

Final Determination

Occidental Chemical Company
Swift Creek and Suwannee River Chemical Complexes
Hamilton County, Florida

PERMIT NUMBERS:

SRCC Fuel Conversion Project PSD-FL-083
Sulfuric Acid Plant Production Rate Increase PSD-FL-082

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

May 18, 1983

Response to Public Comment
Occidental Chemical Company
PSD-FL-082 and PSD-FL-083

Comments were received from Mr. James T. Wilburn of the U.S. Environmental Protection Agency, Region IV, Mr. Walter R. McAllister of the U.S. Fish and Wildlife Service and John B. Koogler in behalf of the Company.

Mr. Wilburn and Mr. McAllister questioned the Department's air quality analysis in the Preliminary Determination. Mr. Koogler questioned a portion of the Preliminary Determination, several of the proposed specific conditions of approval, and the draft public notice.

The areas of question and DER's responses follow. The first seven comments are those of Mr. Wilburn and the eighth comment is common to both Mr. Wilburn and Mr. McAllister. The last comment is that of Mr. Koogler.

Comment No. 1

In determining the sulfur dioxide (SO₂) impacts on the Class I area, a 12-hour half-life was used in the modeling. Region IV discourages anyone from using this assumption except in very isolated cases and then only after sufficient documentation has been presented. Therefore, Occidental should justify how and why a 12-hour half-life for SO₂ emissions would be appropriate in this case.

Response

The use of a 12-hour half-life for SO₂ impacts on the Class I area was approved by the Department after consultation with EPA Region IV. Our several conversations with EPA on this point were with Lew Nagler, the Region IV meteorologist.

The applicant originally proposed the use of an eight-hour half-life. This was disapproved by the Department. A 12-hour half-life has been used, and approved of, in the past by EPA in other permit-related modeling studies. Two in particular are Jacksonville Electric Authority (JEA) in Florida and Airco Carbon in South Carolina. It is the opinion of the Department that the meteorology and SO₂ conversion environment of the north Florida site for Occidental facilities is similar enough to the above two cases to justify the use of the same 12-hour half-life.

Comment No. 2

Much of the modeling analysis is confusing in that one is not able to determine whether or not all emission points have been included or that the SCCC and SRCC plants have been modeled separately. The modeling information is insufficient to determine the adequacy of the submittals, for example, Tables 1, 2, and 3 depicting Class I area impacts are not clear.

Response

In the modeling analysis all increment consuming sources at both SRCC and SCCC were used for the separate PSD reviews of these facilities. The facilities were modeled separately in that separate receptor grids were used for each facility under review. Since the two facilities are five kilometers apart, the separate grids were needed to adequately resolve the calculated concentrations in the areas surrounding each facility.

Only one analysis of the Class I area was made. Both the SRCC and SCCC facilities were included in the modeling with the receptors located along the boundary of the Class I area.

Comment No. 3

On page 8, the existing air quality analysis for the SRCC facility gives different results from similar analyses performed for the SCCC facility found on page 7. Please explain these differences.

Response

The maximum increment consumption predicted in the general area of each facility (SRCC and SCCC) defined the increment consumed for each. In determining these values all increment consuming sources from both facilities were used in the modeling. The predicted maximum increment consumption for each facility could occur with different meteorology because of the effect of the upwind facility on the other. However, the maximum predicted increment consumption for a facility will not necessarily occur in an interacting situation of both facilities. For these reasons, the increment consumption was quantified in the areas surrounding each facility. The alternative would be to take the maximum increment consumed from either facility and call that the maximum for both.

Comment No. 4

The Department of Environmental Regulation (DER) letter of June 25, 1982, indicates violations were modeled by the DER. There is no evidence in the documents that this concern has been corrected.

Response

The modeled violations of the 24-hour Florida Ambient Air Quality Standard (FAAQS) for SO₂ were corrected when the

applicant agreed to change the allowable emission limits of the polyphos reactors A and B from 13.1 grams per second to 0.63 grams per second. The lower value is close to the actual emissions coming from these sources.

Comment No. 5

The AQDM model used in the SCCC annual modeling analysis is inappropriate. The preferred model is the ISCLT which was used in the SRCC analysis. The impacts however, from the two different models were identical.

Response

The Department agrees that the AQDM model is no longer appropriate for annual modeling. This model will no longer be accepted for PSD review. The ISCLT model will be the recommended model. The use of the AQDM model in the PSD review for the Occidental facilities would not, in the opinion of the Department, result in a change in the conclusions.

Comment No. 6

The use of the PTMTP-W model should be accepted with reservation since this model has been replaced by the MPTER/ISC or other similar models.

Response

The PTMTP-W model has been accepted by the Department as an equivalent model to the MPTER and ISCST models provided all the appropriate updates have been made. The Department often checks the modeling results with equivalent ISCST model runs.

Comment No. 7

The soils and vegetation analysis should be expanded, especially when discussing Class I area impacts. This analysis should correlate predicted ground-level concentrations with the sensitivity levels of the soils and vegetation in the area. This should also include short and long term exposure durations.

Response

The impact of the Occidental facilities has been shown to result in concentrations in the ambient air of less than the secondary standards. Since these standards have been set to protect soils and vegetation, the Department is satisfied that no adverse impacts will result.

Since the maximum impact near the Occidental facility is less than the secondary standard, the impact at the Class I area located 40 kilometers to the northeast will be far below the secondary standard. Although all of the allowed PSD increment is consumed, the actual levels of SO₂ concentration are not expected to be great enough to cause any effect on soils and vegetation in the Class I area.

