




State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

Interoffice Memorandum

TO: Dale Twachtmann
FROM: Howard L. Rhodes 
SUBJ: Approval of Occidental Chemical Corporation's Sulfuric Acid Plants A, C, and D

State Construction Permit Numbers: AC 24-146400, -146402
-146404

DATE: June 7, 1988

Attached for your approval and signature are permits prepared by Central Air Permitting for the above mentioned company to increase the sulfuric acid production capacity of plants A, C, and D while shutting down plant B.

The facility is located in White Springs, Hamilton County, Florida. Comments received during the public notice period are addressed in the Final Determination.

Day 90, after which these permits will be issued by default, is July 6, 1988.

I recommend your approval and signature.

HLR/aqm/pr

attachments

RECEIVED

JUN 9 1988

Office of the Secretary



Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMIT

Mr. Hudson C. Smith
Occidental Chemical Company
Post Office Box 300
White Springs, Florida 32096-0300

June 14, 1988

Enclosed are permits Nos. AC 24-146400, 24-146402, 24-146404, for Occidental Chemical Company to install increased production capacity of A, C, and D Sulfuric Acid Plants, while shutting down plant B, at the Suwannee River Chemical Complex in Hamilton County, Florida.

Any Party to these permits has the right to seek judicial review of these 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:

B. Stewart, NE District
R. E. McNeill, P.E.

Final Determination

Occidental Chemical Corporation
Suwannee River Chemical Complex
White Springs, Hamilton County, Florida

Sulfuric Acid Plants

Permit Numbers:

AC 24-146400, Plant A
AC 24-146402, Plant C
AC 24-146404, Plant D

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

June 7, 1988

Final Determination

Occidental's application for construction permits to increase the sulfuric acid production capacity of Plant A, C, and D, while shutting down Plant B at the existing Suwannee River Chemical Complex in White Springs, Hamilton County, Florida, has been reviewed by the Department. Public Notice of the Department's Intent to Issue the permits was published in the The Jasper News on May 5, 1988.

Comments were received in response to the Public Notice from the applicant requesting rephrasing of the testing requirements. Since the Department is in the process of negotiating these requirements, changes shall be made at the conclusion of the negotiations, if warranted. However, the Department will amend specific condition No. 9 of the C and D permits by specifying the compliance test methods. Specific Condition No. 14 in the permit for plant A will be amended to reflect permanent shut down of plant B.

The final action of the Department will be to issue the permits as proposed with amended Specific Conditions No. 9 in plants C & D permits and No. 14 in plant A's permit.



Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

ERMITTEE:
Occidental Chemical Corp.
P. O. Box 300
White Springs FL 32096

Permit Number: AC 24-146400
Expiration Date: September 30, 1988
County: Hamilton
Latitude/Longitude: 30° 26' 27"N
82° 47' 16"W
Project: Sulfuric Acid Plant A

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

For the permitting of the Sulfuric Acid Plant A, with a maximum production capacity of 1000 tons per day 100% acid. Sulfur dioxide and acid mist emissions will be controlled by the single absorption process itself and a York mist eliminator, respectively. The project is located at Occidental's Suwannee River Chemical Complex (SRCC) in Hamilton County, Florida. The UTM coordinates are Zone 17, 328 km East and 3368 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-08, A and B Plants (98% Conversion).

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

Attachments:

1. Occidental's letter dated February 19, 1988.
2. DER's letter dated March 1, 1988.
3. Occidental's application package dated March 7, 1988.
4. Preliminary Determination dated April 21, 1988.
5. Occidental's letter dated April 26, 1988.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146400 Expiration Date: September 30, 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.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146400
Expiration Date: September 30, 1988

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.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146400 Expiration Date: September 30, 1988

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 noncompliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

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

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

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

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146400
Expiration Date: September 30, 1988

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 A

1. The Plant A may operate continuously, i.e., 8760 hours/year.
2. The maximum production rate shall not exceed 1000 TPD (tons per day) based on 100% H₂SO₄.

PERMITTEE: Occidental Chemical Corp. **Permit Number:** AC 24-146400
Expiration Date: September 30, 1988

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO₂) emissions shall not exceed:
 - a) 29 lbs/ton of 100% H₂SO₄ produced
 - b) 1208 lbs/hr
 - c) 5292 TPY (tons/yr)
4. Sulfuric acid mist emissions shall not exceed:
 - a) 0.5 lb/ton, 100% H₂SO₄ produced
 - b) 21 lbs/hr
 - c) 91 TPY
5. Visible Emissions (VE) shall not exceed 10% opacity.
6. Nitrogen oxides (NO_x) emissions are estimated to be 26 TPY, for inventory and PSD tracking purposes.
7. Acid mist emissions shall be controlled by a mist eliminator.
8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC).
9. A CEM shall be used to monitor SO₂, in accordance with Rule 17-2.710, FAC. Initial and annual compliance tests shall be conducted using:
 - a) EPA Method 8, for SO₂ and acid mist
 - b) EPA Method 9, for visible emissions

Other DER approved test methods may be used only after prior Departmental approval.

10. The DER district office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the district office within 45 days of test completion.

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 district office must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2; FAC).

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146400
Expiration Date: September 30, 1988

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the 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. (FAC Rules 17-2 and 17-4)

If the construction permit expires prior to the permittee filing an application for a permit to operate, then all activities at the project must cease. (FAC Rule 17-4)

11. Any change in the method of operation, raw materials and chemicals processed, equipment, or operating hours pursuant to FAC Rule 17-2.100(118), Modification, shall be submitted for approval to DER's Bureau of Air Quality Management office and the district office.

12. When start-up involving more than one acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.

13. This permit shall replace previous permits issued for the Sulfuric Acid Plant A.

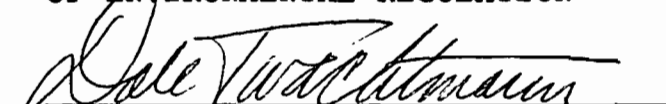
14. Plant B shall be permanently shut down and will no longer be allowed to operate.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146400
Expiration Date: September 30, 1988

Issued this 9 day of June,
1988.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary



Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
Occidental Chemical Corp.
P. O. Box 300
White Springs FL 32096

Permit Number: AC 24-146402
Expiration Date: September 30, 1989
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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of the Sulfuric Acid Plant C, with a maximum production capacity of 2300 tons per day 100% acid. Sulfur dioxide and acid mist emissions will be controlled by the existing double absorption process and a Brinks mist eliminator, respectively. The project is located at Occidental's Suwannee River Chemical Complex (SRCC) in Hamilton County, Florida. The UTM coordinates are Zone 17, 328 km East and 3368 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-04, C and D Plants (99.5% Conversion).

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

Attachments:

1. Occidental's letter dated February 19, 1988.
2. DER's letter dated March 1, 1988.
3. Occidental's application package dated March 7, 1988.
4. Preliminary Determination dated April 21, 1988.
5. Occidental's letter dated April 26, 1988.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402
Expiration Date: September 30, 1989

GENERAL CONDITIONS:

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

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

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

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

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

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402 Expiration Date: September 30, 1989

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.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402 Expiration Date: September 30, 1989

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.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402 Expiration Date: September 30, 1989

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.

PERMITTEE: Permit Number: AC 24-146402
Occidental Chemical Corp. Expiration Date: September 30, 1989

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 noncompliance 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.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146402
Expiration Date: September 30, 1989

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 Plant C may operate continuously, i.e., 8760 hours/year.
2. The maximum production rate shall not exceed 2300 TPD (tons per day) based on 100% H₂SO₄.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402
Expiration Date: September 30, 1989

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO₂) emissions shall not exceed:
 - a) 4 lbs/ton of 100% H₂SO₄ produced
 - b) 383 lbs/hr
 - c) 1679 TPY (tons/yr)
4. Sulfuric Acid Mist emissions shall not exceed:
 - a) 0.15 lb/ton, 100% H₂SO₄ produced
 - b) 14.4 lbs/hr
 - c) 63 TPY
5. Visible Emissions (VE) shall not exceed 10% opacity.
6. Nitrogen oxides (NO_x) emissions are estimated to be 60 TPY, for inventory and PSD tracking purposes.
7. An SO₂ continuous emission monitor shall be maintained and operated in accordance with 40 CFR 60, Subpart H.
8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC) and 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants.
9. Initial and annual compliance tests shall be conducted in accordance with 40 CFR 60 Subpart H, and Appendix A, to determine emissions of SO₂, acid mist, and visible emissions. EPA Method 8 for SO₂ and acid mist, and EPA Method 9 for visible emission shall be used for compliance testing.
10. The DER district office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the district office within 45 days of test completion.

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 district office must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2, FAC).

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402
Expiration Date: September 30, 1989

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the 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. (FAC Rules 17-2 and 17-4)

If the construction permit expires prior to the permittee filing an application for a permit to operate, then all activities at the project must cease. (FAC Rule 17-4)

11. Any change in the method of operation, raw materials and chemicals processed, equipment, or operating hours pursuant to FAC Rule 17-2.100(118), Modification, shall be submitted for approval to DER's Bureau of Air Quality Management office and the district office.

12. When start-up involving more than one acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.

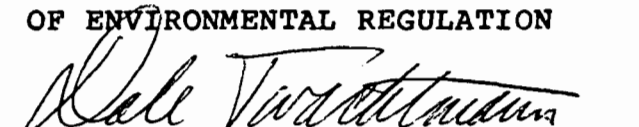
13. This permit shall replace previous permits issued for the Sulfuric Acid Plant C.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146402
Expiration Date: September 30, 1989

Issued this 9 day of June,
1988.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary



Florida Department of Environmental Regulation

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

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:
Occidental Chemical Corp.
P. O. Box 300
White Springs FL 32096

Permit Number: AC 24-146404
Expiration Date: September 30, 1989
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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of the Sulfuric Acid Plant D, with a maximum production capacity of 2300 tons per day 100% acid. Sulfur dioxide and acid mist emissions will be controlled by the existing double absorption process and a Brinks mist eliminator, respectively. The project is located at Occidental's Suwannee River Chemical Complex (SRCC) in Hamilton County, Florida. The UTM coordinates are Zone 17, 328 km East and 3368 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-04, C and D Plants (99.5% Conversion).

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

Attachments:

1. Occidental's letter dated February 19, 1988.
2. DER's letter dated March 1, 1988.
3. Occidental's application package dated March 7, 1988.
4. Preliminary Determination dated April 21, 1988.
5. Occidental's letter dated April 26, 1988.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146404 Expiration Date: September 30, 1989

GENERAL CONDITIONS:

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

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

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

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

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

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146404
Expiration Date: September 30, 1989

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.

