NOTE
SCFM MEASURED AT 32°F & 14.7 PSIA

CONFIDENTIAL
BAYER-LURGI SYSTEM

Davy Powergas, Inc.

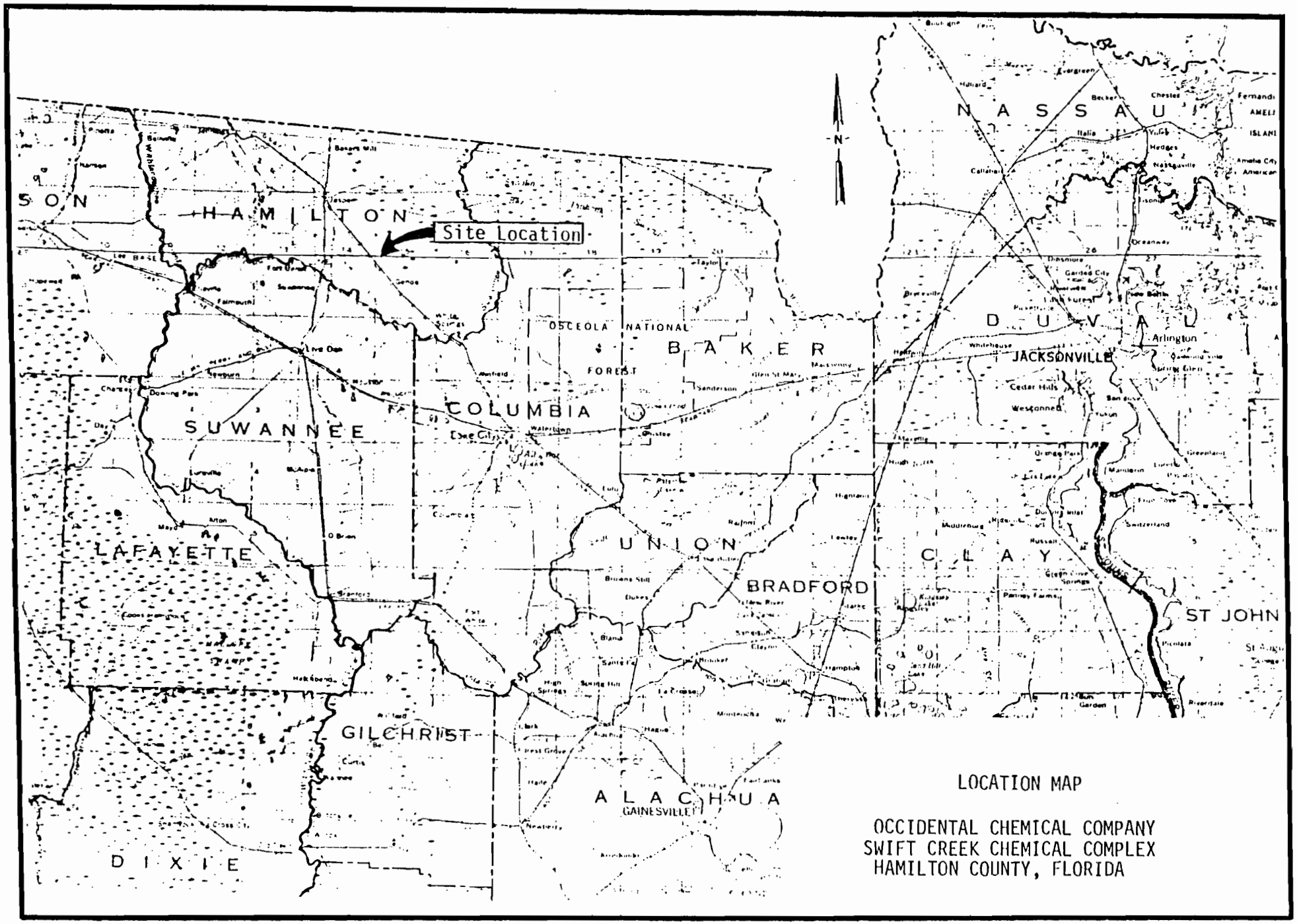
OXY-SPA PROJECT
1800 STPD SULFURIC ACID PLANT (SINGLE TRAIN)
PROCESS FLOW DIAGRAM

ISSUED FOR CONSTRUCTION

PROJECT NO. 2352 DRAWING NO. 01-F-0001 P0

NO	TITLE	NO	DESCRIPTION	ZONE	MADE AT	APP'D AT	DATE	NO	DESCRIPTION	ZONE	MADE AT	APP'D AT	DATE	NO	DESCRIPTION	ZONE	MADE AT	APP'D AT	DATE	ISSUE	PURPOSE	REV.	DATE
REFERENCE DRAWINGS		REVISIONS																		A	ISSUED FOR PROPOSAL	P0	9/10/76
																				DRAWING HISTORY			

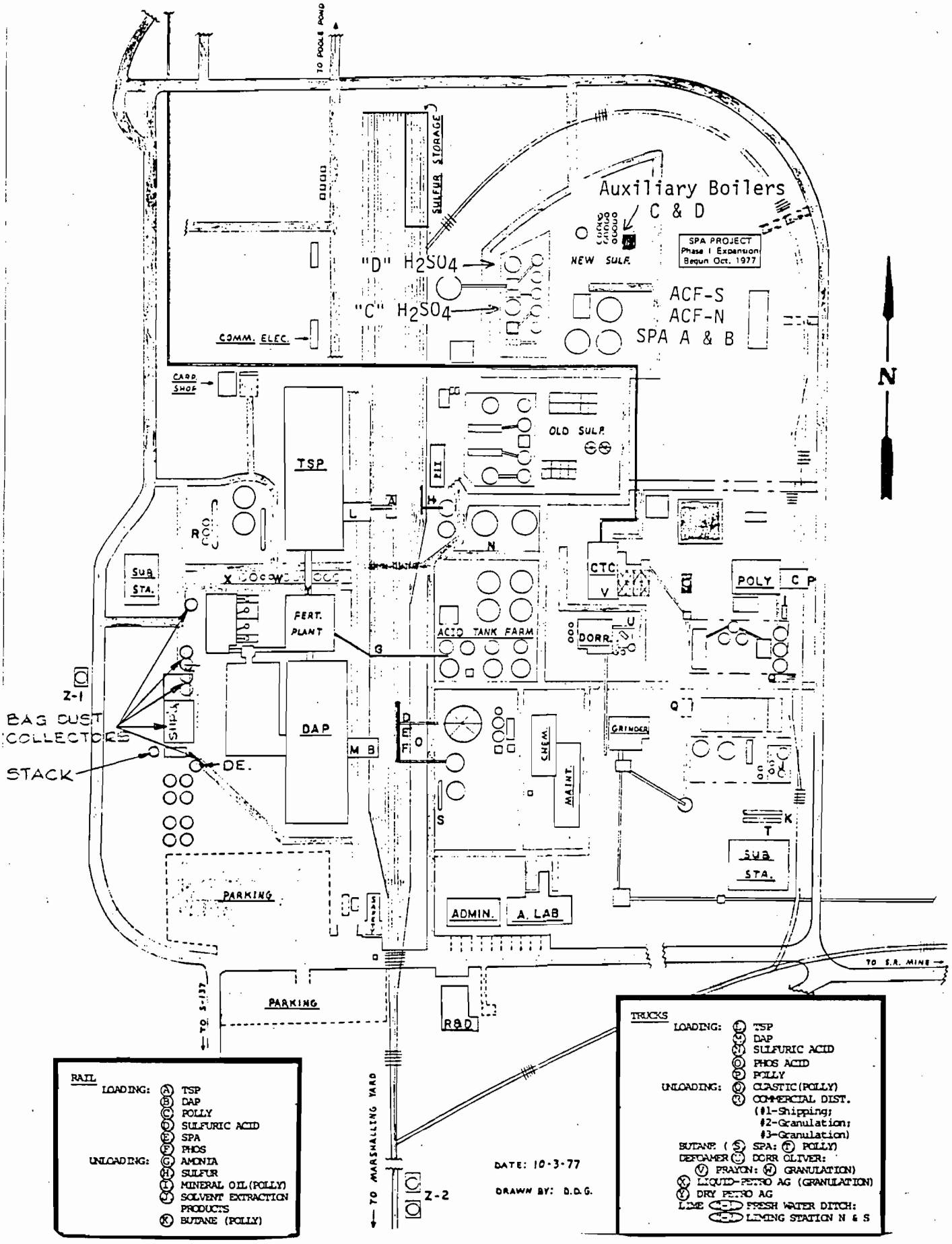
ATTACHMENT 3



LOCATION MAP

OCCIDENTAL CHEMICAL COMPANY
SWIFT CREEK CHEMICAL COMPLEX
HAMILTON COUNTY, FLORIDA

ATTACHMENT 4


TO POOLE POND
SULFUR STORAGE
Auxiliary Boilers
C & D
SPA PROJECT
Phase I Expansion
Begun Oct. 1977
NEW SULF.
"D" H2SO4
"C" H2SO4
ACF-S
ACF-N
SPA A & B
COMM. ELEC.
CARP. SHOP
OLD SULF.
TSP
SUB STA.
FERT. PLANT
ACID TANK FARM
CTC
DORR.
POLY
C P
Z-1
BAG DUST COLLECTORS
STACK
DE.
DAP
M B
CHEM.
MAINT.
GRINDER
SUB STA.
PARKING
ADMIN.
A. LAB
TO S.R. MINE
TO S-137
PARKING
R&D
TO MARSHALLING YARD
Z-2
N
RAIL
LOADING: A TSP
B DAP
C POLLY
D SULFURIC ACID
E SPA
F PHOS
UNLOADING: G AMONIA
H SULFUR
I MINERAL OIL (POLLY)
J SOLVENT EXTRACTION PRODUCTS
K BUTANE (POLLY)
TRUCKS
LOADING: 1 TSP
2 DAP
3 SULFURIC ACID
4 PHOS ACID
5 POLLY
UNLOADING: 6 CLASTIC (POLLY)
7 COMMERCIAL DIST.
(#1-Shipping;
#2-Granulation;
#3-Granulation)
BUTANE (S) SPA: (F) POLLY)
DEFOAMER (U) DORR OLIVER:
(V) PRAYON: (W) GRANULATION)
8 LIQUID-PETRO AG (GRANULATION)
9 DRY PETRO AG
LIME (X) FRESH WATER DITCH:
(Y) LIMING STATION N & S
DATE: 10-3-77
DRAWN BY: D.D.G.

AC 24-131270

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803

DER

FEB 27 1987

BAQM

BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ALEX SENKEVICH
DISTRICT MANAGER

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

SOURCE TYPE: Double Absorption Sulfuric Acid [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) Sulfuric Acid Plant "D"

SOURCE LOCATION: Street SR 137 City

UTM: East (17) 328,320 North 3,368,820

Latitude ___° ___' ___"N Longitude ___° ___' ___"W

APPLICANT NAME AND TITLE: Occidental Chemical Agricultural Products Inc.