Comment No. 8

Due to the 100% consumption of the Class I area increment for SO₂, EPA recommends that a post-construction ambient monitor be located at the maximum impact area at the appropriate boundary of the Class I area. (A similar comment was made by the U. S. Fish and Wildlife Service.)

Response

The placement of an SO₂ monitor at the boundary of the Class I area will not give any meaningful information about the

increment consumed by the SRCC and SCCC facilities. It is the Department's opinion that the use of monitors to discover violations of increments is inappropriate in the case of a source modification, because one cannot distinguish between background or non-increment consuming concentrations and increment consuming ones in the measured data. Therefore the Department does not agree with this recommendation.

Comment No. 9

Mr. John B. Koogler commented on the draft public notice's wording and requested that Specific Conditions No. 5 and No. 9 (PSD-FL-082), and Specific Condition No. 2 (PSD-FL-083) be modified. He also requested a modification of Table 1 of the Preliminary Determination. The Department responses are described below:

Public Notice

The Public Notice was reworded to read: "No physical modifications to the plant equipment are required to accomplish these operational changes except for the minor changes detailed in the construction permit applications." These minor changes will be done in order to achieve the production rate increase (up to 2500 TPD). These changes involve increasing the size of the economizer, the gas handling system and the catalyst loading will be increased. The absorption towers and mist eliminators will not be modified.

PSD-FL-082

Specific Condition No. 5 was modified as follows: The applicant shall establish a conversion factor for the purpose of converting monitoring data into units of the applicable standard

(kg/metric ton, lb/short ton). The conversion factor shall be determined, as set forth in Section 60.84(b), Emission Monitoring. Other EPA and State approved methods may be substituted for those specified in 40 CFR 60, Subpart H, 60.84(b).

Specific Condition No. 9 was modified to specify the frequency with which compliance tests for nitrogen oxide emissions must be made. The following paragraph was added to this condition: Performance tests for nitrogen oxides to determine emission compliance status shall be requested by the Department when deemed necessary.

PSD-FL-083

Specific Condition No. 2 was changed to allow continuous operation, since full time operation will not threaten ambient air quality standards.

Table I of the Preliminary Determination was corrected as requested. The particulate matter emission data was changed to reflect emissions from oil burning instead of coal-oil mix burning in the "C" boiler. Table II was modified for clarification purposes.

CONCLUSION

The comments received were considered as indicated above in the development of the Department's Final Determination for the construction/modification of the proposed sources.

Table 1

SUMMARY OF EMISSIONS(Tons per year)⁽¹⁾

| <u>SOURCE</u> | <u>POLLUTANT</u> | | | | | |
|--------------------------|------------------|-----------------|-----------------|------------|------------|------------|
| | PM | SO ₂ | NO ₂ | CO | VOC | |
| Boiler "B" | | | | | | |
| Permitted ⁽²⁾ | 70.00 | 597 | | --- | --- | |
| Proposed ⁽³⁾ | 62.3 | 765.8 | 287.2 | 23.9 | 4.8 | |
| Increase | -7.7 | 168.8 | | -0- | -0- | |
| Boiler "C" | | | | | | |
| Permitted ⁽²⁾ | 39.5 | 442.4 | ---- | ---- | ---- | |
| Proposed ⁽³⁾ | 46.7 | 572.1 | 239 | 18.4 | 4.5 | |
| Increase | 7.2 | 129.7 | -0- | -0- | -0- | |
| Boiler "D" | | | | | | |
| Permitted ⁽²⁾ | 39.5 | 442.4 | ---- | ---- | ---- | |
| Proposed ⁽³⁾ | 46.7 | 564.0 | 215 | 18 | 4 | |
| Increase | 7.2 | 121.6 | -0- | -0- | -0- | |
| TOTAL INCREASE** | 6.7 | 420.1 | -0- | -0- | -0- | |
| #2 DAP Dryer* | PM | SO ₂ | | F | | |
| Permitted ⁽²⁾ | 193 | 27.7 | | 6.1 | --- | --- |
| Proposed ⁽³⁾ | 193 | 51.5 | | 6.1 | --- | --- |
| Increase | ---- | 23.8 | | -0- | --- | --- |
| TOTAL INCREASE** | -0- | 23.8 | | -0- | -0- | -0- |
| Significant Levels | 25 | 40 | 40 | 3 | 100 | 40 |

(1) Emissions calculations based on 8760 hours per year and 100% on oil for Boilers B, C, D and DAP plant No. 2.

(2) Permitted emissions as stated in the federal application PSD-FL-083 (Table 2-1) and Boiler B operating permit AO 24-34186
Boiler C and D operating permit AO 24-21059, and
DAP plant #2 operating permit AO 24-33051

(3) Proposed emissions as calculated by the applicant in the State applications and additional correspondence

* Fluoride Emissions for the #2 DAP plant will not change (0.06#F/TP₂O₅)

** Emission rate increases of regulated pollutants (nitrogen oxides, VOC and carbon monoxide) will not be affected by the proposed change.