PERMITTEE: Permit Number: AC 24-146404
Occidental Chemical Corp. Expiration Date: September 30, 1989

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 noncompliance 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.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146404 Expiration Date: September 30, 1989

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 Plant D may operate continuously, i.e., 8760 hours/year.
2. The maximum production rate shall not exceed 2300 TPD (tons per day) based on 100% H₂SO₄.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146404
Expiration Date: September 30, 1989

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO₂) emissions shall not exceed:

- a) 4 lbs/ton of 100% H₂SO₄ produced
- b) 383 lbs/hr
- c) 1679 TPY (tons/yr)

4. Sulfuric acid mist emissions shall not exceed:

- a) 0.15 lb/ton, 100% H₂SO₄ produced
- b) 14.4 lbs/hr
- c) 63 TPY

5. Visible Emissions (VE) shall not exceed 10% opacity.

6. Nitrogen oxides (NO_x) emissions are estimated to be 60 TPY, for inventory and PSD tracking purposes.

7. An SO₂ continuous emission monitor shall be maintained and operated in accordance with 40 CFR 60, Subpart H.

8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC) and 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants.

9. Initial and annual compliance tests shall be conducted in accordance with 40 CFR 60 Subpart H, and Appendix A, to determine emissions of SO₂, acid mist, and visible emissions. EPA Method 8 for SO₂ and acid mist, and EPA Method 9 for visible emissions shall be used for compliance testing.

10. The DER district office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the district office within 45 days of test completion.

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 district office must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2, FAC).

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146404 Expiration Date: September 30, 1989

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the 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. (FAC Rules 17-2 and 17-4)

If the construction permit expires prior to the permittee filing an application for a permit to operate, then all activities at the project must cease. (FAC Rule 17-4)

11. Any change in the method of operation, raw materials and chemicals processed, equipment, or operating hours pursuant to FAC Rule 17-2.100(118), Modification, shall be submitted for approval to DER's Bureau of Air Quality Management office and the district office.

12. When start-up involving more than one acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.

13. This permit shall replace previous permits issued for the Sulfuric Acid Plant D.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146404
Expiration Date: September 30, 1989

Issued this 9 day of June,
1988.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postage meter for fees and check box(es) for additional service(s) requested.

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

3. Article Addressed to: Mr. Hudson C. Smith Occidental Chemical Company P.O. Box 300 White Springs, FL 32096-0300	4. Article Number P 778 940 849
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X <i>Hudson C. Smith</i>	
7. Date of Delivery 6-16-88	

PS Form 3811, Mar. 1987

* U.S.G.P.O. 1987-178-268

DOMESTIC RETURN RECEIPT

P 778 940 849
RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

Sender Hudson C. Smith	
Street and No. Occidental Chemical Co. P.O. Box 300	
P.O., State and ZIP Code White Springs, FL 32096-0300	
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: 06/14/88 Permits: AC 24-146400, -402 and -404	

PS Form 3800, June 1985

PM
7-8-88
~~WILLIS~~

file copy

 **Occidental Chemical Corporation**

July 7, 1988

CERTIFIED RETURN RECEIPT

RECEIVED

Mr. Ernest E. Frey
Florida Department of Environmental
Regulation
3426 Bills Road
Jacksonville, FL 32207

JUL 11 1988

DER-BAQM

Re: Warning Notice No. AP-W-24-0012
"D" Sulfuric Acid Plant AC 24-146404

Dear Mr. Frey:

It is Occidental Chemical Corporation's position that, during the two periods cited (April 16, 1988 and June 22, 1988), the "D" Sulfuric Acid Plant was in compliance with its permit conditions at all times.

During the April 16 test, which was run during a 30 day test period at an allowed maximum rate of 2300 tons per day, the Department alleges that sulfuric acid mists were emitted at a rate of 25.2 lb./hr. A review of this test, which has been submitted to the Department previously, shows reported values of acid mist of 13.30 and 9.77 lb./hr. This is an average rate of 11.52 lb./hr. Allowable emissions for acid mist during the 30 day/2300 TPD test period was 14.38 lb./hr., not the 12.5 lb./hr. referred to in the Warning Notice. Only two runs were performed and reported during the test because Occidental did not consider this to be a compliance test but an in-plant performance test to gather operating information.

During the June 22 test the Department alleges that sulfur dioxide emissions exceeded the allowable rate of 317.87 lb./hr. The enclosed test report, which has not been submitted previously shows that, according to our calculations, the referenced test met the sulfur dioxide standards of 317.87 lb./hr.

As you are aware, Occidental uses the method to determine SO₂ and acid mist emissions that is described in 40 CFR 60.85(e). Occidental multiplies the emission rates determined by this method (lb/ton of acid) by the acid production rate to determine the mass emission rate (lb/hr) of SO₂ and acid mist. We have used this method since the early 1980's and the results calculated by this method have been reported to, and accepted by, the Department. The Department's representative, however, continues to calculate mass emission rates of SO₂ and acid mist by a method referenced in 40 CFR 60.85(d), a method that Occidental has demonstrated not to be appropriate for its sulfuric acid plants. It was through Occidental's

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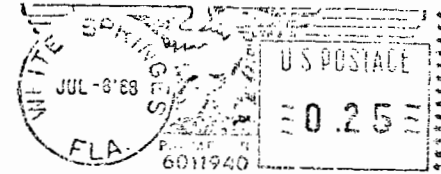
Agricultural Products - Florida Operations
County Road 137, P.O. Box 300, White Springs, Florida 32096
(904) 397-8101



Occidental Chemical Corporation

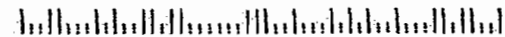
Agricultural Products - Florida Operations

County Road 137, P.O. Box 300, White Springs, Florida 32096



OxyChem®

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



Occidental Chemical Corporation

Page 2
July 7, 1988

efforts, associated with the demonstration of inappropriate aspects of the method referenced in 40 CFR 60.85(d), that the alternate ("S" Factor) method of 40 CFR 60.85(e) was adopted by EPA.

Jim Pennington, Tallahassee BAQM, is currently working with EPA to resolve the question of the appropriateness of the use of the "S" Factor method by Occidental. He recently requested some additional information for submittal to EPA. That information will be mailed to him by July 8 with a copy to Mr. David McNeal of the Region IV EPA Office.

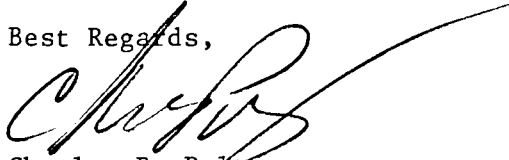
At some point near the end of Run #1 of the June 22 test the plant reduced the operating rate, unknown to the stack testing crew. This reduction was taken to correct a temperature problem in the plant. This reduction caused a decrease in the stack velocity and subsequently, a reduced volume of sample to be drawn through the meter. The actual volumes of Runs 2 & 3 were 38.4 and 37.8 cubic feet respectively. This is less than the 40.6 cubic feet required by 40 CFR 60. Because of the low meter volumes, this test was rescheduled and performed July 6, 1988. Based on preliminary calculations by Mr. Stan Mazur of FDER, the July 6 test results are satisfactory and indicate compliance with all permit conditions.

I am also enclosing, for your information, a copy of the SO₂ continuous monitor record and a copy of the daily log sheet with the O₂ readings for June 22, 1988. Reference to this information will further show that the "D" Sulfuric Acid Plant was in compliance with its permit conditions at all times during the period in question.

Please note that the FDER calculated value of 325.03 lb./hr. appears to be in error. I believe the correct value is 320.49 lb./hr. This is based on calculations made by your representative during the onsite inspection June 22.

If I may be of further service in helping to resolve this matter, please do not hesitate to contact me.

Best Regards,



Charles B. Putts
Environmental Engineer

psb

attachment

cc: Mr. W. P. Stewart, FDER, Jacksonville, FL	w/attachment
Mr. Jim Pennington, FDER, Tallahassee, FL	w/attachment
Mr. Clair Fancy, FDER, Tallahassee, FL	w/o attachment
Ms. Teri Rhodes, FDER, Jacksonville, FL	w/o attachment
Dr. John Koogler, Koogler & Associates	w/o attachment

Copied: Pradeep Revol }
Tom Rogers } 7-11-88
CWF/BA

PM
5 May 1988
Rene Oak, FL

JUL COPY

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

Department of Environmental

Regulation

in the

Hamilton County

Court, was published in said newspaper in the issues of

May 5, 1988

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 5th

day of May, A.D. 19 88

Waycliff C. Thomas
(SEAL) (Notary Public)

Notary Public, Florida, State at Large
My Commission Expires March 29, 1993

State of Florida
Department of
Environmental Regulation
Notice of Intent
The Department of Environmental Regulation hereby gives notice of its intent to issue permits to Occidental Chemical Corporation to install increased Sulfuric Acid production capacity at Plant A, C, and O, while shutting down plant B, at the Suwannee River Chemical Complex in Hamilton County, Florida. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.
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 Office
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.
May 5, 1988.

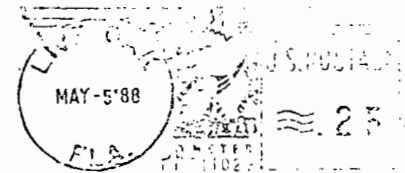
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Copied: Pradeep Raval } MAY 09 1988
Bill Stewart, N.E. Dist } 5.12.88
DER-BAQM



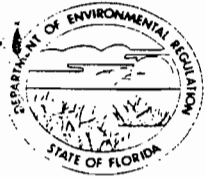
JASPER NEWS

(904) 792-2487 • P.O. Drawer D
Jasper, Florida 32052



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





State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

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

Interoffice Memorandum

To: Pradeep Raval
Thru: Bill Thomas *BT*
Thru: Clair Fancy *CF*
Thru: John Brown *JB*
From: Jim Pennington *JKP*
Date: May 6, 1988

Subject: Occidental Chemical Company - "A", "C", and "D"
Sulfuric Acid Plants Permits, Specific Condition 9

This memorandum is in response to Occidental's letter of April 29, 1988 requesting language revisions in the above referenced permits to the effect that the "S" factor in 40 CFR 60.85(e) is "an acceptable procedure" for stack testing.