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

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

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

I certify that the statements made in this application for a 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: Hudson C. Smith

Hudson C. Smith, General Manager
Name and Title (Please Type)

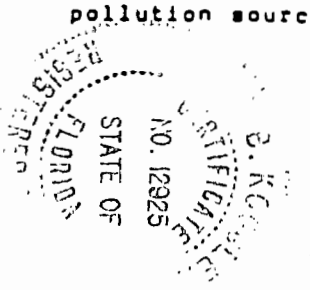
Date: 2/13/87 Telephone No. (904) 397-8101

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)

KOOGLER & ASSOCIATES
Company Name (Please Type)

1213 N.W. 6th Street, Gainesville, FL 32601
Mailing Address (Please Type)

Florida Registration No. 12925 Date: 2/11/87 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.

The production rates of the C and D sulfuric acid plants are being increased from 1800 to 2000 tons per day of 100% acid. The increased SO2, acid mist and NOx emissions will be offset by reducing the permitted production capacities of the A and B sulfuric acid plants from 1000 to 900 tons per day (see Attachment1).

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

Start of Construction March 1987 Completion of Construction April 1987

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.)

Existing control system (double absorption towers and high efficiency mist eliminators) will be adequate to control emissions at the higher rate.

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

A024-107480 issued 8/22/85 and expiring 8/26/90

A024-34185 issued 1/15/81 and expiring 9/30/85

A024-2485 issued 10/9/75 and expiring 9/30/80; AC24-2132 issued 11/6/73 and expiring

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) Major modification with ofsetting emissions

1. Is this source in a non-attainment area for a particular pollutant? No

   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. No

3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII. No

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

5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source? No

H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source? No

   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.

See Attachment 1

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	Ash	App. 0.005%	54,586	

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

1. Total Process Input Rate (lbs/hr): 54,586 (sulfur)

2. Product Weight (lbs/hr): 179.211 or 93% H2SO4

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	
Sulfur Dioxide	333.3	1460	17-2.600(2)(b)	333.3	333.3	1460	2
H2SO4 mist	12.5	55	17-2.600(2)(b)	12.5	225	985	2
VE	10%		17-2.600(2)(b)	10%			

[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).

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)
Double Absorption	SO2	99.7%	NA	Design & test
Contact H2SO4 Parsons				
Plant				
Brink ES mist	H2SO4 mist	94%	0-10	Tests
eliminators				

E. Fuels NOT APPLICABLE

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

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

Fuel Analysis:

Percent Sulfur: _____ 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 _____ Maximum _____

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

NONE

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

Stack Height: 150 ft. Stack Diameter: 9.0 ft.

Gas Flow Rate: 112,750 ACFM 93,750 DSCFM Gas Exit Temperature: 175 °F.

Water Vapor Content: 0 % Velocity: 29.5 FPS

SECTION IV: INCINERATOR INFORMATION

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 ATTACHMENTS 2-5)

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)

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

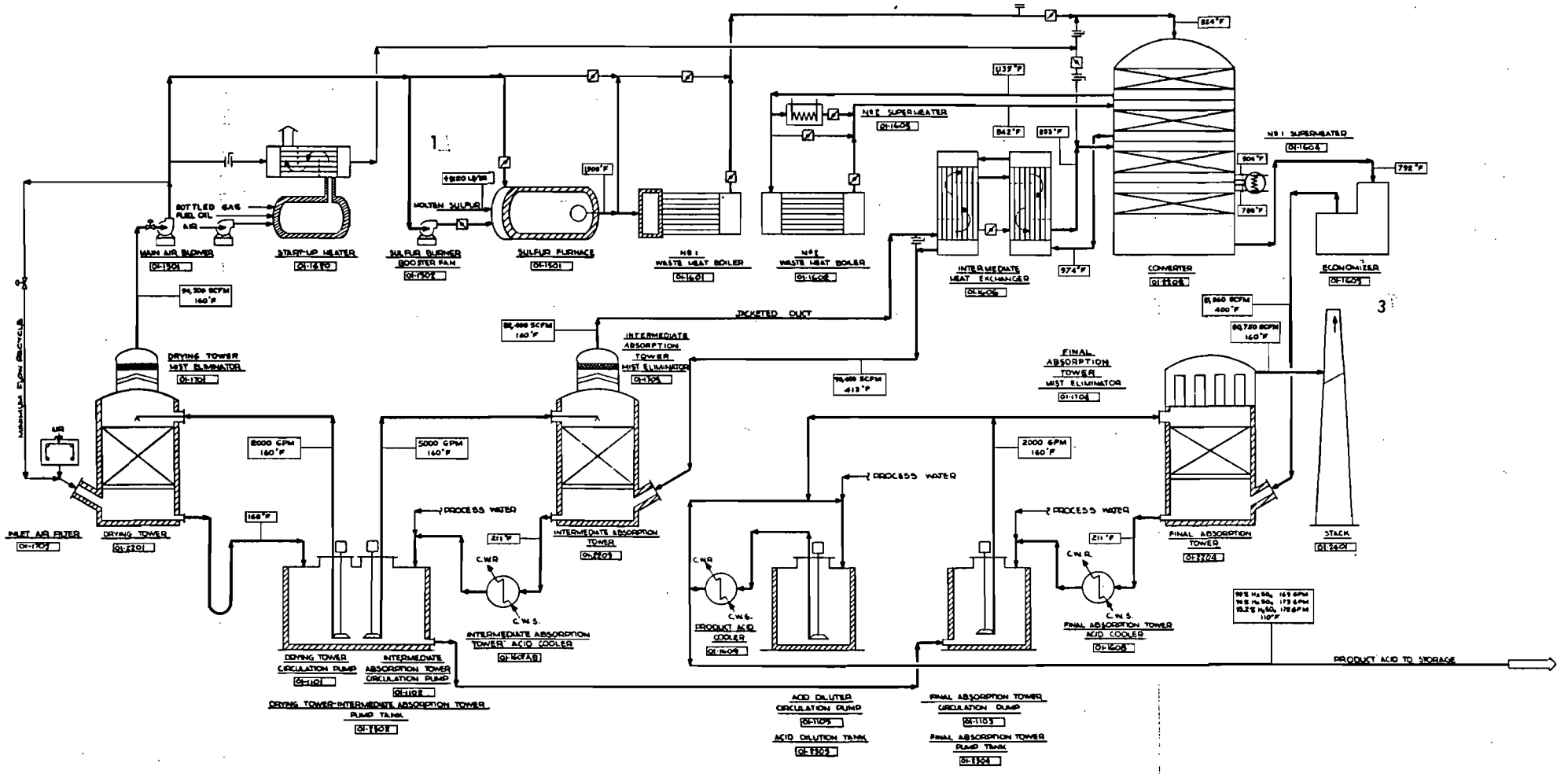
E. Emission Data Used in Modeling

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.



CASE I-79 SINGLE TRAIN 1800 STPD H_2SO_4
CASE II-79 TWO(2)-1800 STPD H_2SO_4

NOTE
SCFM MEASURED AT 32°F @ 14.7 PSIA

CONFIDENTIAL
BAYER/LURGI SYSTEM

Davy Powergas, Inc.

OXY-SPA PROJECT
1800 STPD SULFURIC ACID PLANT (SINGLE TRAIN)
PROCESS FLOW DIAGRAM

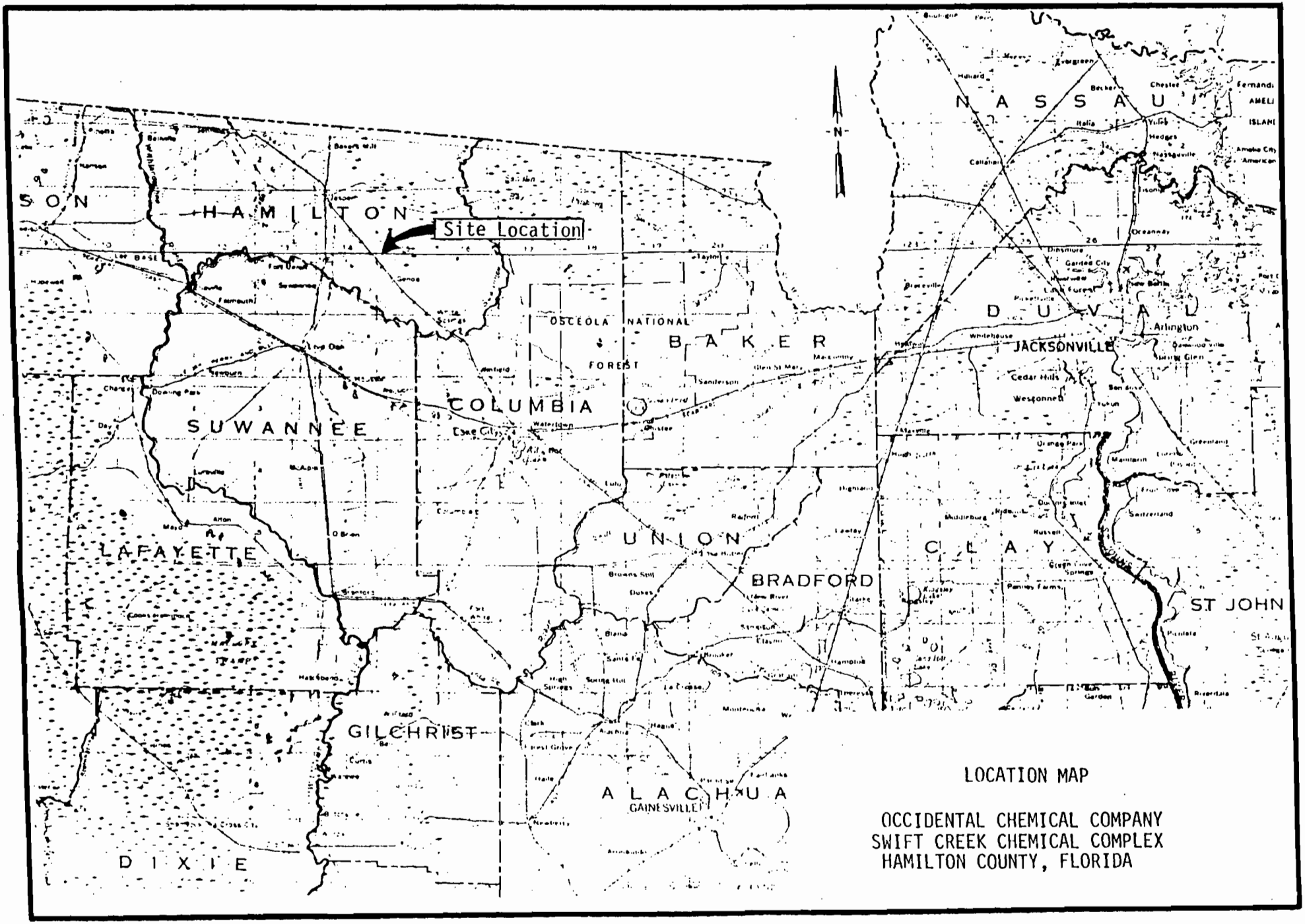
ISSUED FOR CONSTRUCTION
SPG APPROVAL DATE
CLIENT APPROVAL DATE
PROJECT NO. 2352 DRAWING NO. 01-F-0001 REV. Po
SCALE