Table 2

ALLOWABLE EMISSIONS⁽¹⁾

| <u>SOURCE/FUEL</u> | <u>PM</u> | | <u>POLLUTANT</u> | | <u>NO_x</u> | | <u>CO</u> | | <u>VOC</u> | |
|---|-----------|------|------------------|-------|-----------------------|-------|-----------|------|------------|-----|
| | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY |
| Boiler B Oil (2) | 14.2 | 62.3 | 174.8 | 765.8 | 65.5 | 287.2 | 5.5 | 23.9 | 1.1 | 4.8 |
| This boiler shall be allowed to operate 60% of rated capacity (Specific Condition No. 1). | | | | | | | | | | |
| Boiler C* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 8.9 | 0.4 | 1.6 |
| Oil (2) | 10.7 | 46.7 | 128.7 | 563.9 | 49.2 | 215.5 | 4.1 | 18.0 | 0.8 | 3.6 |
| COM (3) | 3.8 | 16.6 | 130.6 | 572.1 | 54.6 | 239.2 | 4.2 | 18.4 | 1.0 | 4.5 |
| Boiler D* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 9 | 0.4 | 2 |
| Oil (2) | 10.7 | 47 | 128.7 | 564 | 49.2 | 215 | 4.1 | 18 | 0.8 | 4 |
| #2 DAP Dryer Oil (4) | 46 | 193 | 11.8 | 51.5 | | | | | | |

(1) Allowable Emissions as estimated by the applicant based on an operating time of 8760 hours per year.

(2) SO₂ emission limit shall not exceed 1.1 lb/MMBTU heat input (Fuel oil with 1% sulfur content).

(3) Coal-Oil mix (COM) with 0.9% sulfur content.

(4) Fuel oil with 1.5% sulfur content. (SO₂ emission limit shall not exceed 0.2 lb/ton DAP).

Fluoride emissions from the DAP Plant shall not exceed 1.74 lb/hr and 0.06#F/Ton P₂O₅.

*Boiler "C" shares a common stack with auxiliary boiler "D".



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

DER
JAN 3 1983
BAQM

DEC 28 1982

LARRY
Mr. Clair Fancy, P.E.
Deputy Chief
Bureau of Air Quality Control
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida

Dear Mr. Fancy:

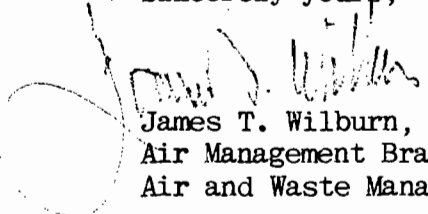
My staff has completed its review of your preliminary determination for Occidental Chemical Company's Swift Creek Chemical Complex (SOCC) Sulfuric Acid Plant Production Rate Increase (PSD-FL-082), and the Suwanne River Chemical Complex (SRCC) Fuel Conversion Project (PSD-FL-083), both of which are located in Hamilton County, Florida. Based upon our review, we offer the following comments:

1. In determining the sulfur dioxide (SO₂) impacts on the Class I area, a 12-hour half-life was used in the modeling. Region IV discourages anyone from using this assumption except in very isolated cases and then only after sufficient documentation has been presented. Therefore, Occidental should justify how and why a 12-hour half-life for SO₂ emissions would be appropriate in this case.
2. Much of the modeling analysis is confusing in that one is not able to determine whether or not all emission points have been included or that the SOCC and SRCC plants have been modeled separately. The modeling information is insufficient to determine the adequacy of the submittals, for example, Tables 1, 2, and 3 depicting Class I area impacts are not clear.
3. On page 8, the existing air quality analysis for the SRCC facility gives different results from similar analyses performed for the SOCC facility found on page 7. Please explain these differences.
4. The Department of Environmental Regulation (DER) letter of June 25, 1982, indicates violations were modeled by the DER. There is no evidence in the documents that this concern has been corrected.
5. Due to the 100% consumption of the Class I area increment for SO₂, EPA recommends that a post construction ambient monitor be located at the maximum impact area at the appropriate boundary of the Class I area.
6. The AQDM model used in the SOCC annual modeling analysis is inappropriate. The preferred model is the ISCLT which was used in the SRCC analysis. The impacts however, from the two different models were identical.
7. The use of the PIMTP-W model should be accepted with reservation since this model has been replaced by the MPTER/ISC or other similar models.

8. The soils and vegetation analysis should be expanded, especially when discussing Class I area impacts. This analysis should correlate predicted ground level concentrations with the sensitivity levels of the soils and vegetation in the area. This should also include short and long term exposure durations.

If you have any questions concerning this matter, please contact Mr. Richard S. DuBose, Chief, Air Engineering Section at (404) 881-7654.

Sincerely yours,



James T. Wilburn, Chief
Air Management Branch
Air and Waste Management Division



United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

ADDRESS ONLY THE DIRECTOR,
FISH AND WILDLIFE SERVICE

*Larry Tom
Patty*

MAR 14 1983

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

DER
MAR 21 1983
BAQM

Dear Mr. Fancy:

We have reviewed your preliminary determination for Occidental Chemical Company's Swift Creek Chemical Complex Sulfuric Acid Plant Production Rate Increase (PSD-FL-082) and the Suwannee River Chemical Complex Fuel Conversion Project (PSD-FL-083), both of which are located in Hamilton County, Florida, near the Class I PSD area on Okefenokee National Wildlife Refuge. We have only one comment on these determinations.

The Class I increment for sulfur dioxide will apparently be completely consumed as a result of these permits. We therefore support EPA's recommendation that a post-construction ambient monitor be located at the maximum impact area at the boundary of the Class I area. We realize that some problems may arise due to the location of Okefenokee in two states, Florida and Georgia. However, we are willing to work cooperatively in the establishment of the monitor to assure protection of the air quality related values on the Class I area.

Thank you for this opportunity to provide comments on the Occidental determinations. If you have questions concerning this matter, please contact John Eadie, Deputy Chief, Division of Refuge Management at (202) 343-4312.