Stan Mazur of the Northeast District and I met with Mr. Charles Pults and Mr. Marvin Miller of Occidental on March 22, 1988 and reviewed this procedure. In that meeting the following conclusions were reached:

- 1) Occidental will submit calibration data, manufacturers' data and other supporting data that indicates the reliability of the measurement of sulfuric acid production rates and where possible, sulfur feed rates.
- 2) Stan Mazur will prepare a list of outstanding questions (if any) on this procedure.
- 3) Upon receipt of the two items above, Jim Pennington will forward the information to David McNeal at Region IV for a written determination as to the suitability of this procedure for compliance testing.
- 4) In the interim, Occidental will continue to test using this procedure. This does not preclude enforcement action in the event that Occidental's method of measurement of acid production rates is found to be invalid.

It is recommended that the permit language not be modified, until clarification is received from the EPA.

JP:ht

cc: Bill Stewart
John Koogler
Marvin Miller

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)

John Brown

Initial

Date

2.

Initial

Date

3.

Initial

Date

4.

Initial

Date

REMARKS:

About your on going negotiations for Oxy to test H₂SO₄ plants per District office requests.

Please convey your comments from your group, on this issue, in the 2-week public notice time frame. TX.

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:

Pradeep.

DATE

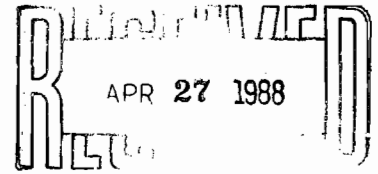
4-29

PHONE



air

NORTHEAST DISTRICT



DER-JACEL

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

RECEIVED

MAY 02 1988

DER-BAQM

April 26, 1988

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental
Regulation
3426 Bills Road
Jacksonville, FL 32207

Ref: "A", "C", and "D" Sulfuric Acid Plants

Dear Mr. Thomas:

I would like to take this opportunity to thank you and all your staff for their work on the above referenced permits. Your timely consideration of this matter is appreciated.

In reference to these permits, we have one comment which concerns all three permits. Specific Condition 9 deals with emission testing and calculations. It is our suggestion that S. C. 9 be modified to include language which specifically states that 40 CFR 60 Subpart H Section 60.85(e) is an acceptable procedure for determining emissions from these three plants.

Over the years there have been protracted discussions between FDER, Occidental, and our consultants concerning the so-called "S" factor referenced in Section 60.85 (e). It is our opinion that, if this can be included in these new permits, this discussion can finally be laid to rest.

If I may be of any assistance in this matter, please do not hesitate to contact me.

Best Regards,

Charles B. Pults
Environmental Engineer

psb

cc: Pradeep Ravel, FDER, Tallahassee, FL

DEPARTMENT OF ENVIRONMENTAL REGULATION

**ROUTING AND
TRANSMITTAL SLIP**

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)	Initial
	Date
2.	Initial
	Date
3.	Initial
	Date
4. <i>Bill Thomas</i>	Initial
	Date

REMARKS:

BAQM

RECEIVED

MAY 02 1988

DER - BAQM

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:

DATE

PHONE

file



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

RECEIVED

APR 29 1988

DER-BAQM

April 26, 1988

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental
Regulation
3426 Bills Road
Jacksonville, FL 32207

Ref: "A", "C", and "D" Sulfuric Acid Plants

Dear Mr. Thomas:

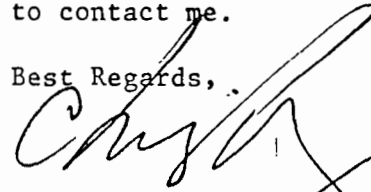
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Best Regards,


Charles B. Pults
Environmental Engineer

psb

cc: Pradeep Ravel, FDER, Tallahassee, FL

Bill Stewart, NEDIT
Cycled } CF/BT
 } JBrown
 } Pradeep. PX

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION



Interoffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE

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

TO: File, AC 24-146400, Sulfuric Acid Plant A
FROM: P. Raval *PR*
DATE: April 26, 1988
SUBJ: NSPS Applicability

The technical evaluation dated April 21, 1988, did not subject the above referenced acid plant to 40 CFR 60, Subpart H, NSPS for sulfuric acid plants, because the plant was capable of accomodating (and previously permitted at) 1000 TPD production rate without a physical modification.

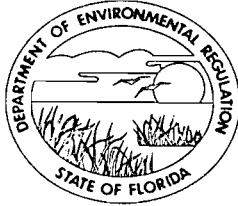
It should be noted that the 200 TPD acid production capability transfer from Plant B to A was critical in bringing about the facility-wide emissions reduction of 2426 TPY for SO₂, and 25 TPY for acid mist (accomplished by the shutting down of Plant B).

PR/plm

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

April 21, 1988

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Hudson C. Smith
Occidental Chemical Corporation
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 for Occidental Chemical Corporation to install increased production capacity of A, C, and D Sulfuric Acid Plants, while shutting down plant B, at the Suwannee River Chemical Complex in 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: B. Stewart, Northeast District
R. E. McNeill, P.E.

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

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

3. Article Addressed to: Mr. Hudson C. Smith Occidental Chemical Corporation P.O. Box 300 White Springs, FL 32096	4. Article Number P 274 010 495 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature -- Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature -- Agent X <i>Clarence Rogers</i>	
7. Date of Delivery <i>4-22-88</i>	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

P. 274 010 495

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

Se Mr. Hudson C. Smith Occidental Chemical Corporation 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: 04/21/88 Permits: AC 24-146400, -402, -404	

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

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Applications for Permits by:

Occidental Chemical Corp.
Post Office Box 300
White Springs, Florida 32096

DER File Nos. AC 24-146400
AC 24-146402
AC 24-146404

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue permits (copy 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 Corporation, applied on February 22, 1988, to the Department of Environmental Regulation for construction permits to increase production capacity of Sulfuric Acid Plants A, C, and D, while shutting down plant B, at the Suwannee River Chemical Complex in 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.

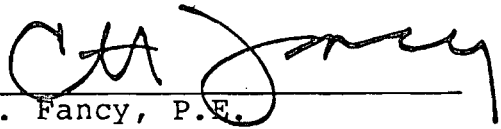
Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit applications. The notice must be published one time only in a section of a major local newspaper of general circulation 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 (copy 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:

B. Stewart, Northeast District
R. E. McNeill, P.E.

State of Florida
Department of Environmental Regulation
Notice of Intent

The Department of Environmental Regulation hereby gives notice of its intent to issue permits to Occidental Chemical Corporation to install increased Sulfuric Acid production capacity at Plant A, C, and D, while shutting down plant B, at the Suwannee River Chemical Complex in Hamilton County, Florida. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

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 Office
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.

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 4-21-88.

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.

Martha J. Wise
Clerk

4-21-88
Date

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

28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
 - (a) The name and address of each agency affected and each agency's file or identification number, if known;
 - (b) The name and address of the petitioner or petitioners;
 - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
 - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
 - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
 - (f) A demand for the relief to which the petitioner deems himself entitled; and
 - (g) Such other information which the petitioner contends is material.

Preliminary Determination
and
Technical Evaluation

Occidental Chemical Corporation
Suwannee River Chemical Complex
White Springs, Hamilton County, Florida

Sulfuric Acid Plants

Permit Nos.
AC 24-146400, Plant A
AC 24-146402, Plant C
AC 24-146404, Plant D

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

April 20, 1988

I. Application

A. Applicant

Occidental Chemical Corporation
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 A, 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 plant A from 800 tons per day (TPD) to 1000 TPD, plants C and D from 2000 TPD to 2300 TPD (each plant), and a simultaneous shut down of the older plant B. Pump, piping, and catalyst bed changes may be required in the proposed project.

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 22, 1988. The application was deemed complete on March 8, 1988.

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). The Source Classification Code (SCC) is 3-01-023-08 (A and B, 98% conversion), and 3-01-023-04 (C and D, 99.5% conversion).

II. Project Description

A. Project

Sulfuric acid is 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 the double contact process. Through this modification, Occidental

hopes to transfer the acid production capacity of the older B plant to the A, C and D plants. Sulfur dioxide (SO₂) and acid mist emissions are controlled by the single / double absorption process and mist eliminators, respectively. The proposed project will result in a net decrease in emissions of SO₂ and acid mist emissions. C and D plants are currently permitted under the Standards of Performance for New Stationary Sources (NSPS), 40 CFR 60, Subpart H. Plant A is permitted in accordance with Rule 17-2.600, Florida Administrative Code (FAC). The modified emission limits on A and B plants will be incorporated into construction permit conditions of Plant A to ensure federal enforceability.

The facility emission changes are tabulated below:

Plant	Permitted Emiss. ¹		Proposed Emiss. ¹		Net Change ¹	
	SO ₂	Acid Mist	SO ₂	Acid Mist	SO ₂	Acid Mist
A	4118	71	5292	91	1174	20
B	4118	71	0	0	(4118)	(71)
C	1420	50	1679	63	259	13
D	1420	50	1679	63	259	13
Total Net Change					(2426)	(25)

¹All figures are in tons per year

It is estimated that the overall NO_x emissions from the facility will not change (increases equal decreases).

B. Operating Hours and Rates

The maximum operating hours and rates will be:

Sulfuric Acid Plant	TPD (100% Acid)	Annual Operating Hours
A	1000	8760
B	0	0
C	2300	8760
D	2300	8760

Note: TPD = Tons per day.

III. Rule Applicability

The proposed modified sources will emit the pollutants sulfur dioxide (SO₂), sulfuric acid mist, and nitrogen oxides (NO_x), and are 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 project is within 100 km of Okefenokee National Wilderness Area, designated as a Class 1 area, in accordance with Rule 17-2.440, FAC. The proposed modification will not be subject to Prevention of Significant Deterioration (PSD) Review Requirements since there will be a net decrease in the pollutants emitted, in accordance with Rule 17-2.500(2)(d)4., FAC.

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

Sulfuric acid plant A is subject to Source Specific Emission Limiting Standards in accordance with Rule 17-2.600(2)(a), FAC, for existing sulfuric acid plants. The standards limit SO₂ emissions to 29 lbs/ton of 100% acid, acid mist to 0.5 lb/ton 100% acid, and visible emissions (VE) to 10% opacity.

Plants C and D are subject to 40 CFR 60, Subpart H, NSPS for sulfuric acid plants, which limits SO₂ to 4 lbs/ton of 100% acid produced, acid mist to 0.15 lb/ton 100% acid, and VE to 10% opacity.

Compliance procedures currently observed will continue to be in effect. However, an initial compliance test will be required to show that the A, 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 SO₂ and acid mist limits will be as described in 40 CFR 60, Subpart H, for plants C and D. SO₂ and acid mist emissions test for plant A will be conducted using EPA Method 8, in accordance with Rule 17-2.700, FAC.