NO.	TITLE
REFERENCE DRAWINGS	

NO.	DESCRIPTION	ZONE	STATE AT	STATE AT	DATE
REVISIONS					

ISSUE	PURPOSE	REV.	DATE
A	1350 BID PROPOSAL	Po	9/10/79
DRAWING HISTORY			

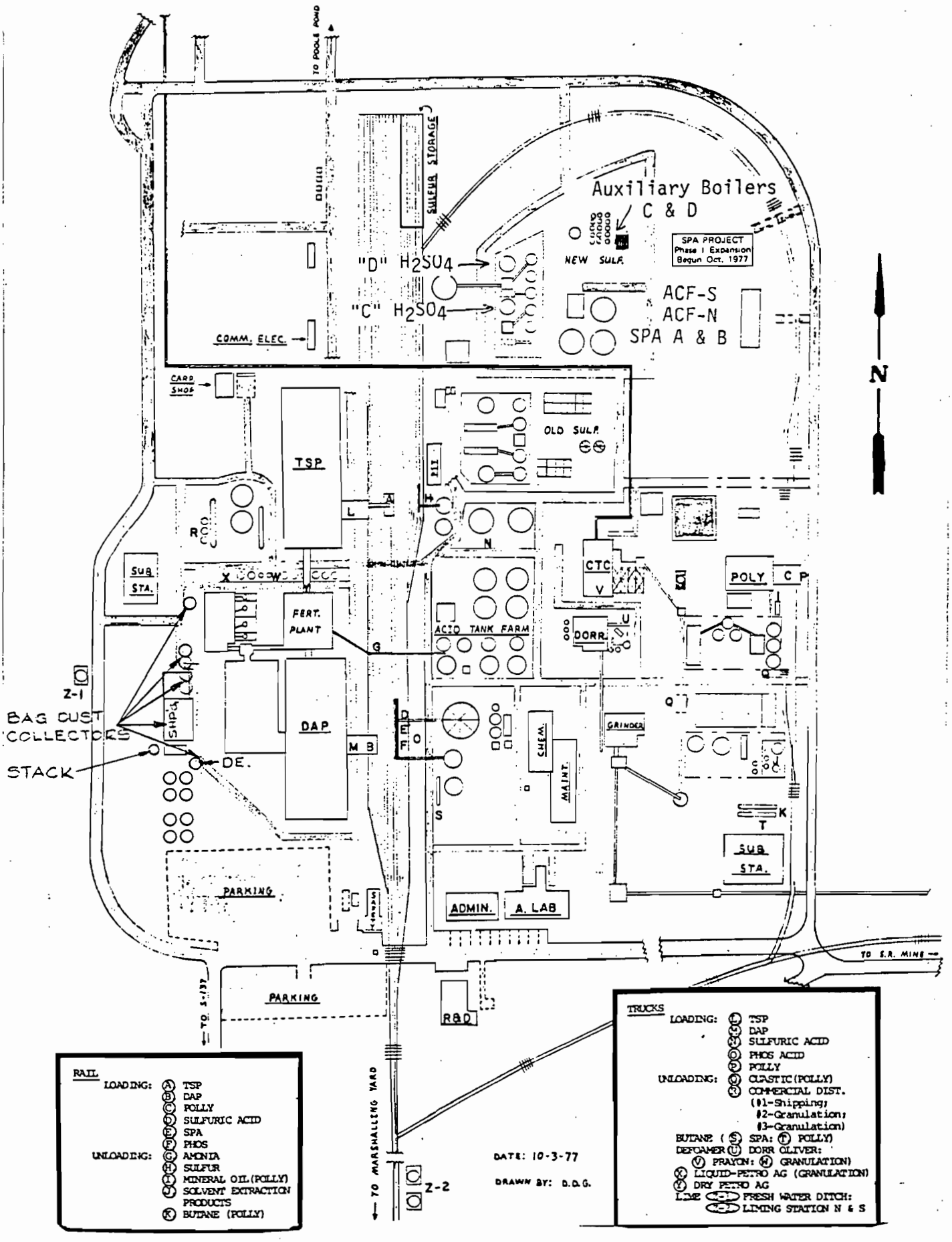
ATTACHMENT 3



LOCATION MAP

OCCIDENTAL CHEMICAL COMPANY
SWIFT CREEK CHEMICAL COMPLEX
HAMILTON COUNTY, FLORIDA

ATTACHMENT 4


TO POOLE POND
SULFUR STORAGE
Auxiliary Boilers
C & D
SPA PROJECT
Phase I Expansion
Begun Oct. 1977
NEW SULF.
"D" H2SO4
"C" H2SO4
ACF-S
ACF-N
SPA A & B
COMM. ELEC.
CARP SHOP
OLD SULF.
TSP
SUB STA.
FERT. PLANT
ACID TANK FARM
CTC
DORR.
POLY
C P
DAP
GRINDER
SHEM.
MAINT.
SUB STA.
PARKING
ADMIN.
A. LAB
R&D
Z-1
BAG DUST COLLECTORS
STACK
DE.
TO S.R. MINE
TO S-137
TO MARSHALLING YARD
Z-2
N
RAIL
LOADING: A TSP
B DAP
C POLLY
D SULFURIC ACID
E SPA
F PHOS
UNLOADING: G AMONIA
H SULFUR
I MINERAL OIL (POLLY)
J SOLVENT EXTRACTION PRODUCTS
K BUTANE (POLLY)
TRUCKS
LOADING: T TSP
DAP
SULFURIC ACID
PHOS ACID
POLLY
UNLOADING: CAUSTIC (POLLY)
COMMERCIAL DIST.
(#1-Shipping;
#2-Granulation;
#3-Granulation)
BUTANE (S) SPA: (T) POLLY)
DEFOAMER (U) DORR OLIVER:
(V) PRAYON: (W) GRANULATION)
LIQUID-PETRO AG (GRANULATION)
DRY PETRO AG
LIME FRESH WATER DITCH:
LIMING STATION N & S
DATE: 10-3-77
DRAWN BY: D.O.G.

ATTACHMENT 1

The increased emissions of SO2, acid mist and NOx resulting from increasing the capacities of the C and D sulfuric acid plants will be offset by reducing the production rates, and hence emissions, from the A and B sulfuric acid plants.

EMISSION RATE INCREASES

C and D as permitted under federally enforceable permit conditions at 1800 tpd

SO2: Hourly = 1800 tpd/24 hr/day x 4 lb/ton
= 300.0 lb/hr

Annual = 300 lb/hr x 8760 hr/yr x 1/2000 lb/ton
= 1314 tpy

MIST: Hourly = 1800 tpd/24 hr/day x 0.15 lb/ton
= 11.2 lb/hr

Annual = 11.2 lb/hr x 8760 hr/yr x 2000 lb/ton
= 49.3 tpy

NOx: at 67500 dscf/ton of acid and 2.1×10^{-6} lb NOx per dscf

Hourly = 1800/24 tph x 67500 ft^3/ton
x (2.1×10^{-6}) lb/ft^3
= 10.6 lb/hr

Annual = 10.6 x 8760/2000
= 46.6 tpy

C and D as proposed at 2000 tpd

SO2: Hourly = 2000 tpd/24 x 4 lb/ton
= 333.3 lb/hr.

Annual = 333.3 lb/hr x 8760 hr/yr x 1/2000 lb/ton
= 1460 tpy

MIST: Hourly = 2000 tpd/24 x 0.15 lb/ton
= 12.5 lb/hr.

Annual = 12.5 x 8760/2000
= 54.7 tpy

NOx: Hourly = 2000 tpd/24 x 67500 ft^3/ton
x (2.1×10^{-6}) lb/ft^3
= 11.8 lb/hr

Annual = 11.8 lb/hr x 8760/2000
= 51.7 tpy

Emission Rate Increase for C and D

SO2: = 1460 - 1314
= 146 tpy, each plant

MIST: = 54.7 - 49.3
= 5.4 tpy, each plant

NOx: = 51.7 - 46.6
= 5.1 tpy, each plant

EMISSION RATE DECREASES

A and B as permitted at 1000 tpd

SO2: Hourly = 1000 tpd/24 hr/day x 29.0 lb/ton
= 1208 lb/hr

Annual = 1208 lb/hr x 8760 hr/yr x 1/2000 lb/ton
= 5293 tpy

MIST: Hourly = 1000 tpd/24 hr/day x 0.5 lb/ton
= 20.8 lb/hr

Annual = 20.8 x 8760/2000
= 91.3 tpy

NOx: at 97500 dscf/ton of acid and 2.1×10^{-6} lb NOx per dscf

Hourly = 1000/24 tph x 97500 ft^3/ton
x (2.1×10^{-6}) lb/ft^3
= 8.5 lb/hr

Annual = 8.5 x 8760/2000
= 37.2 tpy

A and B as proposed at 950 tpd

SO2: Hourly = 950 tpd/24 x 29 lb/ton
= 1148 lb/hr.

Annual = 1148 x 8760/2000
= 5028 tpy

MIST: Hourly = 950/24 tph x 0.5 lb/ton
= 19.8 lb/hr.

Annual = 19.8 x 8760/2000
= 86.7 tpy

NOx: Hourly = 950/24 tpy x 97000 ft^3/ton
x (2.1×10^{-6}) lb/ft^3
= 8.1 lb/hr

Annual = 8.1 x 8760/2000
= 35.3 tpy

Emission Rate Reduction for A and B

SO2: = 5028 - 5293
= -265 tpy, each plant

MIST: = 86.7 - 91.3
= -4.6 tpy, each plant

NOx: = 35.3 - 37.2
= 1.9 tpy, each plant

NET EMISSION RATE CHANGES

Pollutant	C and D Increase (tpy)	A and B Decrease (tpy)	Net Change (tpy)	Significant Change (1) (tpy)
SO2	+292	-530	-238	40
MIST	+10.8	-9.2	+1.6	7
NOx	+10.2	-3.8	+6.4	40

(1) 17-2.500(2)(e)2, FAC

ATTACHMENT 2

CALCULATION FOR SECTION III A, B, C, AND D

PRODUCT: Sulfuric Acid as 93% H_2SO_4

PRODUCT RATE: 2,000 Short tons per day (STPD) of 100% H_2SO_4 as 93% H_2SO_4 -or-

179.211 lbs/hr (2,000/0.93 x 2,000/24) of 93% Sulfuric Acid

PROCESS LOSSES: 0.005% equivalent to ash content of sulfur (consider negligible). Recovery is 99.7% equivalent to emission of 4.0 pounds SO_2 per ton of 100% H_2SO_4 produced.

PROCESS INPUT:

SULFUR: 2,000 STPD of 100% H_2SO_4 equivalent to 653 STPD of sulfur (2,000 x 32/98) which at an efficiency of 99.7% requires 655 STPD of sulfur (653/0.997) -or-

54.586 lbs/hr (655 x 2,000/24)

EMISSIONS:

SULFUR DIOXIDE: 333.3 lbs/hr (4 lb SO_2/ton 100% H_2SO_4 produced x 2,000 STPD/24) -or-

1.460 STPY (333.3 x 8,760/2,000)

H_2SO_4 MIST: 12.5 lbs/hr (0.15 lb H_2SO_4 Mist/ton 100% H_2SO_4 produced x 2,000 STPD/24) -or-

54.7 STPY (12.5 x 8,760/2,000)

Hand Delivered
to Pradeep Raval
2/22/88 @ 3:30 pm

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

February 19, 1988

DER

FEB 22 1988

BAQM

Mr. Ernie Frey
District Manager
Department of Environmental
Regulation
3426 Bills Road
Jacksonville, FL 32207

Dear Mr. Frey:

By this letter, Occidental Chemical Company is requesting a permit revision to allow operation at increased rates for the following plants:

°	"A" Sulfuric Acid	AO24-103966	FROM 800 TPD to 1000 TPD
°	"C" Sulfuric Acid	AO24-131271	FROM 2000 TPD to 2200 TPD
°	"D" Sulfuric Acid	AO24-131270	FROM 2000 TPD to 2250 TPD

Stack testing on these plants will be conducted at the elevated rates as soon as permission is received from your office and the results of these tests will be submitted as soon as they are available.