Sincerely,

Walter R. McAllister
Acting Associate
Director



SHOLTES & KOOGLER, ENVIRONMENTAL CONSULTANTS

1213 N.W. 6th Street Gainesville, Florida 32601 (904) 377-5822

SKEC 102-81-08

December 16, 1982

*Bill
Teresa*

Mr. Clair Fancy
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

Subject: Occidental Chemical Company
Hamilton County, Florida
Preliminary Determination PSD-FL-082
Preliminary Determination PSD-FL-083

Dear Mr. Fancy:

On November 18, 1982, Mr. Wes Atwood and I visited your office to discuss the two subject PSD Applications and the FDER Air Pollution Source Construction Permits associated with the sources addressed in these applications. I would like to provide you with a written record of the matters which we discussed and provide you with documentation to support our comments.

PSD-FL-082

A request was made to modify the Public Notice contained in this application. The last sentence in the first paragraph of the Notice read, "No physical modifications to the plant equipment is required to accomplish these operational changes." We requested that this sentence be reworded to read, "No physical modifications to the plant equipment are required to accomplish these operational changes; except for the minor changes detailed in the construction permit applications." The construction permit applications referenced are those for sulfuric acid plant "E" (AC24-56211) and sulfuric acid plant "F" (AC24-56209). The modifications are described on Page 2A of these applications and relate to modifications to handle the increased gas flow rate through the sulfuric acid plants.

Specific condition No. 5 of both sulfuric acid plant construction permits (referenced in the above paragraph) require that the applicant establish a conversion factor that requires a measurement of the sulfur dioxide concentration at the converter entrance. This conversion factor is then used with the continuous stack gas sulfur dioxide monitoring data to calculate a sulfur dioxide emission rate with units of pounds of sulfur dioxide per ton of acid produced.

Occidental has worked with EPA for quite some time to have an alternative method approved for calculating the sulfur dioxide emission rate per ton of acid produced. This method was proposed as an alternative to 40 CFR 60.84 in the Federal Register of July 16, 1982; a copy of which is attached. This method requires only that the sulfur dioxide and the oxygen concentrations be measured in the stack gas. These concentrations can then be used with the equation published in the Federal Register to calculate the pounds of sulfur dioxide emitted per ton of acid produced. To facilitate the use of the method published in the Federal Register, Occidental has installed continuous oxygen monitors on both the "E" and "F" sulfuric acid plant stacks. In the case of Occidental there is no auxiliary fuel used in the sulfuric acid plants, hence the "auxiliary fuel factor" used in the equation published in the Federal Register is equal to 0.00.

Occidental is of the opinion that the method published in the Federal Register is much easier to use than the method presently specified in the draft construction permits and requests that the method published in the Federal Register be substituted for the method presently proposed in specific condition No. 5. If you have any questions regarding the derivation of the method published in the Federal Register or any other questions regarding this method, please feel free to contact me.

Specific condition No. 9 of the draft construction permits for both sulfuric acid plants requires that compliance for emission limits be determined in accordance with specific test methods. For nitrogen oxide EPA Test Method 7 is specified. Nowhere in specific condition No. 9 or any other specific conditions attached to the permits does it specify the frequency with which compliance tests must be made.

It is requested that a condition to demonstrate compliance with the emission limit for nitrogen oxides be worded similar to the specific condition attached to the construction permit for auxiliary boiler "E"; also covered by PSD Application PSD-FL-082. This condition is worded, "Performance tests for nitrogen oxides. . . to determine emission compliance status shall be requested by the Department when deemed necessary."

PSD-FL-083

A typographical error was noted in Table 1 of the Preliminary Determination for this application. The "worst case" particulate matter emission rate for the "C" boiler, as proposed, will be 46.7 tons per year. This will result in an increase of 7.2 tons per year over the currently permitted emission rate. This increase, combined with other increases addressed in the PSD Application, will result in a total particulate matter increase for all sources addressed by the Application of 6.7 tons per year.

Specific condition No. 2 of the construction permit applications for boiler "C" (AC24-56214) and boiler "D" (AC24-56213) specify that the boilers shall be allowed to operate 25 percent of the time. Occidental requests that the 0.25 annual operating factor be removed as a permit condition. The entire Air Quality Review which is part of the subject PSD Application, was conducted under the assumption that both boilers would operate 100 percent of the time. The conclusion reached in the Application was that all of the modifications addressed could be approved with no threat to ambient air quality standards or to PSD increments.

The "25 percent" condition first appeared in an operating permit for either the "C" or "D" boiler and was stated ". . . the boiler will operate about 25 percent of the time." This condition came about, to the best of our knowledge as a result of a response to an inquiry by the Jacksonville FDER office regarding the approximate operating time of the boilers. At no time were the operating times of these boilers limited because of a threat to ambient air quality.

The original approval to construct the boilers, granted by EPA on March 21, 1978, did not limit the operating time of the "C" and "D" boilers, nor did the original state construction permits (AC24-2700 and 2701). The original operating permits for the boilers also did not limit the time of operation of the boilers and a construction permit granted to allow the use of a coal-oil mix in the "C" boiler (AC24-40968) issued on June 30, 1981, did not limit the operating time of this boiler.

In view of this history and the fact that we can uncover no concrete reason for the 0.25 annual operating factor to be a part of the construction permits for either the "C" or "D" boilers, Occidental requests that these conditions be removed.

If there are any questions regarding the matter addressed in this letter, please feel free to contact me.

Very truly yours,

SHOLTES & KOOGLER
ENVIRONMENTAL CONSULTANTS, INC.



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

JBK:sc
Attachments

cc: Mr. W. W. Atwood

40 CFR Part 60

[AD-FRL-2145-3]

Standards of Performance for New Stationary Sources; Alternative Sampling Procedures for Sulfuric Acid Plants**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Proposed rule.

SUMMARY: The purpose of this action is to propose an alternative procedure for determining the SO₂ or sulfuric acid mist emission rate based on measurements of O₂ and SO₂ or acid mist concentrations in the plant exhaust.