IV. Source Impact Analysis

A. Emission Limitations

Emissions from the following sources shall not exceed:

Acid Plant	lb/T*	SO ₂		Acid Mist			VE
		lb/hr	TPY	lb/T*	lb/hr	TPY	% opacity
A	29	1208	5292	0.5	21	91	10
B	0	0	0	0	0	0	NA
C	4	383	1679	0.15	14.4	63	10
D	4	383	1679	0.15	14.4	63	10

* Based on 100% sulfuric acid.

B. Ambient Air Analysis

The Department has evaluated the proposed emission changes at the Occidental facility for impact on ambient air quality. The net emission changes from the nearly identical A and B H₂SO₄ plants are reductions of 725 lbs SO₂/hr and 12.5 lbs/H₂SO₄ mist/hr. The nearly identical C and D H₂SO₄ plants increase their emissions in total by 100 lbs SO₂/hr and 4.8 lbs H₂SO₄ mist/hr. The facility wide emission change is a reduction of 625 lbs SO₂/hr and 7.7 lbs H₂SO₄ mist/hr. Since the emission increases are occurring through shorter stacks than the emission reductions, the Department used an air quality dispersion model to verify that the net ambient air quality impact is minimal.

The Department is satisfied that the proposed modification at the Occidental facility will not cause or contribute to a violation of an ambient air quality standard or allowed PSD increment.

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 Corp.
P. O. Box 300
White Springs FL 32096

Permit Number: AC 24-146400
Expiration Date: September 30, 1988
County: Hamilton
Latitude/Longitude: 30° 26' 27"N
82° 47' 16"W
Project: Sulfuric Acid Plant A

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

For the permitting of the Sulfuric Acid Plant A, with a maximum production capacity of 1000 tons per day 100% acid. Sulfur dioxide and acid mist emissions will be controlled by the single absorption process itself and a York mist eliminator, respectively. The project is located at Occidental's Suwannee River Chemical Complex (SRCC) in Hamilton County, Florida. The UTM coordinates are Zone 17, 328 km East and 3368 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-08, A and B Plants (98% Conversion).

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

Attachments:

1. Occidental's letter dated February 19, 1988.
2. DER's letter dated March 1, 1988.
3. Occidental's application package dated March 7, 1988.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146400 Expiration Date: September 30, 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.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146400
Expiration Date: September 30, 1988

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.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146400 Expiration Date: September 30, 1988

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 noncompliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

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

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

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

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146400
Expiration Date: September 30, 1988

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 A

1. The Plant A may operate continuously, i.e., 8760 hours/year.
2. The maximum production rate shall not exceed 1000 TPD (tons per day) based on 100% H₂SO₄.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146400 Expiration Date: September 30, 1988

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO₂) emissions shall not exceed:
 - a) 29 lbs/ton of 100% H₂SO₄ produced
 - b) 1208 lbs/hr
 - c) 5292 TPY (tons/yr)
4. Sulfuric acid mist emissions shall not exceed:
 - a) 0.5 lb/ton, 100% H₂SO₄ produced
 - b) 21 lbs/hr
 - c) 91 TPY
5. Visible Emissions (VE) shall not exceed 10% opacity.
6. Nitrogen oxides (NO_x) emissions are estimated to be 26 TPY, for inventory and PSD tracking purposes.
7. Acid mist emissions shall be controlled by a mist eliminator.
8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC).
9. A CEM shall be used to monitor SO₂, in accordance with Rule 17-2.710, FAC. Initial and annual compliance tests shall be conducted using:
 - a) EPA Method 8, for SO₂ and acid mist
 - b) EPA Method 9, for visible emissions

Other DER approved test methods may be used only after prior Departmental approval.

10. The DER district office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the district office within 45 days of test completion.

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 district office must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2, FAC).

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146400
Expiration Date: September 30, 1988

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the 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. (FAC Rules 17-2 and 17-4)

If the construction permit expires prior to the permittee filing an application for a permit to operate, then all activities at the project must cease. (FAC Rule 17-4)

11. Any change in the method of operation, raw materials and chemicals processed, equipment, or operating hours pursuant to FAC Rule 17-2.100(118), Modification, shall be submitted for approval to DER's Bureau of Air Quality Management office and the district office.

12. When start-up involving more than one acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.

13. This permit shall replace previous permits issued for the Sulfuric Acid Plant A.

14. Plant B shall be shut down and will no longer be allowed to operate.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146400
Expiration Date: September 30, 1988

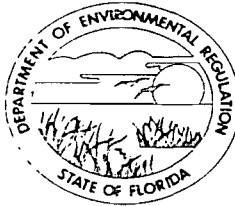
Issued this ____ day of _____,
19__.

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



BOE MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

PERMITTEE:
Occidental Chemical Corp.
P. O. Box 300
White Springs FL 32096

Permit Number: AC 24-146402
Expiration Date: September 30, 1989
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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of the Sulfuric Acid Plant C, with a maximum production capacity of 2300 tons per day 100% acid. Sulfur dioxide and acid mist emissions will be controlled by the existing double absorption process and a Brinks mist eliminator, respectively. The project is located at Occidental's Suwannee River Chemical Complex (SRCC) in Hamilton County, Florida. The UTM coordinates are Zone 17, 328 km East and 3368 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-04, C and D Plants (99.5% Conversion).

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

Attachments:

1. Occidental's letter dated February 19, 1988.
2. DER's letter dated March 1, 1988.
3. Occidental's application package dated March 7, 1988.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402 Expiration Date: September 30, 1989

GENERAL CONDITIONS:

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

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

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

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

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

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402 Expiration Date: September 30, 1989

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.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402 Expiration Date: September 30, 1989

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 noncompliance 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.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402 Expiration Date: September 30, 1989

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 Plant C may operate continuously, i.e., 8760 hours/year.
2. The maximum production rate shall not exceed 2300 TPD (tons per day) based on 100% H₂SO₄.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146402
Expiration Date: September 30, 1989

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO₂) emissions shall not exceed:
 - a) 4 lbs/ton of 100% H₂SO₄ produced
 - b) 383 lbs/hr
 - c) 1679 TPY (tons/yr)
4. Sulfuric Acid Mist emissions shall not exceed:
 - a) 0.15 lb/ton, 100% H₂SO₄ produced
 - b) 14.4 lbs/hr
 - c) 63 TPY
5. Visible Emissions (VE) shall not exceed 10% opacity.
6. Nitrogen oxides (NO_x) emissions are estimated to be 60 TPY, for inventory and PSD tracking purposes.
7. An SO₂ continuous emission monitor shall be maintained and operated in accordance with 40 CFR 60, Subpart H.
8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC) and 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants.
9. Initial and annual compliance tests shall be conducted in accordance with 40 CFR 60 Subpart H, and Appendix A, to determine emissions of SO₂, acid mist, and visible emissions.
10. The DER district office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the district office within 45 days of test completion.

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 district office must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2, FAC).

PERMITTEE: Permit Number: AC 24-146402
Occidental Chemical Corp. Expiration Date: September 30, 1989

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the 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. (FAC Rules 17-2 and 17-4)

If the construction permit expires prior to the permittee filing an application for a permit to operate, then all activities at the project must cease. (FAC Rule 17-4)

11. Any change in the method of operation, raw materials and chemicals processed, equipment, or operating hours pursuant to FAC Rule 17-2.100(118), Modification, shall be submitted for approval to DER's Bureau of Air Quality Management office and the district office.

12. When start-up involving more than one acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.

13. This permit shall replace previous permits issued for the Sulfuric Acid Plant C.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146402
Expiration Date: September 30, 1989

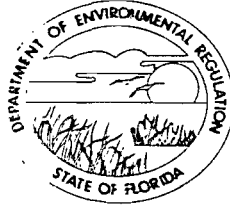
Issued this _____ day of _____,
19__.

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 Corp.
P. O. Box 300
White Springs FL 32096

Permit Number: AC 24-146404
Expiration Date: September 30, 1989
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 drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the permitting of the Sulfuric Acid Plant D, with a maximum production capacity of 2300 tons per day 100% acid. Sulfur dioxide and acid mist emissions will be controlled by the existing double absorption process and a Brinks mist eliminator, respectively. The project is located at Occidental's Suwannee River Chemical Complex (SRCC) in Hamilton County, Florida. The UTM coordinates are Zone 17, 328 km East and 3368 km North.

The Standard Industrial Classification (SIC) Code is Group 20, Chemical and Allied Products; Industry No. 2819, Sulfuric Acid Contact Process. The Source Classification Code (SCC) is 3-01-023-04, C and D Plants (99.5% Conversion).

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

Attachments:

1. Occidental's letter dated February 19, 1988.
2. DER's letter dated March 1, 1988.
3. Occidental's application package dated March 7, 1988.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146404 Expiration Date: September 30, 1989

GENERAL CONDITIONS:

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

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

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

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

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

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146404 Expiration Date: September 30, 1989

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.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146404 Expiration Date: September 30, 1989

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 noncompliance 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.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146404 Expiration Date: September 30, 1989

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 Plant D may operate continuously, i.e., 8760 hours/year.
2. The maximum production rate shall not exceed 2300 TPD (tons per day) based on 100% H₂SO₄.

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146404
Expiration Date: September 30, 1989

SPECIFIC CONDITIONS:

3. Sulfur dioxide (SO₂) emissions shall not exceed:

- a) 4 lbs/ton of 100% H₂SO₄ produced
- b) 383 lbs/hr
- c) 1679 TPY (tons/yr)

4. Sulfuric acid mist emissions shall not exceed:

- a) 0.15 lb/ton, 100% H₂SO₄ produced
- b) 14.4 lbs/hr
- c) 63 TPY

5. Visible Emissions (VE) shall not exceed 10% opacity.

6. Nitrogen oxides (NO_x) emissions are estimated to be 60 TPY, for inventory and PSD tracking purposes.

7. An SO₂ continuous emission monitor shall be maintained and operated in accordance with 40 CFR 60, Subpart H.

8. The permittee shall comply with all the applicable provisions of Chapter 17-2 and 17-4 of the Florida Administrative Code (FAC) and 40 CFR 60 Subpart H, Standards of Performance for Sulfuric Acid Plants.

9. Initial and annual compliance tests shall be conducted in accordance with 40 CFR 60 Subpart H, and Appendix A, to determine emissions of SO₂, acid mist, and visible emissions.

10. The DER district office shall be notified in writing 15 days prior to source testing. Written reports of the tests shall be submitted to the district office within 45 days of test completion.

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 district office must be notified in writing 60 days prior to the expiration of the construction permit and the permittee shall submit a new schedule and request for an extension of the construction permit (Rule 17-2, FAC).