The basis for this request is an emissions trade-off between the "A", "B", "C", and "D" Sulfuric Acid plants. The "B" Sulfuric Acid plant is currently permitted for operation at 800 TPD and emissions of 23,200 lb/day of SO_2 and 400 lb/day of acid mist. Although this plant could be started to meet the demand for additional sulfuric acid it would be economically and environmentally more desirable to shift this additional production capacity to our plants which are already operating. Although this shift in production capacity will cause an increase in the total emissions from the operating plants, the shifting of the bulk of the production to the more modern and efficient "C" and "D" plants will result in a net decrease in the total emissions. This is summarized in the attached table.

It is anticipated that there will be some modernization work performed at both "C" and "D" Acid plants within the next 12 to 18 months. After completion of that work it is anticipated that we will request permission to test and possibly modify the permits for operation at a 2300 TPD rate for each plant. This would complete the trade-off for production tonnage with the "B" Sulfuric Acid plant.

If FDER approves these permit modifications Occidental Chemical will benefit economically by not having to start up the "B" Sulfuric Acid plant and all the people of the State of Florida will benefit by a reduction in the total permitted air emissions to the environment. As shown in the accompanying table, this is a net reduction of approximately 15,000 lb/day of SO_2 and 220 lb/day of acid mist.

If I may provide additional information concerning this request, please do not hesitate to contact me.

Best Regards,

Charles B. Pults
Environmental Engineer

psb

cc: M. J. Fitzsimmons, FDER, Jacksonville, FL
W. P. Stewart, FDER, Jacksonville, FL
R. P. Vogh, FDER, Gainesville, FL
R. E. McNeill, OXY
W. M. Miller, OXY
M. E. Pauley, OXY

Copied: Pradeep Raval CHF IBT 2/23/88

TABLE 1

EMISSION RATE COMPARISONS

	CURRENT PERMITTED RATE			PROPOSED MODIFICATIONS		
	TPD	SO_2 (lb/ton)	MIST (lb/ton)	TPD	SO_2 (lb/ton)	MIST (lb/ton)
"A" Sulfuric	800	29 (23200 PPD)	0.50 (400 PPD)	1000	29 (2900 PPD)	0.50 (500 PPD)
"B" Sulfuric	800	29 (23200 PPD)	0.50 (400 PPD)	0 0	0 0	0 0
"C" Sulfuric	2000	4 (8000 PPD)	0.14 (280 PPD)	2200	4 (8800 PPD)	0.14 (308 PPD)
"D" Sulfuric	2000	4 (8000 PPD)	0.14 (280 PPD)	2250	4 (9000 PPD)	0.14 (315 PPD)

CURRENTLY PERMITTED:

All plants (A + B + C + D) operating = 5600 TPD H_2SO_4
Maximum SO_2 Permitted = 62400 lb/day
Maximum Mist Permitted = 1360 lb/day

REQUESTED MODIFICATIONS:

Plants (A + C + D) operating = 5450 TPD H_2SO_4
Maximum SO_2 Permitted = 46800 lb/day
Maximum Mist Permitted = 1123 lb/day

EMISSION DIFFERENCES:

By shifting production to the currently operating plants a **NET REDUCTION** in total emissions to the environment occurs.

SO_2 (Max) 62400 - 46800 = **15600 lb/day**
Mist (Max) 1360 - 1123 = **237 lb/day**

11/16/1987

KOOGLER & ASSOCIATES, *Environmental Services*
1213 NW 6th Street • Gainesville, Florida 32601 • 904/377-5822

11/18/87
CHF
FYI

Mr. Pradeep Ravel
Florida Department
of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

KOOGLER & ASSOCIATES, *Environmental Services*
1213 NW 6th Street • Gainesville, Florida 32601 • 904/377-5822

KA 102-86-04

November 13, 1987

Mr. John Brown
Florida Department
of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: Occidental Chemical Company
Test Procedure for Determining Sulfur Dioxide and
Sulfuric Acid Mist Emission Rates

Dear Mr. Brown:

During a visit to Tallahassee on October 20, 1987, I had the opportunity to talk with you and Pradeep Ravel regarding possible amendments to the air permits for the Occidental sulfuric acid plants. The amendments we discussed would specifically state the procedure that is to be used to calculate sulfur dioxide and sulfuric acid mist emission rates from the plants. This discussion was prompted by my review of permits that were recently issued to modify the operating conditions of the "C" and "D" sulfuric acid plants (Permits AC24-131270 and AC24-131271) at Occidental's Suwannee River Chemical Complex.

The referenced permits for the "C" and "D" sulfuric acid plants state in part (Specific Condition No. 7):

> A compliance test shall be carried out in accordance with 40CFR60, Subpart H. ...

In reviewing the test methods and procedures of 40CFR60, Subpart H, (Section 60.85), I confirmed that Occidental has, in the past, complied with the compliance test requirements of Sections 60.85(a)(1) and (4) and of Section 60.85(e) and can reasonably continue to comply with these requirements. The test methods and procedures set forth in these sections specify procedures for determining the pounds of sulfur dioxide (SO2) and sulfuric acid mist emitted to the atmosphere per ton of 100 percent acid produced.

Basically, the method that Occidental uses, and a method set forth in Section 60.85(e), involves the use of EPA Method 8 to measure the concentration of SO2 and acid mist in a cubic foot of stack gas, the use of EPA Method 3 to determine the oxygen content of the stack gas and the use of an "S" factor to calculate the pounds of SO2 and acid mist emitted per ton of acid produced. The "S" factor referenced in this method is described in 40CFR60.84(d) and is the number of cubic feet of stack gas generated per ton of 100 percent sulfuric acid produced. Occidental was instrumental in having the "S" factor procedure incorporated into 40CFR60, Subpart H, as I will discuss later.

As stated in the preceding paragraph, the test methods and procedures of 40CFR60, Subpart H, which Occidental has and will continue to comply with, set forth the procedures for calculating the pounds of SO2 and sulfuric acid mist per ton of acid produced. In addition to this emission limit, however, the permits issued by the Florida Department of Environmental Regulation (FDER) also limit the hourly mass emission rate of both SO2 and sulfuric acid mist (i.e., the permits limit the pounds of SO2 and acid mist that can be emitted into the atmosphere each hour). This is a requirement that is beyond the requirements of 40CFR60, Subpart H.

To demonstrate compliance with this state-imposed mass emission limit, Occidental, in accordance with correspondence to the Northeast District office of FDER, dated April 2, 1981, has multiplied the pounds of SO2 and sulfuric acid mist emitted per ton of acid by the hourly average sulfuric acid production rate over the test period. The sulfuric acid production rates have been determined by acid flow totalizers which have been cross-checked against tank strappings, steam production rates and long-term sulfur consumption records. The acid production rates determined by the totalizers have also been included in the compliance test reports to document the sulfuric acid production rates at the time of a compliance test. The Department has accepted the acid production rates determined by the totalizers, based upon descriptions and information on these measuring devices provided by Occidental at the Department's request.

Based on the fact that the pounds of SO2 and acid mist emitted per ton of acid have been determined in accordance with requirements of 40CFR60.85 and the fact that the acid production rates during the test period have been determined by a method found acceptable by the Department, it follows that the determination of the mass emission rates of SO2 and acid mist (pounds per hour) based on these two factors should also be acceptable to the Department. During our discussion on October 20, 1987, and based upon previous discussions we've had of this matter, I believe you stated that you had no objection to calculating the mass emission rates of SO2 and acid mist using the procedure that Occidental has used for the past six years; i.e., the procedure outlined above.

The other procedure for calculating the mass emission rate of SO2 and acid mist (pounds per hour) is to multiply the SO2 and acid mist concentrations as determined by EPA Method 8 (pounds per cubic foot) by the hourly stack gas flow rate (cubic feet per hour). The SO2 and acid mist mass emission rates determined by this procedure should equal the mass emission rates determined by the procedure outlined in the previous paragraphs if the stack gas flow rate is accurately measured.

Regarding the stack gas flow rate measurements, Occidental has never been convinced that the stack gas flow rates from their sulfuric acid plants could be measured without significant error. During the period 1980-1981, Occidental spent considerable time and effort measuring stack gas flow rates from sulfuric acid plants and comparing these flow rates with the stack gas flow rate calculated from a mass balance across the plant. The measured stack gas flow rates were also compared with flow rates expected from the sulfuric acid plant turbine blowers. In virtually all cases, the measured stack gas flow rates were higher than the flow rates determined by the mass balance and the flow rates determined from the turbine blower performance curves. As a result, Occidental began relying exclusively on the use of the "S" factor for determining the pounds of SO2 and sulfuric acid mist emitted per ton of acid produced and the product of the unit SO2 and acid mist emission rates (pounds per ton) and the sulfuric acid production rate (tons per hour) to determine the mass emission rate (pounds per hour) of both SO2 and acid mist.

To codify the procedures that Occidental found to be most accurate for calculating emissions from their sulfuric acid plants, Occidental visited EPA on September 17, 1981 and discussed the "S" factor with Mr. Peter Westlin. On October 8, 1981, Occidental wrote to EPA and requested a formal recognition of the procedures. A copy of Occidental's letter to EPA and the attachments to that letter describing the "S" factor are attached hereto. Also attached are EPA's responses to Occidental's letter. As a result of this effort on the part of Occidental, the "S" factor method was incorporated into 40CFR60, Subpart H in 1983.

The attachments to Occidental's letter to EPA dated October 8, 1981, have been transmitted to the Department and have been discussed with you and/or other members of the Department's staff on several occasions. The information is attached hereto to provide you with a ready reference to the material.

Also, as I have stated in a previous paragraph, Occidental has discussed methods for determining the sulfuric acid production rate with the Department (see letter dated April 2, 1981). As a result of these discussions and other information provided by Occidental, it was mutually agreed to use the sulfuric acid plant totalizers as an accurate method of determining the sulfuric acid production rate during compliance test periods.

By this letter, Occidental is requesting that the product of the SO2 and sulfuric acid mist emissions (pounds per ton), as determined by 40CFR60.85, and the sulfuric acid production rate (tons per hour), determined by a method approved by the Department (the flow totalizers), be incorporated by amendment into the permits for the Occidental sulfuric acid plants as the procedure for determining the mass emission rates (pounds per hour) of SO2 and sulfuric acid mist. Although the review of the permits for Occidental's "C" and "D" sulfuric acid plants (AC24-131270 and AC24-131271) prompted my discussion with you and this request, Occidental would also like to have the permits for the "A" and "B" sulfuric acid plants at the Suwannee River Chemical Complex (AO24-103966 and AO24-103964) and the permits for the "E" and "F" sulfuric acid plants at the Swift Creek Chemical Complex (AO24-090784 and AO24-090785) amended to specify the procedure described herein for calculating the mass emission rate (pounds per hour) of SO2 and sulfuric acid mist.