These revisions would apply to all sources subject to the standards of performance for sulfuric acid plants.

DATE: *Comments.* Comments must be received on or before September 14, 1982.

Public Hearing. A public hearing will be held, if requested. Persons wishing to request a public hearing must contact EPA by August 16, 1982. If a hearing is requested, an announcement of the date and place will appear in a separate Federal Register notice.

ADDRESS: *Comments.* Comments should be submitted (in duplicate if possible) to: Central Docket Section (A-133), Attention: Docket Number A-82-03, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460.

Public Hearing. Persons wishing to present oral testimony should notify Mrs. Naomi Durkee, Emission Standards and Engineering Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541-5378.

Docket. Docket No. A-82-03, containing materials relevant to this rulemaking, is available for public inspection and copying between 9:00 a.m. and 4:00 p.m., Monday through Friday, at EPA's Central Docket Section, West Tower Lobby, Gallery 1, Waterside Mall, 401 M Street, SW.,

Washington, D.C. 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT.

Mr. Roger Shigehara, Emission Measurement Branch (MD-13), Emission Standards and Engineering Division, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number (919) 541-2334.

SUPPLEMENTARY INFORMATION: Subpart H of 40 CFR Part 60 contains standards of performance for the sulfuric acid manufacturing plant industry including sulfur dioxide (SO₂) and sulfuric acid mist emission rate limits and continuous monitoring requirements. Data from emission measurement tests and continuous monitoring systems must be converted from units of SO₂ or sulfuric acid mist concentrations to the units of the standard in kg per metric ton of acid produced (lb per short ton). The present procedure for this conversion requires the measurement of the inlet SO₂ to the plant converter and the calculation of a production rate factor in kg per metric ton per ppm (lb per short ton per ppm) for each 8-hour period.

The proposed revisions allow the source to measure O₂ concentrations in the exhaust gas as an alternative to measurements of SO₂ inlet concentrations and process production rates in obtaining SO₂ or sulfuric acid mist emission rates from sulfuric acid plants. The procedure is applicable to plants that oxidize elemental sulfur or oxidize ore that contains elemental sulfur. The procedure does not apply to plants which use spent acid or use gas streams containing hydrogen sulfide in the production of acid.

The alternative procedure is based on a sulfur mass balance determination of the sulfuric acid production progress and is accurate to the accuracy level of the measurements. The revision is appropriate for the applicable plants and it provides a means of reducing the testing requirements without loss of emissions data.

These revisions would apply to all sources subject to the standards of performance for sulfuric acid plants. This rulemaking would not impose any additional emission measurement requirements on any facilities. Rather, the rulemaking would simply revise the emission measurement calculation procedures allowing an alternative to procedures that would apply irrespective of this rulemaking.

The Office of Management and Budget has exempted this rule from the requirements of Section 3 of Executive Order 12291.

Pursuant to the provisions of 5 U.S.C. 605(b), I hereby certify that this rule will not have a significant economic impact on a substantial number of small entities.

(Sec. 111, 114, and 301(a) of the Clean Air Act, as amended (42 U.S.C. 7411, 7414, and 7601(a))

Dated: July 7, 1982.

Anne M. Gorsuch,
Administrator.

Lists of Subjects in 40 CFR Part 60

Air pollution control, Aluminum, Ammonium sulfate plants, Cement industry, Coal, Copper, Electric power plants, Glass and glass products, Grains, Intergovernmental relations, Iron, Lead, Metals, Motor vehicles, Nitric acid plants, Paper and paper products industry, Petroleum, Phosphate, Sewage disposal, Steel, Sulfuric acid plants, Waste treatment and disposal, Zinc.

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

It is proposed that Subpart H of 40 CFR Part 60 be amended as follows:

1. By adding a paragraph (d) to § 60.84 as follows:

§ 60.84 Emission monitoring.

(d) Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur may use the following continuous emission monitoring approach and calculation procedures in determining SO₂ emissions rates in terms of the standard. Continuous emission monitoring of SO₂, O₂, and CO₂ (if required) shall be installed, calibrated, maintained, and operated by the owner or operator according to this procedure in Performance Specifications 2 and 3. This calibration procedure and span value for this SO₂ monitor shall be as specified in paragraph (b) of this section. This span value for CO₂ (if required) shall be 10 percent and for O₂ shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO₂ emission rate as follows:

$$E_{SO_2} = C_{SO_2} S \times \frac{1}{0.263 - 0.0126(O_2) - A(CO_2)}$$

Where:

- E_{SO₂} = SO₂ emission rate, kg/t acid (lb/ton acid).
- C_{SO₂} = SO₂ concentration, kg/dscm (lb/dscf) (see Table below).
- S = Acid production rate factor.
 - = 365 dscm/t acid for metric units.
 - = 11800 dscf/ton acid for English units.

O₂ = O₂ concentration, percent.

A = Auxiliary fuel factor.

- = 0.00 for no fuel.
- = 0.0226 for methane.
- = 0.0217 for natural gas.
- = 0.0196 for propane.
- = 0.0172 for #2 oil.
- = 0.0161 for #6 oil.
- = 0.0148 for coal.
- = 0.0126 for coke.

CO₂ = CO₂ concentration, percent.

Note.—It is necessary in some cases to convert measured concentration units to other units for these calculations:

Use the following Table for such conversions:

| From— | To— | Multiply by— |
|-----------------------|--------|--------------------------|
| g/scm | kg/scm | 10 ⁻³ |
| mg/scm | kg/scm | 10 ⁻⁴ |
| ppm(SO ₂) | kg/scm | 2.660 × 10 ⁻⁶ |
| ppm(SO ₂) | lb/scf | 1.650 × 10 ⁻¹ |

2. By adding a paragraph (e) to § 60.85 as follows:

§ 60.85 Test methods and procedures.