PERMITTEE: Occidental Chemical Corp. Permit Number: AC 24-146404 Expiration Date: September 30, 1989

SPECIFIC CONDITIONS:

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results, and the Certificate of Completion, to the 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. (FAC Rules 17-2 and 17-4)

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12. When start-up involving more than one acid plant occurs, a second plant will not be started up until the first plant is started and in compliance. The permittee shall take all reasonable precautions to avoid violations of ambient air quality standards during plant start-ups.

13. This permit shall replace previous permits issued for the Sulfuric Acid Plant D.

PERMITTEE:
Occidental Chemical Corp.

Permit Number: AC 24-146404
Expiration Date: September 30, 1989

Issued this _____ day of _____,
19__.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary

Jue

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

AC 24-146400

March 1, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Charles B. Pults
Environmental Engineer
Occidental Chemical Company
Post Office Box 300
White Springs, Florida 32096

Dear Mr. Pults:

Re: Request for Permit Revision Dated February 19, 1988

The Department has received your above referenced letter requesting permit revisions for **Plants A, C, and D.**

Please submit construction permit applications along with the appropriate processing fee of \$1000 for each of the acid plants being modified.

The above referenced letter will be incorporated into your application since it addresses PSD applicability.

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: B. Stewart
G. McNeil

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATIONTWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY

March 1, 1988

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Environmental Engineer
Occidental Chemical Company
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White Springs, Florida 32096

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

CHF/PR/s

cc: B. Stewart
G. McNeil

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 1, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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Environmental Engineer
Occidental Chemical Company
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White Springs, Florida 32096

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Sincerely,

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

CHF/PR/s

cc: B. Stewart
G. McNeil

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. 2. Restricted Delivery.

3. Article Addressed to:

Mr. Charles B. Pults
Environmental Engineer
Occidental Chemical Company
P.O. Box 300
White Springs, FL 32096

4. Article Number
P 274 010107

Type of Service:

Registered Insured
 Certified COD
 Express Mail

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

5. Signature - Addressee
X

6. Signature - Agent
X *Clarence Rogers*

7. Date of Delivery
3-2-88

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

PS Form 3811, Feb. 1986 DOMESTIC RETURN RECEIPT

P 274 010 107

RECEIPT FOR CERTIFIED MAIL

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

* U.S.G.P.O. 1985-480-794

PS Form 3800, June 1985

Charles B. Pults, Env. Eng. Occidental Chemical Company 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: 03/02/88 Permit Revision	



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

March 7, 1988

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

RECEIVED

MAR 08 1988

DER - BAQM

Dear Mr. Fancy:

Enclosed are the completed construction applications for "A", "C" & "D" Sulfuric Acid plants. Also enclosed is \$3,000 (2 checks, \$1,000 & \$2,000) to cover the processing fees for these permits.

The enclosed permits reflect Occidental's desire to move ahead with rate increase for "A", "C", & "D" Sulfuric Acid plants as outlined in Charles Pults' letters of February 18, & 19, 1988. We are aware that this arrangement will deplete the production capacity of the "B" Sulfuric Acid plant. We are further aware that additional emission control equipment would be required in the event we should ever request repermitting of the "B" plant.

The "A" Sulfuric permit is a complete 12 page form with attachments. The "C" & "D" Sulfuric permits are abbreviated, at the suggestion of Pradeep Raval, to use only the first six pages showing signatures and calculations. All pertinent flow sheets, maps, and calculations are already on file with the previous "C" & "D" Sulfuric construction permits.

If Occidental may be of further assistance in expediting the completion of these permits, please do not hesitate to call me (904/397-8270) or Charles Pults (904/397-8442).

Sincerely,

A handwritten signature in cursive script that reads "Gene McNeill".

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

psb

Page 2
March 7, 1988

cc: Ernie Frey, FDER, Jacksonville, FL
Mike Fitzsimmons, FDER, Jacksonville, FL
Bill Stewart, FDER, Jacksonville, FL
Pradeep Raval, FDER, Tallahassee, FL

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 (29000 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)	2300	4 (9200 PPD)	0.14 (322 PPD)
"D" Sulfuric	2000	4 (8000 PPD)	0.14 (280 PPD)	2300	4 (9200 PPD)	0.14 (322 PPD)

CURRENTLY PERMITTED:

All plants (A + B + C + D) operating = 5600 TPD H₂SO₄
 Maximum SO₂ Permitted = 62400 lb/day
 Maximum Mist Permitted = 1360 lb/day

REQUESTED MODIFICATIONS:

Plants (A + C + D) operating = 5600 TPD H₂SO₄
 Maximum SO₂ Permitted = 47400 lb/day
 Maximum Mist Permitted = 1144 lb/day

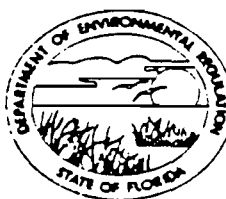
EMISSION DIFFERENCES:

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

SO₂ (Max) 62400 - 47400 = **15000 lb/day**
 Mist (Max) 1360 - 1144 = **216 lb/day**

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



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MAR 08 1988

DER-BAQM

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX SENKEVICH
DISTRICT MANAGER

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Sulfuric Acid Production New¹ Existing¹

APPLICATION TYPE: Construction Operation Modification

COMPANY NAME: Occidental Chemical 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 "A"

SOURCE LOCATION: Street SR 137 City White Springs

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

Latitude 32° 26' 27" N Longitude 82° 47' 16" W

APPLICANT NAME AND TITLE: Occidental Chemical

APPLICANT ADDRESS: P. O. Box 300, White Springs, FL 32096-0300

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Occidental Chemical

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, Vice President & General Mgr.
Name and Title (Please Type)

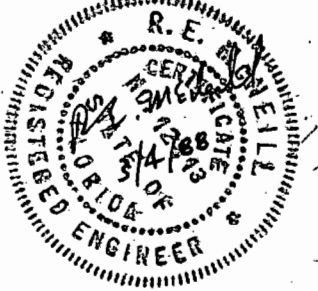
Date: 2/7/88 Telephone No. 904/397-8101

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 R. E. McNeill

 R. E. McNeill

 Name (Please Type)
 Occidental Chemical Corporation

 Company Name (Please Type)
 P. O. Box 300, White Springs, FL 32096-0300

 Mailing Address (Please Type)

Florida Registration No. 12813 Date: 3/4/88 Telephone No. 904/397-8101

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 rate of "A" Sulfuric Acid plant is being increased from 800 to 1000 tons per day. The increased so2, Acid Mist, and NOx emissions will be offset by reducing the permitted production capacity of "B" Sulfuric Acid from 800 to 600 TPD.

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

Start of Construction March 1988 Completion of Construction April 1988

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 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.

A024-2462 issued 9/5/75 and expiring 8/31/80

A024-33055 issued 7/28/80 and expiring 7/28/85

A024-103966 issued 7/18/85 and expiring 7/18/90; Rev. 10/19/87

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)

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 Deterioration" (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? No

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 justifi-
cation for any answer of "No" that might be considered questionable.

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Sulfur	Ash	Approx. 0.005%	27,764	1

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

1. Total Process Input Rate (lbs/hr): 27,764
2. Product Weight (lbs/hr): 89,606

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	1208	5291	17-2.05(6)	1208	1208	5291	1
H2SO4 Mist	20.8	91	17-2.05(6)	20.8	346	1517	1
VE	10%		17-2.05(6)	10%			

¹See Section V, Item 2.

²Reference 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)

³Calculated from operating rate and applicable standard.

⁴Emission, 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)
Single Absorption	SO2	98%	NA	Design & test
Contact H2SO4 Dorr- Oliver Plant				
York Demister in exit of absorber	H2SO4 Mist	94%	0-10	Test

E. Fuels

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: 200 ft. Stack Diameter: 5.92 ft.
 Gas Flow Rate: 80,000 ACFM 68,129 DSCFM Gas Exit Temperature: 160 °F.
 Water Vapor Content: 0 % Velocity: 48.5 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 Diameter: _____ 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 devices: 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)

2-4

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

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:

¹Explain method of determining efficiency.

²Energy 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:

¹Explain method of determining efficiency.
²Energy 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:

¹Applicant 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 _____ () SO₂* _____ 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

PRODUCT RATE: 1000 Short Tons Per Day (STPD) of 100% H₂SO₄ as 93%
H₂SO₄ - or -

$$\frac{1000 \text{ ton}}{\text{day}} \times \frac{1}{.93} \times \frac{\text{day}}{24 \text{ hr.}} \times \frac{2000 \text{ lb.}}{\text{ton}} = 89,606 \text{ lb/hr}$$

PROCESS INPUT 1000 STPD of 100% H₂SO₄ equivalent to 326.5 STPD of
sulfur (1000 x 32/98) at an efficiency of 98% requires
333.2 STPD of sulfur (326.5/0.98) - or -

$$\frac{333.2 \text{ ton}}{\text{day}} \times \frac{\text{day}}{24 \text{ hr.}} \times \frac{2000 \text{ lb.}}{\text{ton}} = 27764 \text{ lb/hr}$$

EMISSIONS CALCULATIONS:

$$\frac{1000 \text{ ton}}{\text{day}} \times \frac{\text{day}}{24 \text{ hr.}} = 41.67 \text{ ton/hr.}$$

SO₂

$$29 \text{ lb/ton} \times 41.67 \text{ ton/hr.} = 1208 \text{ lb/hr.}$$

$$1208 \text{ lb/hr.} \times 24 \text{ hr/day} \times 365 \text{ day/yr.} \times \frac{\text{ton}}{2000 \text{ lb}} = 5291 \text{ ton/yr.}$$