In discussing this request with you, you stated that you would have your staff review Occidental's request once it was submitted and would also possibly discuss the matter with EPA. Occidental's contact with EPA in 1981 was Mr. Peter Westlin of the Emission Measurement Branch, Emission Standards and Engineering Division, USEPA, Research Triangle Park, North Carolina. I recently contacted Mr. Westlin at (919) 541-2237 and he indicated that he would be more than happy to discuss this matter with you or your staff.

I appreciate your review and consideration of this request and will be happy to provide any additional information that you may require to complete your review of this matter.

Very truly yours,

KOOGLER & ASSOCIATES

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

JBK:mab

cc: Mr. Peter Westlin, EPA, Research Triangle Park, N.C.
Mr. Pradeep Ravel, FDER, Tallahassee
Mr. Marvin Miller, Occidental Chemical Company

Copied: Pradeep Raval
CHF/BT
11/18/87 mb

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department gives notice of its intent to issue permits to Occidental Chemical Agricultural Products, Inc., to modify the existing C and D plants at the existing Suwannee River Chemical Complex (SRCC), located in White Springs, Hamilton County, Florida. The project will involve an increase in the acid production of C and D plants from 1800 tons per day (TPD) to 2000 TPD (each plant) and a reduction in the production of acid on the older A and B plants from 1000 TPD to 800 TPD (each plant). Piping size changes, if required, would be the only physical change associated with this modification. A determination of best available control technology (BACT) or lowest achievable emission rate (LAER) was not required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (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 Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has 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 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 32399-2400. 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 32399-2400

Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.
P. O. BOX 300 • WHITE SPRINGS, FLORIDA 32096
PHONE: 904-397-8101

message

TO Jasper News 8/10/87

DATE Please publish the attached legal notice in this weeks newspaper. Send proof of publication to

Bill Thomas
Dept. of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400

with a copy to:

Mary Pauley
Occidental Chemical Co.
P.O. Box 300
White Springs, FL 32096

SIGNED

reply

DATE Hand delivered to Jasper News
8/10/87 2:55 pm
MP

SIGNED

SENDER: Snap out Yellow copy only. Send White & Pink with carbons in set. RECEIVER: Write reply, keep White original, return Pink copy to sender.

FORM 11013, RAPIDFORMS, INC., BELLMAWR, N.J. 08031

Per our tele conversation of Sept 9, 1987

Marvin Miller
Opy - White Springs FL

10/9/87

OCCIDENTAL CHEMICAL COMPANY
FLORIDA OPERATIONS
Post Office Box 300, White Springs, Florida 32096

Ms. Maggie Janes
Department of Environmental
Regulation
2600 Blair Stone Road
Twin Tower Office Building
Tallahassee, FL 32399-2400

BEST AVAILABLE COPY

Received 8/20/87

The Jasper News

PUBLISHED WEEKLY
Jasper, Hamilton County, Florida

F FLORIDA
OF HAMILTON

re the undersigned authority personally appeared

inda Bray

who on oath says that he is

gal Secretary

sper News, a weekly newspaper published at Jasper n County, Florida; that the attached copy of adver- eing a

otice of Intent

in the matter of

rmits-Occidental Chemical Co.

in the

milton County

t, was published in said newspaper in the issues of

gust 13, 1987

further says that the said Jasper News is a news- lished at Jasper in said Hamilton County, Florida, and id newspaper has heretofore been continuously pub- id Hamilton County, Florida, each week and has been second class mail matter at the post office in Jasper, milton County, Florida, for a period of one year next the first publication of the attached copy of advertise- affiant further says that he has neither paid nor pro- person, firm or corporation any discount, rebate, or refund for the purpose of securing this advertise- ublication in said newspaper.

nda Bray

nd subscribed before me this 18th

August , A.D. 19 87

(Notary Public)

iblic, Florida, State at Large
ssion Expires March 29, 1988

File Copy

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department gives notice of its intent to issue permits to Occidental Chemical Agricultural Products, Inc., to modify the existing C and D plants at the existing Suwannee River Chemical Complex (SRCC), located in White Springs, Hamilton County, Florida. The project will involve an increase in the acid production of C and D plants from 1800 tons per day (TPD) to 2000 TPD (each plant) and a reduction in the production of acid on the older A and B plants from 1000 TPD to 800 TPD (each plant). Piping size changes, if required, would be the only physical change associated with this modification. A determination of best available control technology (BACT) or lowest achievable emission rate (LAER) was not required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (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 Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has 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 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 32399-2400. 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 32399-2400

Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

August 13, 1987.

DER
SEP 10 1987
BAQM

cc: Pradeep Raval
Tom Rogers
Miguel Flores
Wayne Duncan
Bill Stewart NE Dist

PM
8/12/87
Atlanta GA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

AUG 11 1987

DER

AUG 14 1987

BAQM

4APT/APB-aes

C. H. Fancy, P.E., Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Re: Suwannee River Chemical Complex
Occidental Chemical Agricultural Products, Inc.
Dear Mr. Fancy: Sulfuric Acid Plants C and D
AC 24-131270 & 131271

This is to acknowledge the receipt of your preliminary determination on the proposed modification at the above-referenced source.

After reviewing your determination, we concur with you that the proposed modification is not subject to PSD review. We also concur with your determination and the draft permit. Please submit copies of the final determination and permit when they are issued.

If you have any questions, please feel free to call me or Mr. Gary Ng of my staff at (404) 347-2864.

Sincerely yours,

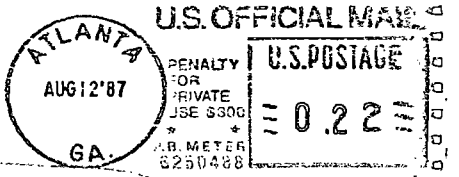
Bruce P. Miller

Bruce P. Miller, Chief
Air Programs Branch
Air, Pesticides, and Toxics
Management Division

Copied: B. Stewart, NE Dist
Pradeep Raval
Joni Rogers
Miguel Flores
} 8/17/87 mg

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300
AIR-4



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

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

June 30, 1987

DER
JUL 1 1987
BAQM

Mr. Pradeep Ravel
Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Re: Application to Construct/Modify Air Pollution Sources, Sulfuric Acid Plants "A", "B", "C", and "D", Permit Nos. AC24-131270 and 131271

Dear Pradeep:

As we've discussed with you by telephone and in our meeting of June 26, the reason for the delay in responding to your May 14 letter is that we have been working on possible alternatives to a permit which does not allow the flexibility to produce the amount of sulfuric acid we can now produce. The proposal we made in the June 26 meeting, which was to permit "A" and "B" at 800 tons per day (TPD), seemed to be a fair compromise, in that it would reduce net emissions for all possible operating scenarios. However, it still does not meet the requirement to offset permitted increases for "C" and "D" with permitted decreases on "A" and "B" based on actual past annual emissions.

After the June 26 meeting, we decided to make a determination regarding an agreement for no increase in permitted emissions of sulfuric acid mist for "C" and "D". According to calculations made by Dr. John Koogler (Attached), if we accept 0.14 lbs. mist per ton sulfuric acid produced by "C" and "D", and a capacity of 800 TPD on "A" and "B", then neither SO_2 or mist are limiting. Therefore, as I notified you by telephone yesterday, we request that you permit the pending application on this basis.

Our past data indicate that there will be no problem meeting 0.14 lbs. mist per ton sulfuric acid produced at "C" and "D". Most of the tests are in the 0.05 to 0.08 range. However, between now and when the permit is issued, we will run additional tests to be absolutely certain this limit can be met.

The above responds to items one and two of your May 14 letter. Item three of the letter requests a startup procedure to be used and if there is a specific sequence for startup of the four plants. In reference to the startup procedure, we are presently discussing this issue with the FDER staff in Tallahassee and Jacksonville. Additionally the air section staff in the Tallahassee office has copies of our startup procedures. A copy of these procedures are attached. Occidental does not object to a special condition in the permit which references these procedures. However, we would object strongly to specific detailed conditions effecting control room operations being included as a condition of the permit. This would limit our flexibility to make improvements in the procedures without a permit modification. Further, it does not appear that FDER has the authority to include such conditions as permit requirements.

There is no specific sequence of startup from the four plants. It should be noted that it is very infrequent that more than one plant is down at the same time, so that only one is normally started at a time. However, when two or more plants are to be started our practice is to start one, bring it into compliance with permitted emission rates, before startup of the next plant. In no instance are plants started simultaneously.

As we have discussed in prior meetings this application requires a fifteen day notice period, rather than a thirty day notice. We would appreciate your consideration of this factor when noticing the permit.

If there are any questions regarding any of the above, please contact Marvin, or me.

Sincerely,

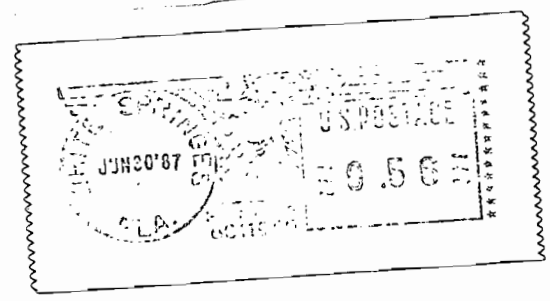
Gene McNeill

R. E. McNeill, P.E.
Director of Safety, Health
and Environmental Control
for Ag Products, Inc.

psb

Attachments

cc: W. M. Miller, Occidental Chemical Company
W. P. Stewart, P. E., FDER, Gainesville, FL
J. Koogler, Ph.d., P.E., Koogler & Associates
Pradeep Raval
Tom Rogers
C. H. Fancy/B. Thomas
} Delivered 7-1-87



FIRST CLASS MAIL

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

Mr. Pradeep Ravel
Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Copy
Clair/Burt
Engineering
Modeler

PROPOSED SO_2 AND MIST LIMITS FOR A, B, C AND D SULFURIC ACID PLANTS

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC
SUWANNEE RIVER CHEMICAL COMPLEX
WHITE SPRINGS, FL

SO_2

C & D PLANTS, PRESENT PERMITTED

SO_2 = 1800 tpd x 4.0 lb/ton x 365 day/yr x 1/2000

= 1314 ton/yr, each plant

A & B PLANTS, PRESENT ACTUAL
(1984/86 avg from Oxy letter of 3/30/87)

SO_2 = (4316 + 4099)/2

= 4207.5 ton/yr, each plant

PROPOSED

C & D PLANTS (each plant)

2000 ton/day production
4.0 lb SO_2 /ton
"m" day/yr operation

A & B PLANTS (each plant)

800 ton/day production
29 lb SO_2 / ton
"m" day/yr operation

ALLOWABLE EMISSIONS A+C = A+D = B+C = B+D

= 1314 + 4207.5 + (< 40/2)
= 5521.5 + (< 20) tpy

(Con't)

2/

ALLOWABLE EMISSIONS A/C, A/D, B/C, B/D (Cont)

=(2000 ton/day x 4.0 lb/ton x m day/yr x 1/2000)
+(800 ton/day x 29 lb/ton x m day/yr x 1/2000)

5521.5+(<20) = 4.0m + 11.6m

m - 355 days/yr operation for all plants

(<20 = 16.5 tpy)

<u>CHECK</u>

C & D PLANTS (each plant)

SO_2 = 2000 tpd x 4.0 lb/ton x 355 d/y x 1/2000

= 1420 tpy, each plant

A & B PLANTS (each plant)

SO_2 = 800 tpd x 29 lb/ton x 355 d/y x 1/2000

= 4118.0 tpy, each plant

TOTAL = 5538.0 tpy proposed, each set (A/C, A/D, B/C, B/D)

= 5521.5 tpy present, each set

INCREASE = 16.5 tpy each set

x2

= 33.0 tpy all 4 plants

< 40 tpy, O.K.