(e) Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur may use the SO₂, acid mist, O₂, and CO₂ (if required) measurement data in determining SO₂ and acid mist emission rates in terms of the standard. Data from the reference method tests as specified in (a) of this part are required; that is, Method 8 for SO₂ and acid mist and Method 3 for O₂ and CO₂. No determinations of production rate or total gas flow rate are necessary. Calculate the SO₂ and acid mist emission rate as described in § 60.84(d) substituting the acid mist concentration for C_{SO₂} as appropriate.

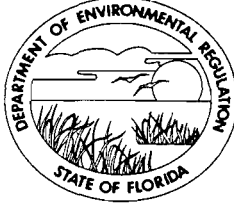
[FR Doc. 82-19406 Filed 7-15-82; 8:45 am]

BILLING CODE 6560-50-M

C_{SO2}
Ed Arsen

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:

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

Permit Number: AC 24-56210
Date of Issue:
Expiration Date: January 30, 1984
County: Hamilton
Latitude/Longitude: 30° 26' 56"
82° 51' 40"
Project: 156 MMBTU/hr Auxiliary
Auxiliary Boiler "E"

This permit is issued under the provisions of Chapter(s) 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 modification, use of fuel with 1.0 percent sulfur, of a 156 MMBTU/hr auxiliary boiler "E" located at Occidental Chemical Swift Creek complex in Hamilton County, Florida. The UTM coordinates are 321.300 Km E and 3,369.830 Km N.

Construction shall be in accordance with the permit application and plans, documents, and drawings, except as otherwise noted on pages 5 through 7 "Specific Conditions", listed below.

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16).
2. Occidental Chemical's letters of June 18, 1981, November 24, 1981, December 7, 1981, April 26, 1981, June 25, 1982, September 15, 1982, (Responses to technical discrepancies).

PERMITTEE: Occidental Chemical
Company

I. D. Number:
Permit Number: AC 24-56210
Date of Issue:
Expiration Date: January 30, 1984

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 therefor 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 I. D. Number:
Company Permit Number: AC 24-56210
Date of Issue:
Expiration Date: January 30, 1984

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 I. D. Number:
Company Permit Number: AC 24-56210
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

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

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

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

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

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

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) 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 I. D. Number:
Company Permit Number: AC 24-56210
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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

SPECIFIC CONDITIONS:

1. The auxiliary boiler shall be allowed to operate 97.5 percent of the time (8,518 hours per year). Maximum steam production shall be 125,000 lb/hr and maximum heat input shall be 156 MMBTU/hr.
2. The boiler will be fired with natural gas, and No. 6 fuel oil. Emissions shall not exceed the allowable emission listed in Table II of the Preliminary Determination for SO₂, NO_x, PM, VOC, and CO.

PERMITTEE: Occidental Chemical
Company

I. D. Number:
Permit/Number: AC 24-65210
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

3. The sulfur content of fuel oil fired in the boiler shall not exceed 1.0 percent.
4. Compliance with all allowable emission limits (Table II) shall be determined by performance tests scheduled in accordance with the attached General Conditions. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference method in Appendix A of 40 CFR 60 or other State approved methods.
 - a. Method 1. Sample and Velocity Traverses
 - b. Method 2. Volumetric Flow Rate
 - c. Method 3. Gas Analysis
 - d. Method 5. Determination of Particulate Emissions for Stationary Sources
 - e. Method 6. Determination of Sulfur Dioxide Emissions from Stationary Sources
 - f. Method 7. Determination of Nitrogen Oxide Emissions from Stationary Sources
 - g. Method 9. Determination of the Opacity of Emissions from Stationary Sources
 - h. Method 10. Determination of Carbon Monoxide Emissions from Stationary Sources.

A compliance test shall consist of the average of three consecutive runs. The boiler shall operate within 10 percent of maximum capacity during sampling, using the fuel that most likely will emit the greater quantity of pollutants being sampled. The Department shall be notified 30 days in advance of the compliance test.

5. Performance tests for NO_x, and CO to determine emission compliance status shall be requested by the Department when deemed necessary.
6. The opacity of the boiler flue gases shall not exceed 20 percent except for one six-minute period per hour during which the opacity shall not exceed 27 percent.
7. The applicant should report any delay in modification of this unit to the Department.

PERMITTEE: Occidental Chemical I. D. Number:
Company Permit Number: AC 24-56210
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

8. This permit replaces operating permit No. A024-34846. The applicant shall return any current operating permit from the boiler to the Department's Northeast District office within three (3) months of modification of the unit.
9. The applicant will demonstrate compliance with the condition of the construction permit and submit a complete application for an operating permit to the Department's Northeast District office prior to 90 days of the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until the expiration date or issuance of an operating permit.
10. Upon obtaining an operating permit, the applicant will be required to submit periodic reports on the actual operation and emission of the facility. These reports will give emission test data, emission test results, hours of operation, maximum and average fuel oil consumption and sulfur content.
11. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700 FAC.
12. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this 17 day of May, 1983.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