MIST

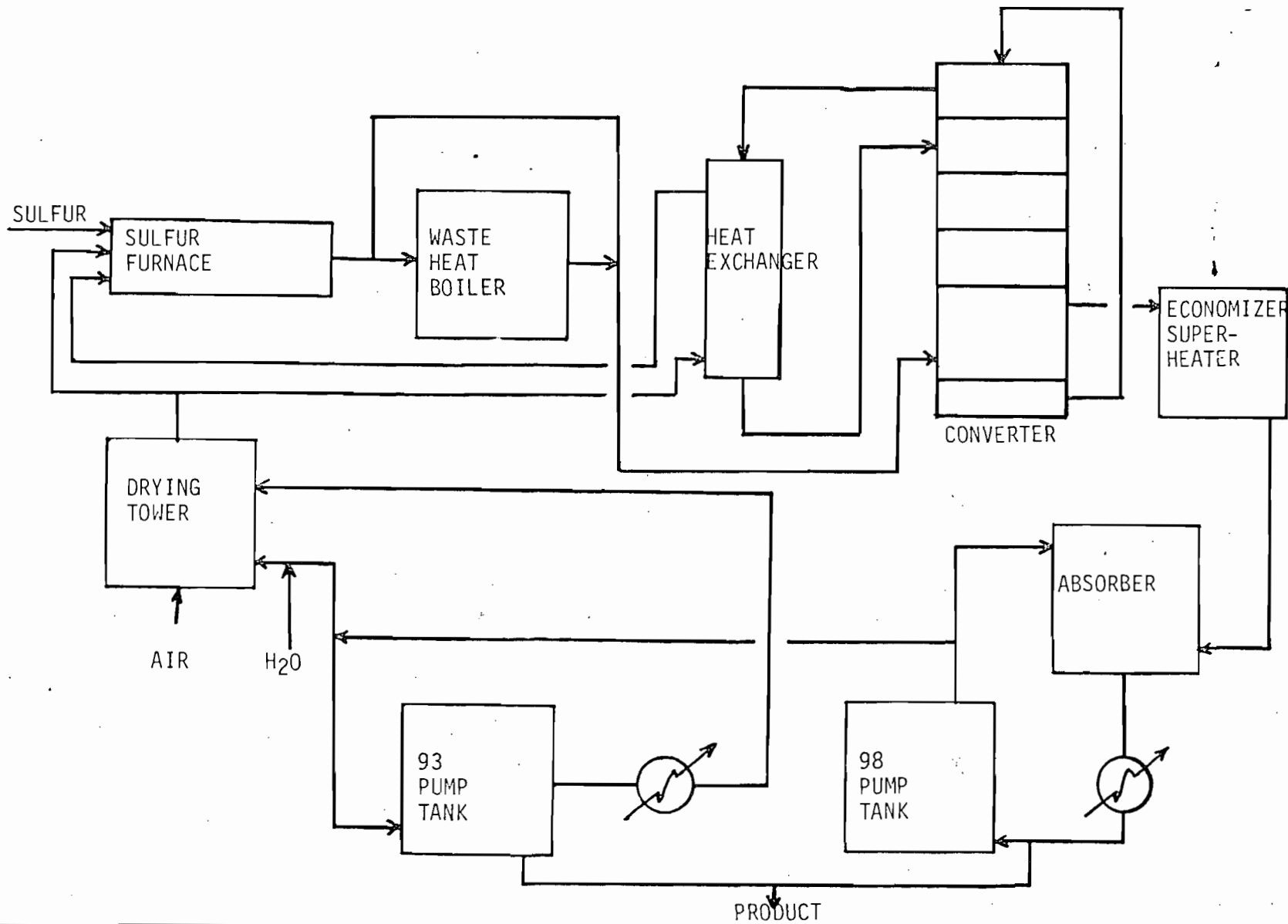
$$0.5 \text{ lb/ton} \times 41.67 \text{ ton/hr.} = 20.8 \text{ lb/hr.}$$

$$20.8 \text{ lb/hr} \times 24 \text{ hr/day} \times 365 \text{ day/yr} \times \frac{\text{ton}}{2000 \text{ lb}} = 91.1 \text{ ton/yr}$$

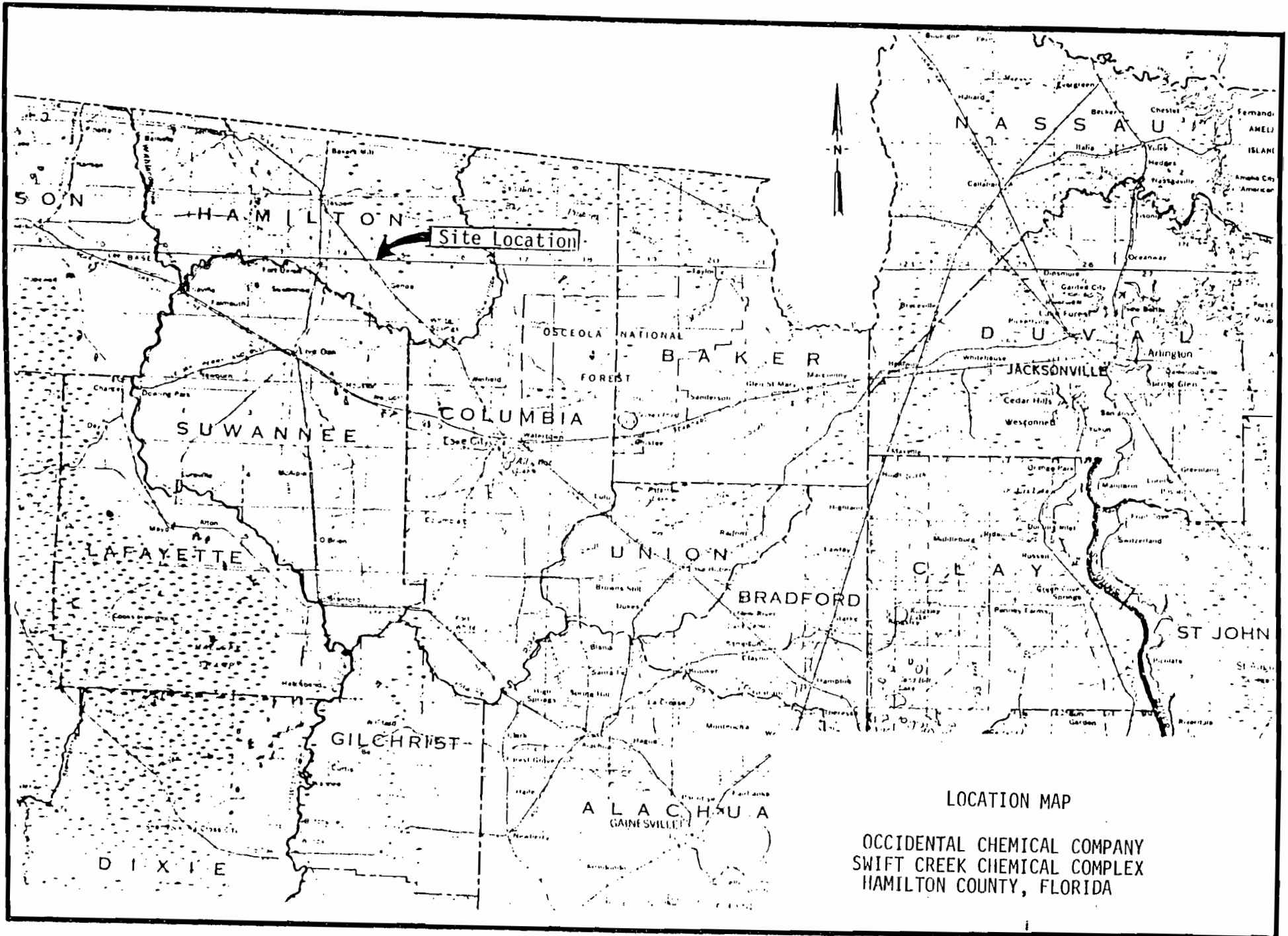
$$\text{DSCFM} = \text{ACFM} \times \frac{T_{\text{std}}}{T_{\text{s}}} = 80000 \times \frac{528}{620} = 68129 \text{ DSCFM}$$

$$T_{\text{std}} = 528^{\circ}\text{K}$$

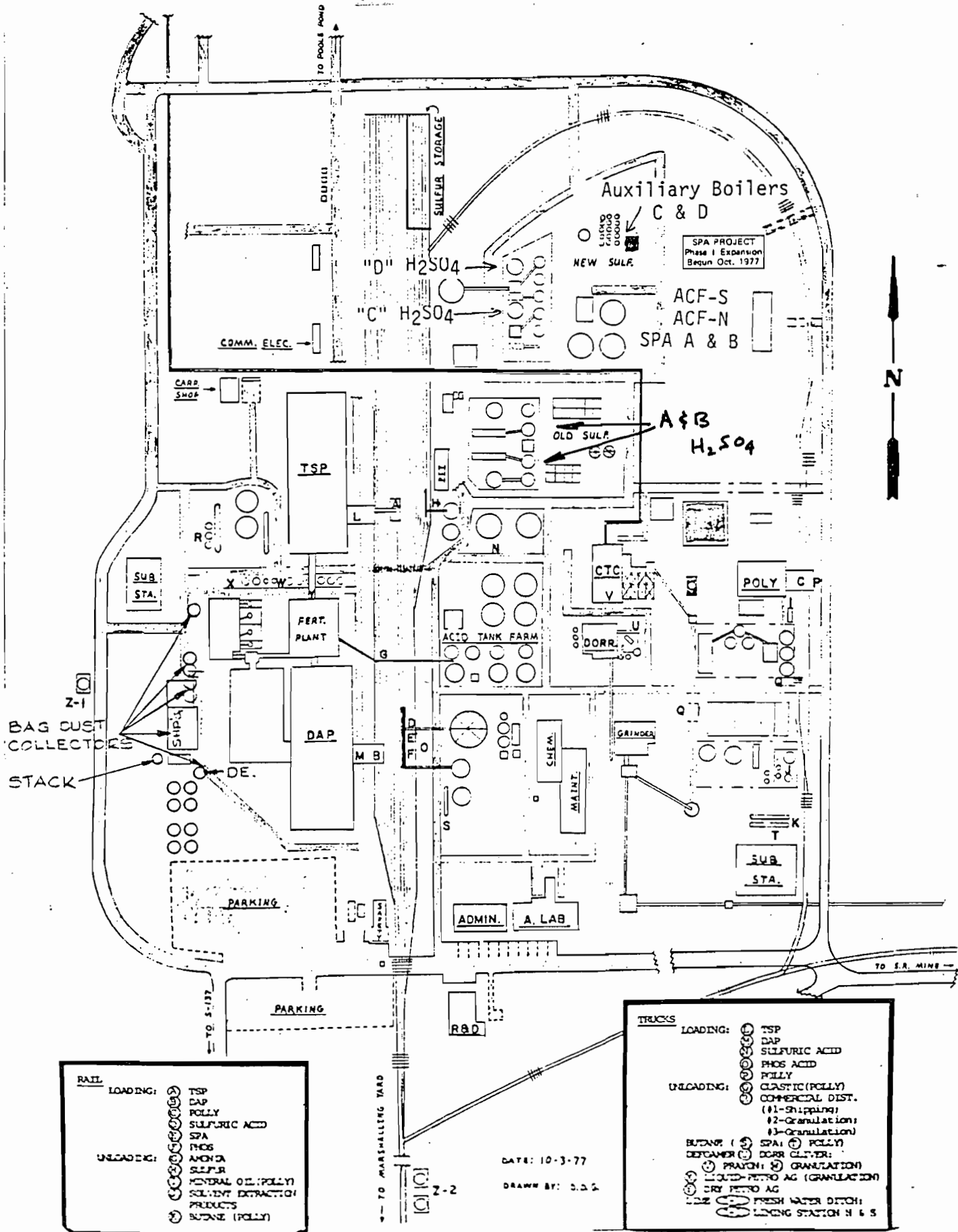
$$T_{\text{s}} = 620^{\circ}\text{K} (460 + 160)$$