MIST

A & B - Reduce rate to 800 tpd ; no change in emission limit of 0.5 lb / ton

C & D PLANTS , PRESENT PERMITTED

MIST = 1800 tpd x 0.15 lb / ton x 365 day/yr x 1/2000

= 49.3 ton / yr , each plant

PROPOSED

C & D PLANTS (each plant)

2000 ton / day production
"m" lb mist / ton
355 day / yr operation

ALLOWABLE EMISSIONS (each plant)

= 49.3 + (< 7/2)

= 2000 lb/ton x "m" lb/ton x 355 d/yr x 1/2000

m = 0.14 lb/ton

(< 7/2 = 0.4 tpy)

CHECK

C & D PLANTS (each plant)

MIST = 2000 tpd x 0.14 lb/ton x 355 d/y x 1/2000

= 49.7 tpy , each plant

x 2

= 99.4 tpy , proposed both plants

= 98.6 tpy , present both plants

INCREASE = 0.8 tpy

< 7.0 tpy , O.K.

STARTUP GUIDELINES

GENERAL

1. If a plant has been down for more than four hours, the wind speed is less than four mph average as indicated on the control room monitor, and the restart is between 0200 and 1000, the area manager or complex manager must approve the startup. The manager who approves the startup will take into consideration the existing plant parameters such as sulfur furnace temperature, catalyst temperature, wind direction, velocity and plant performance startup history in reaching his decision. The manager has the discretion and may institute additional operating constraints to provide additional safeguards to prevent environmental damage.

2. When an SO_2 meter is out of service, plant production rate will not be raised nor will any changes be made in the converter temperature profile that would cause an increase in SO_2 emissions.

3. When a plant shutdown involving more than one sulfuric acid plant occurs, the startup of the sequent plants will not occur until the prior plant has been restarted and is in compliance.

4. When an acid plant is started up, stack O_2 and SO_2 will be monitored and action taken to ensure the plant stays in compliance.

5. Three hours prior to any scheduled startup, E/I technicians will test the SO_2 meter with span gas. Should the meter not test satisfactorily, startup will be delayed until repairs have been completed.

START-UP PROCEDURE

DORR-OLIVER SULFURIC ACID PLANTS

1. Have the "B" Operator blow down the waste heat boiler to 35%.

2. Start the 96% and 98% circulating pump turbines. Use maximum acid bypass around the 98% cooler until normal operating acid temperature is reached.

3. Position dampers as follows:

a. Furnace Inlet Damper	100% Open
b. Heat Exchanger Inlet Damper	50% Open
c. Return Air Damper	100% Open
d. Boiler Exit Damper	5% Open
e. Jug Damper	100% Open
f. C-Mass Dilution Air Damper	Shut
g. D-Mass Dilution Air Damper	Shut
h. Converter Exit Damper	100% Open

4. Have the "B"Operator start the sulfur feed pump.

5. Slowly open the main turbine throttle valve until the blower discharge pressure reaches 50".

6. Have the "B" Operator open one of the sulfur guns.

7. Open the sulfur feed valve 25%.

8. When the gun fires, adjust the sulfur feed valve to obtain a furnace temperature of 1100-1600 F. Keep the furnace temperature as high as possible within this range without allowing SO2 emissions to exceed the compliance level.

9. When the HGF inlet reaches 900-1000 F, open the boiler exit damper as necessary to maintain that temperature range until the HGF outlet reaches 750 F. Then open the boiler exit damper as necessary to achieve normal HGF operating temperatures.

10. Set up cross-circulation and dilution water flows when necessary to maintain proper acid concentrations.

11. When the inlet temperatures of all four masses are above 750 F, open the main turbine throttle valve until the blower discharge pressure reaches 100".

11. Operate dampers as follows:
    a. When A-mass inlet reaches 800-850 F, open the #1 heat exchanger inlet damper and close its bypass as necessary to maintain that temperature range.
    b. When B-mass inlet reaches 800-850 F, open the #2 heat exchanger inlet damper and close its bypass as necessary to maintain that temperature range.
    c. When C-mass inlet reaches 800-850 F, close the primary superheater bypass as necessary to maintain that temperature range.
    d. When D-mass inlet reaches 800-850 F, open the boiler exit damper and close the jug damper as necessary to maintain that temperature range.

12. When SO2 emissions return to the compliance level, adjust dampers as necessary to achieve normal operating temperatures in the converter and heat exchangers.

13. Bring the plant up to the desired rate by slowly increasing the air and sulfur rates in small increments, followed by intervals during which all operating parameters are checked and adjusted.

14. When the HGF reaches its normal operating temperature, slowly close the HGF bypass damper.

NOTES:

1. This procedure is meant to serve as a guideline only. If circumstances necessitate different actions than those given above, the supervisor will direct such action.

2. SO2 and O2 stack concentrations should be monitored continuously during start-up to determine SO2 emissions.

3. Under no condition should O2 in the stack drop below 3%. Serious plant damage can result due to the sublimation of sulfur. Immediately increase air flow if O2 drops to 3% or less.

4. The blower's critical range is 2300-2750 rpm. Operating the blower in this range must be avoided. Speed change through this range should be done quickly to avoid possible turbine damage.

5. Sulfur guns operate best with high sulfur pressure. Fire an additional gun only when furnace temperature cannot be maintained with the sulfur control valve at least 3/4 open.

START-UP PROCEDURE
CTC SULFURIC ACID PLANTS

1. Have the "C" Operator blow down the waste heat boiler to 35%.

2. Start the acid circulating pumps. Use maximum acid bypass around the absorption tower coolers until normal operating acid temperature is reached.

3. Position dampers and valves as follows:

a. Furnace Inlet Damper	100% Open
b. Boiler Exit Damper	5% Open
c. Jug Damper	100% Open
d. HGF Bypass Damper	100% Open
e. Heat Exchanger Inlet Dampers	Shut
f. Heat Exchanger Bypass Dampers	100% Open
g. E-Mass Dilution Air Valve	Shut
h. Economizer Exit Damper	100% Open
i. Primary Superheater Bypass	100% Open

4. Have the "C" Operator open the top left sulfur gun.

5. Ensure the main turbine governor valve is set at minimum, then have the "C" Operator slowly open the turbine throttle valve until the blower discharge pressure reaches 50".

6. Start the sulfur feed pump with the panel mounted switch and open the sulfur feed valve by adjusting its controller to 5 psig air pressure.

7. When the gun fires, adjust the sulfur feed valve to obtain a furnace temperature of 1100-1600 F. Keep the furnace temperature as high as possible within this range without allowing SO2 emissions to exceed the compliance level.

8. When #1 heat exchanger shell inlet reaches 1000-1050 F, open the boiler exit damper as necessary to maintain that temperature range. Do not exceed 1050 F.

9. When the inlet temperatures of the top three masses are all above 750 F, have the "C" Operator open the main turbine throttle valve completely, leaving furthur control to the "A" Operator with the governor valve. The turbine should come to about 3000 rpm.

10. Adjust the sulfur feed valve to obtain a furnace temperature of 1375-1425 F.

12. Operate dampers as necessary to obtain normal operating temperatures in the converter:
    a. Open the boiler exit damper and adjust the jug damper to control A-mass inlet.
    b. Open the heat exchanger inlet damper and adjust the furnace inlet damper to control B-mass inlet.
    c. Open the C-mass dilution air damper to control C-mass inlet.
    d. Open the D-mass dilution air damper to control D-mass inlet.

13. Bring the plant up to the desired rate by slowly increasing the air and sulfur rates in small increments, followed by intervals during which all operating parameters are checked and adjusted.

NOTES:

1. This procedure is meant to serve as a guideline only. If circumstances necessitate different actions than those given above, the supervisor will direct such action.

2. SO2 and O2 stack concentrations should be monitored continuously during start-up to determine SO2 emissions.

3. Under no condition should O2 in the stack drop below 3%. Serious plant damage can result due to the sublimation of sulfur. Immediately increase air flow if O2 drops to 3% or less.

4. Sulfur guns operate best with high sulfur pressure. Fire an additional gun only when furnace temperature cannot be maintained with the sulfur control valve at least 3/4 open.

I-A "E" AND "F" SULFURIC ACID PLANT START UP PROCEDURE

Safety Equipment Required - None

Other Equipment Required - None

A. Twenty to thirty (20-30) minutes prior to the startup:

1. Bring boiler level to -2".

2. Stroke the BPCV and leave in manual at 50%.

3. Close C&D mass temperature control dampers and open B mass temperature control damper. Verify damper position in the field.

4. Open the hot gas filter bypass damper.

B. At startup:

1. Open the slide gate when the "C" Operator begins opening the manual dampers.

2. Put H1004 (turbine speed control) in manual at 0% and T1039 (furnace temperature control valve) in manual at 100%. Open the jug damper 50% on "F" plant and 100% on "E" plant.

3. The boiler exit damper must be closed at least 75% on "E" plant.

4. The boiler exit damper on "F" plant must be closed 50% if the furnace temperature prior to start up is less than 700 deg. C. If the furnace temperature is greater than 700 deg. C., leave the boiler exit damper open.

5. Ensure the sulfur supply to ALL sulfur guns is shut off with the exception of the one gun that will be used for startup. Start up on a 700 TPD gun if available. If not, start up on a 900 TPD gun.

6. Have the "C" Operator bring the blower speed to at least 1000 RPM.

7. Start the sulfur pump. The amps on the pump will start at about 65-70%. Then the amps will slowly build up to about 80%. They will then drop off about 10%. When the amps drop off, there should be sulfur at the front of the furnace.

8. When the fire lights in the furnace (indicated by an increase in furnace temperature), adjust the blower speed to maintain the furnace temperature at the same temperature prior to startup.

CAUTION: DO NOT LET O_2 DROP BELOW 3.5% AT ANY TIME WHILE THE PLANT IS OPERATING.

I-A "E" AND "F" SULFURIC ACID PLANT START UP PROCEDURE

B. (continued)

9. Check the #/ton chart and determine if the plant is in compliance. If it is not, reduce furnace temperature until the emission rate is in compliance, but do not allow the furnace to be less than 650°C. Steam production must start as soon as possible in order to control "B" mass inlet temperature.

10. Raise A mass inlet temperature to 440°C AS SOON AS POSSIBLE. (See 14A).

11. Raise plant rate and furnace temperature from this point as the converter catalyst beds start converting. The plant will be maintained at less than 4#/ton of emissions during the startup or corrective action must be taken. The stack SO_2 must be, if possible, maintained at less than 1000 ppm at all times.

12. The converter beds will start converting properly when the bed inlet temperature exceeds 400°C. Conversion across a catalyst bed will decrease when the inlet temperature exceeds 460-470°C.