___ pages attached.

Table 2

ALLOWABLE EMISSION LIMITS

| SOURCE | POLLUTANT EMISSION | | | | | | | BASIS |
|---------------------------------------|---|------------|--------------------------|-----------------|-----|-----|---------------|--|
| | SO ₂ | PM | Mist | NO _x | CO | VOC | | |
| "E" Sulfuric Acid Plant Standard | 4 lb/ton 100% acid | -- | 0.15 lb/ton 100% acid | --- | --- | --- | NSPS and BACT | |
| Emission Rate(lb/hr) | 416.7 | -- | 15.6 | 14.8 | 0.1 | --- | | |
| "F" Sulfuric Acid Plant Standard | 4 lb/ton 100% acid | -- | 0.15 lb/ton 100% acid | --- | --- | --- | NSPS and BACT | |
| Emission Rate(lb/hr) | 416.7 | -- | 15.6 | 14.8 | 0.1 | --- | | |
| "E" Auxiliary Boiler Emission Rate | 1.1 lb/10 ⁶ BTU heat input and 170.7 lb/hr | -- 13.9 | ---- | ---- | 64 | 5.3 | 1.1 | BACT and Emission rates as estimated by the applicant |

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:

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

Permit Number: AC 24-56209
Date of Issue:
Expiration Date: January 30, 1984
County: Hamilton
Latitude/Longitude: 30° 26' 29"
82° 51' 56"
Project: Sulfuric Acid Plant "F"

This permit is issued under the provisions of Chapter(s) 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 modification of a 2500 TPD double absorption type Sulfuric Acid Plant located at Occidental Chemical Swift Creek Complex in Hamilton County, Florida. The UTM coordinates are 320.860 Km E and 3,369.750 Km N.

Construction shall be in accordance with the permit application and plans, documents, and drawings, except as otherwise noted on pages 5 through 8 "Specific Conditions", listed below.

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16).
2. Occidental Chemical's letters of June 18, 1981, November 24, 1981, December 7, 1981, April 26, 1981, June 25, 1982, September 15, 1982, (Responses to technical discrepancies).

PERMITTEE: Occidental Chemical
Company

I. D. Number:

Permit Number: AC 24-56209

Date of Issue:

Expiration Date: January 30, 1984

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 therefor 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 I. D. Number:
Company Permit Number: AC 24-56209
Date of Issue:
Expiration Date: January 30, 1984

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
Company

I. D. Number:

Permit Number: AC 24-56209

Date of Issue:

Expiration Date: January 30, 1984

GENERAL CONDITIONS:

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

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

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

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

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

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) 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 I. D. Number:
Company Permit Number: AC 24-56209
Date of Issue:
Expiration Date: January 30, 1984

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:

Sulfuric Acid Plant "E"

1. Maximum production rate will be 2500 tons of 100 percent H_2SO_4 per day for each sulfuric acid plant.
2. Emission of sulfur dioxide from the sulfuric acid plant shall not exceed 416.7 pounds per hour at the maximum allowable operating rate of 104.2 tons per hour of 100% H_2SO_4 . At lower operating rates, the emissions shall not exceed 4 pounds per ton of 100% H_2SO_4 produced.

PERMITTEE: Occidental Chemical
Company

I. D. Number:
Permit/Number: AC 24-65209
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

3. Emission of acid mist from the sulfuric acid plant shall not exceed 15.6 pounds per hour at the maximum allowable operating rate of 104.2 tons per hour of 100% H₂SO₄. At lower operating rates, the emissions shall not exceed 0.15 pounds per ton 100% H₂SO₄.
4. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated by the applicant. The pollutant gas used to prepare calibration gas mixture under paragraph 2.1 Performance Specification 2 and for calibration checks under 60.13(d) to this part, shall be sulfur dioxide (SO₂). Reference Method 8 shall be used for conducting monitoring system performance evaluations under 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span shall be set at 1000 ppm of sulfur dioxide.
5. The applicant shall establish a conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/short ton). The conversion factor shall be determined, as set forth in Section 60.84(b) Emission Monitoring. Other EPA and State approved method may be substituted for those specified in 40 CFR, Subpart H, 60.84(b).
6. The applicant shall record all conversion factors and values under paragraph (b) or (d) as set forth in 60.84 Subpart H - Standards of Performance for Sulfuric Acid Plant.
7. For the purpose of report under 60.7(c), periods of excess emission shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under 60.82.
8. The applicant shall comply with all requirements of 40 CFR 60, Subpart H, Standards of Performance for sulfuric acid plants.

PERMITTEE: Occidental Chemical I. D. Number:
Company Permit/Number: AC 24-56209
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

9. Compliance with all emission limits shall be determined by performance tests scheduled in accordance with the attached General Conditions. Except as provided under 40 CFR 60.8(b), the performance tests shall be conducted in accordance with the provisions of the following reference methods which are described in Appendix A of 40 CFR 60:
- a. Method 1 for sample and velocity traverses;
 - b. Method 2 for volumetric flow rate;
 - c. Method 3 for gas analysis;
 - d. Method 7 for nitrogen oxides
 - e. Method 8 for concentration of SO₂ and acid mist;
and
 - f. Method 9 for visible emissions.

A compliance test shall consist of the average of three consecutive runs. The maximum sample time and volume per run will be as specified in the NSPS (40 CFR 60.85). The facility shall operate within 10 percent of maximum capacity during sampling. The parameters for the operating rate and control equipment variables and all continuous monitoring results shall be recorded during compliance testing and made a part of the test report. The Department will be notified 30 days in advance of the compliance test.

Performance tests for nitrogen oxides to determine emission compliance status shall be requested by the Department when deemed necessary.

10. Visible emissions from the sulfuric acid plant shall not exceed 10% opacity.
11. This permit replaces operating permit No. AO 24-34847. The applicant shall return this operating permit to the Department's Northeast District office within three (3) months of start-up of the unit.
12. The applicant will demonstrate compliance with the condition of the construction permit and submit a complete application for an operating permit to the Department's Northeast District office prior to 90 days of 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 or issuance of an operating permit.