Best Available Copy



LOCATION MAP
OCCIDENTAL CHEMICAL COMPANY
SWIFT CREEK CHEMICAL COMPLEX
HAMILTON COUNTY, FLORIDA



RAIL

LOADING: TSP, DAP, POLLY, SULFURIC ACID, SPA, PHOS, AMONIA, SULFUR, GENERAL OIL (POLLY), SOLVENT EXTRACTION PRODUCTS, BUTANE (POLLY)

UNLOADING: TSP, DAP, POLLY, SULFURIC ACID, SPA, PHOS, AMONIA, SULFUR, GENERAL OIL (POLLY), SOLVENT EXTRACTION PRODUCTS, BUTANE (POLLY)

TRUCKS

LOADING: TSP, DAP, SULFURIC ACID, PHOS ACID, POLLY

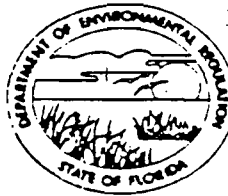
UNLOADING: CLASTIC (POLLY), COMMERCIAL DIST. (#1-Shipping), (#2-Granulation), (#3-Granulation)

BUTANE (), SPA (), POLLY (), DEFAMER (), DORR CLTYER (), PRAXION (), GRANULATION (), LIQUID-PETRO AG (GRANULATION), DRY PETRO AG (), FRESH WATER DITCH (), LIVING STATION N & S

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



RECEIVED

MAR 08 1988

DER-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 [] New¹ [X] Existing¹

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

COMPANY NAME: Occidental Chemical Corporation 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 White Springs

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

Latitude 32° 26' 27" N Longitude 82° 47' 16" W

APPLICANT NAME AND TITLE: Occidental Chemical Corporation

APPLICANT ADDRESS: P. O. Box 300, White Springs, FL 32096-03-0

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Occidental Chemical Corp.

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, Vice President & General Mgr.
Name and Title (Please Type)

Date: 2/7/88 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 R. E. McNeill
R. E. McNeill
Name (Please Type)
Occidental Chemical Corporation
Company Name (Please Type)
P. O. Box 300, White Springs, FL 32096-0300
Mailing Address (Please Type)

Florida Registration No. 12813 Date: 1/4/88 Telephone No. 904/397-8269

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 rate of "C" sulfuric acid is being increased from 2000 TPD to 2300 TPD of 100% acid. The increased SO2, acid mist, and NOx emissions will be offset by reducing the permitted production rate of the "B" sulfuric acid plant by 300 TPD as stipulated in previous letters to the Department. This increase is concurrent with similar increases at "A" and "C" sulfuric acid plants. Total reduction at "B" sulfuric acid plant
- B. Schedule of project covered in this application (Construction Permit Application Only) will be 800 TPD.
Start of Construction _____ Completion of Construction _____
- C. Cost 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 systems (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.
AC24-2131 issued 11/6/73 expiring 6/30/75; A024-2548 revised 3/1/76 expiring 1/31/81
A024-34851 issued 12/23/81 expiring 12/23/86
A024-125595 issued 12/12/86 expiring 12/23/91; AC24-131271 issued 9/29/87 expiring 7/1/88

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)

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 Deterioration" (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 justifi-
cation for any answer of "No" that might be considered questionable.

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Sulfur	Ash	Approx. 0.005%	62775	1

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

- Total Process Input Rate (lbs/hr): 62775
- Product Weight (lbs/hr): 206,093 of 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	383.3	1678.4	17-2.600(2)(b)	383.3	383.3	1678.4	1
H2SO4 Mist	14.4	63	"	14.4	254.4	1114.2	1
VE	10%		"	10%			

¹See Section V, Item 2.

²Reference 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)

³Calculated from operating rate and applicable standard.

⁴Emission, 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				
Brinks ES mist	H2SO4 Mist	94%	0-10	Test
Eliminator				

E. Fuels

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 Diameter: _____ 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 devices: Cyclone Wet Scrubber Afterburner
 Other (specify) _____

ATTACHMENT 1

PRODUCT RATE: 2300 Short Tons Per Day (STPD) of 100% H₂SO₄ as 93%
H₂SO₄ - or -

$$\frac{2300 \text{ ton}}{\text{day}} \times \frac{1}{.93} \times \frac{\text{day}}{24 \text{ hr.}} \times \frac{2000 \text{ lb.}}{\text{ton}} = 206093 \text{ lb/hr}$$

PROCESS INPUT 2300 STPD of 100% H₂SO₄ equivalent to 751 STPD of
sulfur (2300 x 32/98) at an efficiency of 99.7% requires
753.3 STPD of sulfur (751/0.997) - or -

$$\frac{753.3 \text{ ton}}{\text{day}} \times \frac{\text{day}}{24 \text{ hr.}} \times \frac{2000 \text{ lb.}}{\text{ton}} = 62775 \text{ lb/hr}$$

EMISSIONS CALCULATIONS:

$$\frac{2300 \text{ ton}}{\text{day}} \times \frac{\text{day}}{24 \text{ hr.}} = 95.83 \text{ ton/hr.}$$

SO₂

$$4 \text{ lb/ton} \times 95.83 \text{ ton/hr.} = 383.3 \text{ lb/hr.}$$

$$383.3 \text{ lb/hr} \times 24 \text{ hr/day} \times 365 \text{ day/yr} \times \frac{\text{ton}}{2000 \text{ lb}} = 1678.4 \text{ ton/yr}$$

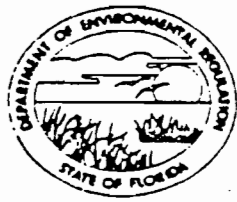
MIST

$$0.15 \text{ lb/ton} \times 95.83 \text{ ton/hr.} = 14.38 \text{ lb/hr.}$$

$$14.38 \text{ lb/hr} \times 24 \text{ hr/day} \times 365 \text{ day/yr} \times \frac{\text{ton}}{2000 \text{ lb}} = 62.98 \text{ ton/yr}$$

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



RECEIVED

MAR 08 1988

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

DER-BAQM

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

SOURCE TYPE: Double Absorption Sulfuric Acid [] New¹ [X] Existing¹

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

COMPANY NAME: Occidental Chemical Corporation 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 White Springs

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

Latitude 32° 26' 27" N Longitude 82° 47' 16" W

APPLICANT NAME AND TITLE: Occidental Chemical Corporation

APPLICANT ADDRESS: P. O. Box 300, White Springs, FL 32096-0300

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Occidental Chemical Corp.

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 permit establishment.

*Attach letter of authorization

Signed: Hudson C. Smith
Hudson C. Smith, Vice President & General Mgr.
Name and Title (Please type)

Date: 2/7/88 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 R. E. McNeill
R. E. McNeill

Name (Please Type)
Occidental Chemical Corporation

Company Name (Please Type)
P. O. Box 300, White Springs, FL 32096-0300

Mailing Address (Please Type)

Florida Registration No. 12813 Date: 3/4/88 Telephone No. 904/397-8269

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 rate of "D" Sulfuric acid is being increased from 2000 TPD to 2300 TPD of 100% acid. The increased SO2, acid mist, and NOx emissions will be offset by reducing the permitted production rate of the "B" Sulfuric acid plant by 300 TPD as stipulated in previous letters to the Department. This increase is concurrent with similar increases at "A" and "C" Sulfuric acid plants. Total reductions at "B" sulfuric acid plant will be 800 TPD.

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

Start of Construction March 1988 Completion of Construction April 1988

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 systems (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.

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

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

A024-107480 issued 8/22/85 expiring 8/26/90; AC24-131270 issued 9/29/87 expiring 7/1/88

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)

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 Deterioration" (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 justifi-
cation for any answer of "No" that might be considered questionable.

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

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

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Sulfur	Ash	Approx. 0.005%	62775	1

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

- Total Process Input Rate (lbs/hr): 62775
- Product Weight (lbs/hr): 206,093 of 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 Emission Rate per Rule 17-2	Allowable Emission lbs/hr ³	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
Sulfur Dioxide	383.3	1678.4	17-2.600(2)(b)	383.3	383.3	1678.4	1
H2SO4 Mist	14.4	63	"	14.4	254.4	1114.2	1
VE	10%		"	10%			

¹See Section V, Item 2.

²Reference 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)

³Calculated from operating rate and applicable standard.

⁴Emission, 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				
Brinks ES mist	H2SO4 Mist	94%	0-10	Test
Eliminator				

E. Fuels

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 Diameter: _____ 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 devices: Cyclone Wet Scrubber Afterburner
 Other (specify) _____

ATTACHMENT 1

PRODUCT RATE: 2300 Short Tons Per Day (STPD) of 100% H₂SO₄ as 93%
H₂SO₄ - or -

$$\frac{2300 \text{ ton}}{\text{day}} \times \frac{1}{.93} \times \frac{\text{day}}{24 \text{ hr.}} \times \frac{2000 \text{ lb.}}{\text{ton}} = 206093 \text{ lb/hr}$$

PROCESS INPUT 2300 STPD of 100% H₂SO₄ equivalent to 751 STPD of
sulfur (2300 x 32/98) at an efficiency of 99.7% requires
753.3 STPD of sulfur (751/0.997) - or -

$$\frac{753.3 \text{ ton}}{\text{day}} \times \frac{\text{day}}{24 \text{ hr.}} \times \frac{2000 \text{ lb.}}{\text{ton}} = 62775 \text{ lb/hr}$$

EMISSIONS CALCULATIONS:

$$\frac{2300 \text{ ton}}{\text{day}} \times \frac{\text{day}}{24 \text{ hr.}} = 95.83 \text{ ton/hr.}$$

SO₂

$$4 \text{ lb/ton} \times 95.83 \text{ ton/hr.} = 383.3 \text{ lb/hr.}$$

$$383.3 \text{ lb/hr} \times 24 \text{ hr/day} \times 365 \text{ day/yr} \times \frac{\text{ton}}{2000 \text{ lb}} = 1678.4 \text{ ton/yr}$$