13. It is not practical to set parameters at which point rate may be increased due to the many variables involved. All rate changes and temperature increases will be monitored closely to ensure emission standards are met. Immediate corrective action will be taken as necessary to reduce the emissions to less than 4#/ton.

14. As the plant heats up, control as follows:

    a. Control A mass inlet temperature with the boiler exit damper and the jug damper. Opening the boiler exit damper and closing the jug damper will lower A mass inlet temperature. When starting up, the boiler exit damper should be used to control until the boiler exit damper is fully opened. Then the jug damper should be used for control.

    b. Control B mass temperature inlet with the superheater bypass damper. Closing the damper will lower B mass inlet temperature.

    c. Control C&D mass inlet temperature as per the control range established for normal operating.

15. Have the "C" Operator unblock the dilution water isolation valves and the magmeter isolation valves once the temperature in the furnace is stabilized after the initial firing. Have the "C" Operator verify proper flow through the final and interpass concentration cells.

B. (continued)

16. Do not increase furnace temperature to more than 1000°C until all converter bed temperatures are greater than 400°C.

17. Place the hot gas filter in service.

18. Place the 96% acid system in service if it is winter.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

July 29, 1987

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Hudson C. Smith
General Manager
Occidental Chemical Agricultural
Products, Inc.
Post Office Box 300
White Springs, Florida 32096

Dear Mr. Smith:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permits to modify the C and D sulfuric acid plants located at the existing Suwannee River Chemical Complex (SRCC), in White Springs, Hamilton County, Florida.

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/bm

Attachments

cc: J. B. Koogler, Ph.D., P.E.
B. Stewart, NE Dist.
Wayne Aronson
Miguel Flores

P 274 007 717

RECEIPT FOR CERTIFIED MAIL

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

Sent to Hudson C. Smith, Gen. Mgr Occidental Chem. Agr. Prod., Inc.	
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 07/31/87 Permits: AC 24-131270 AC 24-131271	

PS Form 3800, June 1985 ☆ U.S.G.P.O. 1985-480-794

PS Form 3811, July 1983 447-845

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. Hudson C. Smith
Occidental Chemical Agricultural Products Inc.
Post Office Box 300
White Springs, FL 32096

4. Type of Service:	Article Number
☐ Registered ☐ Insured ☒ Certified ☐ COD ☐ Express Mail	P 274 007 717

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X Clarence Rogers

7. Date of Delivery
8-3-87

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

DOMESTIC RETURN RECEIPT

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department gives notice of its intent to issue permits to Occidental Chemical Agricultural Products, Inc., to modify the existing C and D plants at the existing Suwannee River Chemical Complex (SRCC), located in White Springs, Hamilton County, Florida. The project will involve an increase in the acid production of C and D plants from 1800 tons per day (TPD) to 2000 TPD (each plant) and a reduction in the production of acid on the older A and B plants from 1000 TPD to 800 TPD (each plant). Piping size changes, if required, would be the only physical change associated with this modification. A determination of best available control technology (BACT) or lowest achievable emission rate (LAER) was not required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (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 Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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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 32399-2400

Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

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.

Preliminary Determination
and
Technical Evaluation

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

Sulfuric Acid Plants C and D
Permit Nos. AC 24-131270, 131271

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

July 27, 1987

I. Application

A. Applicant

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

B. Project and Location

The applicant proposes to modify the existing facility by increasing the sulfuric acid production capacity of the C and D plants at the permittee's Suwannee River Chemical Complex (SRCC) located in White Springs, Hamilton County, Florida. The project will involve an increase in the acid production of C and D plants from 1800 tons per day (TPD) to 2000 TPD (each plant) and a reduction in the production of acid on the older A and B plants from 1000 TPD to 800 TPD (each plant). Piping size changes, if required, would be the only physical change associated with this modification.

The UTM coordinates of this facility are zone 17, 328.3 km East and 3368.8 km North.

C. Sources Reviewed

The four sources reviewed in this technical evaluation will be the A, B, C, and D Sulfuric Acid Plants located at SRCC.

Occidental applied for the modification of their current permit on February 25, 1987. The application was deemed complete on July 1, 1987.

D. Facility Category

Occidental's SRCC 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 facility is also classified as a major one in accordance with Table 500-1 in Chapter 17-2 of the Florida Administrative Code (FAC).

II. Project Description

A. Project

Sulfuric acid is manufactured as an intermediate product in the manufacture of phosphoric acid. The A and B sulfuric acid plants installed originally are based on a single contact process whereas the C and D plants, built more recently, are based on double contact process. Through this modification, Occidental hopes to transfer part of the acid production capacity of the older A and B plants to the newer C and D plants. The reduction

in A and B plants' acid production will correspond to the increases in the C and D plants' production rates (netting out emissions). Both C and D plants are currently permitted under the Standards of Performance for New Stationary Sources (NSPS), 40 CFR 60, Subpart H. The modified emission limits on A and B plants will be incorporated into the permit modification for C and D plants so as to ensure federal enforceability.

The net emission increase due to this project will be 33 TPY for SO_2 (40 TPY significant emission level) and 0.8 TPY for acid mist (7 TPY significant emission level).

B. Operating Hours and Rates

The maximum operating hours and rates will be:

Sulfuric Acid Plant	TPD (100% Acid)	Annual Operating Hours
A	800	8520
B	800	8520
C	2000	8520
D	2000	8520

Note: TPD = Tons per day.

III. Rule Applicability

The proposed modified project will emit the pollutants sulfur dioxide (SO_2) and sulfuric acid mist and is subject to a preconstruction review in accordance with Chapters 17-2 and 17-4 of the Florida Administrative Code (FAC) and Chapter 403 of the Florida Statutes.

The facility is located in Hamilton County, an area designated as attainment for all pollutants, in accordance with Rule 17-2.420, FAC. The proposed modification will not be subject to Prevention of Significant Deterioration (PSD) Review Requirements since there is no net significant increase in the pollutants emitted (See Table 500-2) in accordance with Rule 17-2.500(2)(d)4., FAC.

The project will be subject to Rule 17-2.520, FAC, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements.

Sulfuric acid plants A and B will be subject to Source Specific Emission Limiting Standards in accordance with Rule 17-2.600(2)(a), FAC, as existing sulfuric acid plants. The standards limit SO_2 emissions to 29 lbs/ton of acid (100% acid), acid mist to 0.5 lb/ton acid (100% acid) and visible emissions (VE) to 10% opacity.

Plants C and D, already permitted under 40 CFR 60, Subpart H, NSPS for sulfuric acid plants, will be limited to emissions of SO_2 at 4 lbs/ton of acid produced (100% acid), acid mist at 0.14 lb/ton acid (100% acid) and VE at 10% opacity. The tighter limit on acid mist emissions (as compared to the standard of 0.15 lb/ton acid) is proposed to ensure a net increase in permitted annual emissions to less than significant levels.

Compliance procedures currently observed will continue to be in effect. However, an initial compliance test will be required to show that the C and D acid plants can comply with the emission limiting standards at the higher operating rates. EPA Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources, in accordance with 40 CFR 60, Appendix A, will be required to determine compliance with the VE limits. Determination of compliance with SO_2 and acid mist limits will be as described in 40 CFR 60, Subpart H.

IV. Source Impact Analysis

A. Emission Limitations

Emissions from the following sources shall not exceed:

	SO_2		Acid Mist		VE
Acid Plant	lb/T*	TPY	lb/T*	TPY	% opacity
A	29	4118	0.5	70	10
B	29	4118	0.5	70	10
C	4	1420	0.14	50	10
D	4	1420	0.14	50	10

* Based on 100% sulfuric acid.

The net emissions increase due to this project will be:
- o 33 TPY for SO_2 (significant emission level is 40 TPY)
- o 0.8 TPY for acid mist (significant emission level is 7 TPY)

B. Ambient Air Analysis

The Department has evaluated the ambient air impacts associated with the proposed emission changes at the Occidental facility. Short-term emission increases will occur at the C and D sulfuric acid plants and short-term emission decreases will occur at the A and B sulfuric acid plants. The A and B emission decreases are occurring through shorter stacks than the C and D increases, but the emission characteristics of the C and D plants have a lower plume-rise. These offsetting effects were analyzed using an air quality dispersion model (the Industrial Source Complex Short-Term (ISCST) model to determine the net result. The results indicate changes less than 1 ug/m^3 for all averaging periods. Based on this modeling, the Department is satisfied that the emission changes will result in an insignificant difference (positive for short-term averages and

negative for long-term averages) in projected ambient SO_2 concentration levels.

V. Conclusion

Based on the information submitted by Occidental, the Department has reasonable assurance that the changes in the operating rates of the A, B, C and D sulfuric acid plants at the SRCC, as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of an ambient air quality standard or PSD increment, or any other provisions of Chapter 17-2, FAC.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

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

Permit Number:AC 24-131270
Expiration Date: July 1, 1988
County: Hamilton
Latitude/Longitude: 30° 26' 27"N/
82° 47' 16"W
Project: Sulfuric Acid Plant "D"

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 modification of the existing Sulfuric Acid Plant D by increasing the production capacity from 1800 TPD (tons per day) to 2000 TPD.

Construction shall be in accordance with the permit application and plans, documents and reference literature submitted unless otherwise stated in the General and Specific Conditions herein.

Attachments:

1. Occidental's application package dated February 25, 1987.
2. DER's letter of incompleteness dated March 25, 1987.
3. Occidental's response dated March 30, 1987.
4. Occidental's additional information dated April 17, 1987.
5. DER's letter dated May 14, 1987.
6. Occidental's response dated June 30, 1987.

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131270
Expiration Date: July 1, 1988

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)
(x) 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:

For Sulfuric Acid Plant "D"

1. The maximum production rate shall not exceed 2000 TPD (tons per day) based on 100% H_2SO_4.

2. The maximum annual operating hours shall not exceed 8520 (355 days/yr).

PERMITTEE:
Occidental Chemical Agricultural
Products, Inc.

Permit Number: AC 24-131270
Expiration Date: July 1, 1988

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO_2) emissions shall not exceed:

   a. 4 lb/ton of 100% H_2SO_4 produced
   b. 334 lbs/hr
   c. 1420 TPY (tons per year)

4. Sulfuric acid mist emissions shall not exceed:

   a. 0.14 lb/ton of 100% H_2SO_4 produced
   b. 12 lbs/hr
   c. 50 TPY

5. Visible emissions shall not exceed 10% opacity.

6. The permittee shall comply with all the requirements of 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants.

7. Compliance tests shall be carried out in accordance with 40 CFR 60, Subpart H. The DER shall be notified 30 days in advance of the tests. Initial compliance tests shall be conducted for acid mist, SO_2, and visible emissions to determine compliance with the standards. Performance tests for nitrogen oxides to determine emissions shall be requested by DER when deemed necessary.

8. 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, FAC)

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 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. (Rule 17-4, FAC).

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131270
Expiration Date: July 1, 1988

SPECIFIC CONDITIONS:

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, FAC)

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

10. This permit shall replace previous permit(s) issued for Occidental's Sulfuric Acid Plant "D".

11. Sulfuric Acid Plants A and B shall each be restricted to the following:

a. Maximum annual operating hours of 8520 (355 days)
b. Maximum production rate of 800 TPD (100% H_2SO_4)
c. SO_2 emissions not to exceed:
   i) 29 lbs/ton of 100% H_2SO_4 produced
   ii) 4118 TPY
d. Sulfuric acid mist emissions not to exceed:
   i) 0.5 lb/ton of 100% H_2SO_4 produced
   ii) 71 TPY
e. Visible emissions not to exceed 10% opacity

The current operating permit for A and B plants shall be amended to reflect the restrictions on the operating parameters.

12. When a start-up involving more than one acid plant occurs, a second (sequent) plant shall not be started up until the first (prior) plant is started and in compliance.

The permittee shall take all reasonable precautions possible to avoid violations of ambient air impacts during plant start-ups.

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131270
Expiration Date: July 1, 1988

SPECIFIC CONDITIONS:

Issued this_____day of_____, 19___

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

_____
Dale Twachtmann, Secretary

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

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

Permit Number: AC 24-131271
Expiration Date: July 1, 1988
County: Hamilton
Latitude/Longitude: 30° 26' 27"N/ 82° 47' 16"W
Project: Sulfuric Acid Plant "C"

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 modification of the existing Sulfuric Acid Plant C by increasing the production capacity from 1800 TPD (tons per day) to 2000 TPD.

Construction shall be in accordance with the permit application and plans, documents and reference literature submitted unless otherwise stated in the General and Specific Conditions herein.

Attachments:

1. Occidental's application package dated February 25, 1987.
2. DER's letter of incompleteness dated March 25, 1987.
3. Occidental's response dated March 30, 1987.
4. Occidental's additional information dated April 17, 1987.
5. DER's letter dated May 14, 1987.
6. Occidental's response dated June 30, 1987.

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131271
Expiration Date: July 1, 1988

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)
(x) 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:

For Sulfuric Acid Plant "C"

1. The maximum production rate shall not exceed 2000 TPD (tons per day) based on 100% H_2SO_4.

2. The maximum annual operating hours shall not exceed 8520 (355 days/yr).

PERMITTEE:
Occidental Chemical Agricultural Products, Inc.

Permit Number: AC 24-131271
Expiration Date: July 1, 1988

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO_2) emissions shall not exceed:

   a. 4 lb/ton of 100% H_2SO_4 produced
   b. 334 lbs/hr
   c. 1420 TPY (tons per year)

4. Sulfuric acid mist emissions shall not exceed:

   a. 0.14 lb/ton of 100% H_2SO_4 produced
   b. 12 lbs/hr
   c. 50 TPY

5. Visible emissions shall not exceed 10% opacity.

6. The permittee shall comply with all the requirements of 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants.

7. Compliance tests shall be carried out in accordance with 40 CFR 60, Subpart H. The DER shall be notified 30 days in advance of the tests. Initial compliance tests shall be conducted for acid mist, SO_2, and visible emissions to determine compliance with the standards. Performance tests for nitrogen oxides to determine emissions shall be requested by DER when deemed necessary.

8. 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, FAC)

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 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. (Rule 17-4, FAC).

SPECIFIC CONDITIONS:

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, FAC)

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

10. This permit shall replace previous permit(s) issued for Occidental's Sulfuric Acid Plant "C".

11. Sulfuric Acid Plants A and B shall each be restricted to the following:

a. Maximum annual operating hours of 8520 (355 days)
b. Maximum production rate of 800 TPD (100% H_2SO_4)
c. SO_2 emissions not to exceed:
   i) 29 lbs/ton of 100% H_2SO_4 produced
   ii) 4118 TPY
d. Sulfuric acid mist emissions not to exceed:
   i) 0.5 lb/ton of 100% H_2SO_4 produced
   ii) 71 TPY
e. Visible emissions not to exceed 10% opacity

The current operating permit for A and B plants shall be amended to reflect the restrictions on the operating parameters.

12. When a start-up involving more than one acid plant occurs, a second (sequent) plant shall not be started up until the first (prior) plant is started and in compliance.

The permittee shall take all reasonable precautions possible to avoid violations of ambient air impacts during plant start-ups.

PERMITTEE:
Occidental Chemical Agricultural
Products, Inc.

Permit Number: AC 24-131271
Expiration Date: July 1, 1988

SPECIFIC CONDITIONS:

Issued this_____day of_____, 19___

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

_____
Dale Twachtmann, Secretary

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Applications for Permits by:

Occidental Chemical Agricultural Products, Inc.
Post Office Box 300
White Springs, Florida 32096

DER File Nos. AC 24-131270
AC 24-131271

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue permits (copies attached) for the proposed project as detailed in the applications 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 Agricultural Products, Inc., applied on February 27, 1987, to the Department of Environmental Regulation for the purpose of modifying their C and D sulfuric acid plants located at their existing Suwannee River Chemical Complex (SRCC), 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 Department has determined that air construction permits were needed for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit applications. The notice must be published one time only in a section of a major local newspaper of general circulation in the county in which the project is located and within thirty (30) days from receipt of this intent. Proof of publication must be provided to the Department within seven days of publication of

the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

The Department will issue the permits with the attached conditions unless petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S. A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. Petitions must comply with the requirement of Florida Administrative Code Rules 17-103.155 and 28-5.201 (copies enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes, concerning the subject permit application. Petitions which are not filed in accordance with the above provisions will be dismissed.

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:

J. B. Koogler, Ph.D., P.E.
B. Stewart, NE Dist.
Wayne Aronson, EPA
Miguel Flores, NPS

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on July 31, 1987.

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.

Maggie V. Jones
Clerk

7/31/87
Date

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Applications for Permits by:

Occidental Chemical Agricultural Products, Inc.
Post Office Box 300
White Springs, Florida 32096

DER File Nos. AC 24-131270
AC 24-131271

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue permits (copies attached) for the proposed project as detailed in the applications 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 Agricultural Products, Inc., applied on February 27, 1987, to the Department of Environmental Regulation for the purpose of modifying their C and D sulfuric acid plants located at their existing Suwannee River Chemical Complex (SRCC), 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 Department has determined that air construction permits were needed for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit applications. The notice must be published one time only in a section of a major local newspaper of general circulation in the county in which the project is located and within thirty (30) days from receipt of this intent. Proof of publication must be provided to the Department within seven days of publication of

the notice. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits.

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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:

J. B. Koogler, Ph.D., P.E.
B. Stewart, NE Dist.
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Miguel Flores, NPS

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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.

Maggie V. Jones
Clerk

7/31/87
Date

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION FOR TRANSFER OF PERMIT

APPLICATION OR
Permit No. SEE ATTACHED Date Issued SEE ATTACHED Date Expires SEE ATTACHED

NOTIFICATION OF SALE OR LEGAL TRANSFER

Source Name: SEE ATTACHED County: HAMILTON

Source Location: EAST OF US 41, NORTH OF WHITE SPRINGS, FL City: N.A.

Permittee Name: SEE ATTACHED Title:

Mailing Address: P. O. BOX 300, WHITE SPRINGS, FL 32096

The undersigned hereby notifies the department of the sale or legal transfer of this pollution source. He further agrees to assign his rights as permittee to the applicant in the event the department agrees to the transfer of permit.

Sworn to and subscribed before me at Hamilton
County, White Springs, Florida
this 18th day of December 19 87

Notary Public

My Commission Expires: NOTARY PUBLIC, STATE OF FLORIDA
My commission expires Apr. 5, 1989

HUDSON C. SMITH Hudson C. Smith
Signature of Permittee

GENERAL MANAGER
Title

Date: DECEMBER 18, 1987

REQUEST FOR TRANSFER OF PERMIT

Source Name: SEE ATTACHED

Applicant Name: OCCIDENTAL CHEMICAL CORPORATION Title: ENVIRONMENTAL COORDINATOR

Mailing Address: P. O. BOX 300, WHITE SPRINGS, FL 32096

Telephone: (904) 397-8269
area

Project Engineer: Name: N. A.

Mailing Address:

Telephone: ( )
area

The undersigned hereby notifies the department of his having acquired title to this pollution source. He further states that he has examined the application and documents submitted by the current permittee the basis on which Permit No. was issued by the department, and states that they accurately and completely describe the permitted activity or project. He further states that he is familiar with the permit, agrees to comply with its terms and conditions, and agrees to assume the rights and liabilities contained therein. He also agrees to promptly notify the department of any future change in ownership of, or responsibility for, the permitted activity or project.

Sworn to and subscribed before me at Hamilton
County, White Springs, Florida
this 18th day of December 19 87

Notary Public

My Commission Expires: NOTARY PUBLIC, STATE OF FLORIDA
My commission expires Apr. 5, 1989

W. M. MILLER W. M. Miller
Signature of Applicant*

ENVIRONMENTAL COORDINATOR
Title

Date: DECEMBER 18, 1987

*Attach letter of authorization if other than owner or corporate officer.

Received 8/20/87 JB

PM
9 Sept. 87 Maggie James
White Springs, FL

File Copy

The Jasper News

PUBLISHED WEEKLY
Jasper, Hamilton County, Florida

STATE OF FLORIDA
COUNTY OF HAMILTON

Before the undersigned authority personally appeared

Linda Bray

who on oath says that he is

Legal Secretary

of the Jasper News, a weekly newspaper published at Jasper in Hamilton County, Florida; that the attached copy of advertisement, being a

Notice of Intent

in the matter of

Permits-Occidental Chemical Co.

in the

Hamilton County

Court, was published in said newspaper in the issues of

August 13, 1987

Affiant further says that the said 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 week and has been entered as second class mail 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 said newspaper.

Linda Bray

Sworn to and subscribed before me this 18th

day of August, A.D. 19 87

Wycliff G. Flynn

(SEAL) (Notary Public)

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

NOTARY PUBLIC STATE OF FLORIDA

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department gives notice of its intent to issue permits to Occidental Chemical Agricultural Products, Inc., to modify the existing C and D plants at the existing Suwannee River Chemical Complex (SRCC), located in White Springs, Hamilton County, Florida. The project will involve an increase in the acid production of C and D plants from 1800 tons per day (TPD) to 2000 TPD (each plant) and a reduction in the production of acid on the older A and B plants from 1000 TPD to 800 TPD (each plant). Piping size changes, if required, would be the only physical change associated with this modification. A determination of best available control technology (BACT) or lowest achievable emission rate (LAER) was not required.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (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 Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has 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 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 32399-2400. 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 32399-2400

Dept. of Environmental Regulation
Northeast District
3426 Bills Road
Jacksonville, Florida 32207

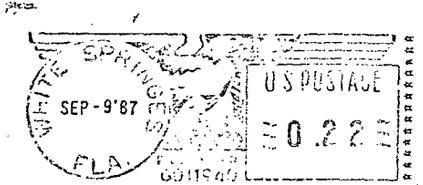
Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

August 13, 1987.

DER
SEP 10 1987
BAQM

cc: Pradeep Raval
Tom Rogers
Miguel (Flores)
Wayne Aronson
Bill Stewart NE Dist

OCCIDENTAL CHEMICAL COMPANY
FLORIDA OPERATIONS
Post Office Box 300, White Springs, Florida 32096



Ms. Maggie Janes
Department of Environmental
Regulation
2600 Blair Stone Road
Twin Tower Office Building
Tallahassee, FL 32399-2400