MIST

$$0.15 \text{ lb/ton} \times 95.83 \text{ ton/hr.} = 14.38 \text{ lb/hr.}$$

$$14.38 \text{ lb/hr} \times 24 \text{ hr/day} \times 365 \text{ day/yr} \times \frac{\text{ton}}{2000 \text{ lb}} = 62.98 \text{ ton/yr}$$



STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
APPLICATION FOR TRANSFER OF PERMIT

NOTIFICATION OR
SEE ATTACHED Date Issued SEE ATTACHED Date Expires SEE ATTACHED

NOTIFICATION OF SALE OR LEGAL TRANSFER

Name: SEE ATTACHED County: HAMILTON
Location: EAST OF US 41, NORTH OF WHITE SPRINGS, FL City: N.A.
Name: SEE ATTACHED Title:
Address: P. O. BOX 300, WHITE SPRINGS, FL 32096

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

and subscribed before me at HAMILTON HUDSON C. SMITH Hudson C. Smith
White Springs, Florida Signature of Permittee
GENERAL MANAGER
day of December 19 87 Title
Notary Public Date: DECEMBER 18, 1987

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

REQUEST FOR TRANSFER OF PERMIT

Name: SEE ATTACHED
Company Name: OCCIDENTAL CHEMICAL CORPORATION Title: ENVIRONMENTAL COORDINATOR
Address: P. O. BOX 300, WHITE SPRINGS, FL 32096
Telephone: (904) 397-8269
area
Engineer Name: N. A.
Address:
Telephone: ()
area

Resigned 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 therein. He also agrees to promptly notify the department of any future change in ownership of, or responsibility for, the activity or project.

and subscribed before me at HAMILTON W. M. MILLER W. M. Miller
White Springs, Florida Signature of Applicant
ENVIRONMENTAL COORDINATOR
day of December 19 87 Title
Notary Public Date: DECEMBER 18, 1987

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

letter of authorization if other than owner or corporate officer.



File Copy
No envelope
attached. Hence
no PM date.
1.4.88 (m)

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

December 10, 1987

DER

DEC 23 1987

BAQM

CERTIFIED MAIL

Mr. Stephen Smallwood
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399

Re: Occidental Chemical Agricultural Products, Inc.- Permit/
Permit Application Transfers to Occidental Chemical Corporation

Dear Mr. Smallwood:

By our correspondence of November 18, 1987, we provided you advance notification of the upcoming merger of Occidental Chemical Agricultural Products, Inc. into Occidental Chemical Corporation. The effective date of the merger will be December 23, 1987. Accordingly, we would appreciate the department's transfer of the permit/permit applications listed on the enclosed DER Form 17-1.201(1) to the name Occidental Chemical Corporation, as applicant or permittee, effective December 23, 1987.

I would appreciate your directing all correspondence to Occidental's Director of Environmental, Health and Safety at the address listed below.

Mr. R. Eugene McNeill
Occidental Chemical Agricultural Products, Inc.
P. O. Box 300
White Springs, FL 32096

Thank you for your cooperation and assistance.

Sincerely yours,

W. Marvin Miller

W. Marvin Miller
Environmental Coordinator

WMM/rdw

Enclosures

cc: Mr. Ernest E. Frey
Lawrence E. Sellers, Esquire

Copied: CHFIBT
Priscilla Raval }
Jim Rogers } 1.4.88 (m)

1-4-88

~~BT~~

BT } FBI

4

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED


OCCIDENTAL CHEMICAL CORPORATION

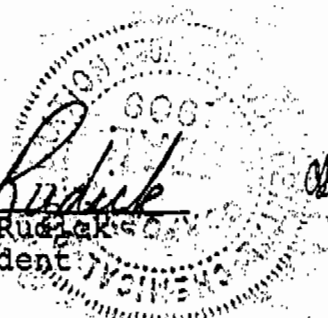
Certificate of Authority

TO WHOM IT MAY CONCERN:

W. M. Miller, Environmental Coordinator, Occidental Chemical Corporation, Agricultural Products Group, is Occidental Chemical Corporation's authorized agent for execution and filing of DER Forms 17-1.201(1), whereby Occidental Chemical Corporation assumes the rights and liabilities as transferee under permits and applications issued and filed in the names of Occidental Chemical Agricultural Products, Inc., Occidental Chemical Company, Jacksonville Bulk Terminal, and Jacksonville Dulk Terminal, Inc.

DATED: December 18, 1987


Michael J. Rudzik
Vice President





KOOGLER & ASSOCIATES, *Environmental Services*

1213 NW 6th Street • Gainesville, Florida 32601 • 904/377-5822

FILE
AC 24-131270

- 131271

KA 102-86-04

April 17, 1987

Mr. Bill Thomas
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Occidental Chemical Agricultural Products Inc.
Proposed rate changes in the A, B, C and D sulfuric acid plants
at Occidental's Suwannee River Chemical Complex

Dear Bill:

On behalf of Gene McNeill and myself, I would like to express appreciation for the opportunity to meet with you, Pradeep Ravel, and Tom Rogers on April 16, 1987 to discuss the proposed rate changes in Occidental's four Suwannee River Chemical Complex (SRCC) sulfuric acid plants. We are continuing to review combinations of emission limits, operating times and production rates for the four sulfuric acid plants and will discuss these factors with you early during the week of April 20, 1987.

I am submitting with this letter, the results of air quality modeling that we discussed with you during our meeting on April 16, 1986 demonstrating that increasing the production rates of the C and D sulfuric acid plants from 1,800 tons per day to 2,000 tons per day (each plant) and reducing the production rates of the A and B sulfuric acid plants from 1,000 tons per day to 950 tons per day (each plant) will have no affect on ambient air quality. This modeling was conducted with Version V of the ISC-ST model using five years of meteorological data from Valdosta. The modeling considered only changes in emissions from the four sulfuric acid plants. If the Department wishes to conduct additional modeling, I have attached hereto stack parameters for the four sulfuric acid plants representing both present permitted and proposed permitted emission rates and stack parameters. The attached information will allow a more rigorous air quality evaluation of the proposed changes.

DER

APR 20 1987

BAQM

Mr. Bill Thomas
Florida Department of
Environmental Regulation

April 17, 1987

Page 2

If there are any questions regarding the information that is provided herein, please do not hesitate to contact me.

Very truly yours,

KOOGLER & ASSOCIATES



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

JBK:app
Enclosure

cc: Gene McNeill
Marvin Miller

Tom Fagers
Pondery Rural 4-20-87 RR

SUMMARY OF IMPACTS ON AIR QUALITY RESULTING FROM CHANGING RATES OF "C" AND "D" H₂SO₄ PLANTS FROM 1800 TPD TO 2000 TPD AND RATES OF "A" AND "B" H₂SO₄ PLANTS FROM 1000 TPD TO 950 TPD

YEAR(1)	SO ₂ IMPACT ($\mu\text{g}/\text{m}^3$) (2)		
	ANNUAL	3-HR	24-HR
1972	< 0	0.05	0.005
1973	< 0	0.05	0.004
1974	< 0	0.06	0.004
1975	< 0	0.05	0.003
1976	< 0	0.06	0.004

(1) VALDOSTA GA METEOROLOGICAL DATA YEAR

(2) SO₂ IMPACT CALCULATED WITH ISC-ST II MODEL

STACK PARAMETERS REPRESENTING
 PROPOSED RATE CHANGES IN H₂SO₄ PLANTS
 OCCIDENTAL CHEM. AG. PRODUCTS, INC.
 SRCC - WHITE SPRINGS, FLORIDA

Plant	Emission Rate (g/sec)	Stack		Stack Gas	
		Ht (m)	Dia (m)	Vel (m/s)	Temp (°K)
A/B permitted(1)	-152.25	61.0	1.80	15.50	350
A/B proposed(2)	+144.64	61.0	1.80	14.73	350
C/D permitted(3)	-37.80	45.7	1.59	28.70	356
C/D proposed(4)	+42.00	45.7	1.59	31.89	356

- (1) 1000 tpd @ 29 lb SO₂/ton
- (2) 950 tpd @ 29 lb SO₂/ton
- (3) 1800 tpd @ 4 lb SO₂/ton
- (4) 2000 tpd @ 4 lb SO₂/ton

42.381 50 SHEETS 5 SQUARE
 42.382 100 SHEETS 5 SQUARE
 42.383 200 SHEETS 5 SQUARE
 NATIONAL

4/17/87



Best Available Copy

MESA UNITED BANK
OF GRAND JUNCTION
GRAND JUNCTION, COLORADO 81501

82-91/1021

DATE: 3/31/87 PAY

PAY TO THE ORDER OF

****1800.00****

TO THE ORDER OF
Department of Environment Regulation
Twin Towers Office Building
2600 Blair Stone Rd
Tallahassee, FL 32301-8241

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.

NOT VALID AFTER 180 DAYS

BY *[Signature]*

AS DISBURSING AGENT(S) FOR THE COMPANY



DETACH BEFORE DEPOSITING

THIS CHECK IS IN PAYMENT OF THE FOLLOWING

DATE	THIS CHECK IS IN PAYMENT OF THE FOLLOWING	AMOUNT
3/31/87	Permit Fees Co. 020200	\$1800.00
	DER APR 02 1987 BAQM Hand Delivered. 4-2-87 BAM Permit #: AC 24-131270 -131271	Receipt # 76150 + 200.00 3-4-87 2000.00

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

CHECK NO. 010058

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

No 76156

RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE

Received from Occidental Chemical Agricultural Products Inc. Date April 2, 1987

Address P.O. Box 300, White Springs, FL 32096 Dollars \$ 1800.00

Applicant Name & Address Same as above

Source of Revenue See Receipt # 76150 (\$200.00); total received: \$2000.00

Revenue Code 001031 Application Number AC 24-131270, -131271

By *[Signature]*

Best Available Copy

PM
13 Nov. 1987
Gainesville.

File Copy

Ka

KOOGLER & ASSOCIATES, Environm.

Services

1213 NW 6th Street • Gainesville, Florida 32604

377-5822

KA 102-86-04

November 13, 1987

DER

NOV 16 1987

BAQM

Copied

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):

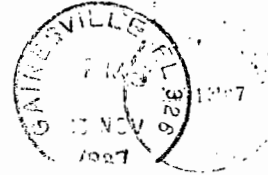
A compliance test shall be carried out in accordance with 40CFR60, Subpart H. ...

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.

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KOOGLER & ASSOCIATES, *Environmental Services*

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~~BT~~ → FYI



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