PERMITTEE: Occidental Chemical I. D. Number:
Company Permit Number: AC 24-56209
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

13. Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility.
14. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700, FAC.
15. The plant shall be allowed to operate continuously (8736 hours per year).
16. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this 12 day of May, 1983.

**STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION**



VICTORIA J. TSCHINKEL, Secretary

___ pages attached.

Table 2

ALLOWABLE EMISSION LIMITS

| SOURCE | POLLUTANT EMISSION | | | | | | | BASIS |
|---------------------------------------|---|------------|--------------------------|-----------------|-----|-----|---------------|--|
| | SO ₂ | PM | Mist | NO _x | CO | VOC | | |
| "E" Sulfuric Acid Plant Standard | 4 lb/ton 100% acid | -- | 0.15 lb/ton 100% acid | --- | --- | --- | NSPS and BACT | |
| Emission Rate(lb/hr) | 416.7 | -- | 15.6 | 14.8 | 0.1 | --- | | |
| "F" Sulfuric Acid Plant Standard | 4 lb/ton 100% acid | -- | 0.15 lb/ton 100% acid | --- | --- | --- | NSPS and BACT | |
| Emission Rate(lb/hr) | 416.7 | -- | 15.6 | 14.8 | 0.1 | --- | | |
| "E" Auxiliary Boiler Emission Rate | 1.1 lb/10 ⁶ BTU heat input and 170.7 lb/hr | -- 13.9 | ---- | ---- | 64 | 5.3 | 1.1 | BACT and Emission rates as estimated by the applicant |

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:

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

Permit Number: AC 24-56211
Date of Issue:
Expiration Date: January 30, 1984
County: Hamilton
Latitude/Longitude: 30° 26' 29"
82° 51' 56"
Project: Sulfuric Acid Plant "E"

This permit is issued under the provisions of Chapter(s) 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 modification of a 2500 TPD double absorption type Sulfuric Acid Plant located at Occidental Chemical Swift Creek Complex in Hamilton County, Florida. The UTM coordinates are 321.110 Km E and 3,369.800 Km N.

Construction shall be in accordance with the permit application and plans, documents, and drawings, except as otherwise noted on pages 5 through 8 "Specific Conditions", listed below.

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(b).
2. Occidental Chemical's letters of June 18, 1981, November 24, 1981, December 7, 1981, April 26, 1981, June 25, 1982, September 15, 1982, (Responses to technical discrepancies).

PERMITTEE: Occidental Chemical
Company

I. D. Number:

Permit Number: AC 24-56211

Date of Issue:

Expiration Date: January 30, 1984

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 therefor 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 I. D. Number:
Company Permit Number: AC 24-56211
Date of Issue:
Expiration Date: January 30, 1984

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
Company

I. D. Number:
Permit Number: AC 24-56211
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

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

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

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

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

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

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) 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 I. D. Number:
Company Permit Number: AC 24-56211
Date of Issue:
Expiration Date: January 30, 1984

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:

Sulfuric Acid Plant "E"

1. Maximum production rate will be 2500 tons of 100 percent H_2SO_4 per day for each sulfuric acid plant.
2. Emission of sulfur dioxide from the sulfuric acid plant shall not exceed 416.7 pounds per hour at the maximum allowable operating rate of 104.2 tons per hour of 100% H_2SO_4 . At lower operating rates, the emissions shall not exceed 4 pounds per ton of 100% H_2SO_4 produced.

PERMITTEE: Occidental Chemical
Company

I. D. Number:
Permit/Number: AC 24-56211
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

3. Emission of acid mist from the sulfuric acid plant shall not exceed 15.6 pounds per hour at the maximum allowable operating rate of 104.2 tons per hour of 100% H₂SO₄. At lower operating rates, the emissions shall not exceed 0.15 pounds per ton 100% H₂SO₄.
4. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated by the applicant. The pollutant gas used to prepare calibration gas mixture under paragraph 2.1 Performance Specification 2 and for calibration checks under 60.13(d) to this part, shall be sulfur dioxide (SO₂). Reference Method 8 shall be used for conducting monitoring system performance evaluations under 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span shall be set at 1000 ppm of sulfur dioxide.
5. The applicant shall establish a conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/short ton). The conversion factor shall be determined, as set forth in Section 60.84(b) Emission Monitoring. Other EPA and State approved method may be substituted for those specified in 40 CFR, Subpart H, 60.84(b).
6. The applicant shall record all conversion factors and values under paragraph (b) or (d) as set forth in 60.84 Subpart H - Standards of Performance for Sulfuric Acid Plant.
7. For the purpose of report under 60.7(c), periods of excess emission shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standards under 60.82.
8. The applicant shall comply with all requirements of 40 CFR 60, Subpart H, Standards of Performance for sulfuric acid plants.

PERMITTEE: Occidental Chemical I. D. Number:
Company Permit/Number: AC 24-56211
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

9. Compliance with all emission limits shall be determined by performance tests scheduled in accordance with the attached General Conditions. Except as provided under 40 CFR 60.8(b), the performance tests shall be conducted in accordance with the provisions of the following reference methods which are described in Appendix A of 40 CFR 60:
- a. Method 1 for sample and velocity traverses;
 - b. Method 2 for volumetric flow rate;
 - c. Method 3 for gas analysis;
 - d. Method 7 for nitrogen oxides
 - e. Method 8 for concentration of SO₂ and acid mist;
and
 - f. Method 9 for visible emissions.

A compliance test shall consist of the average of three consecutive runs. The maximum sample time and volume per run will be as specified in the NSPS (40 CFR 60.85). The facility shall operate within 10 percent of maximum capacity during sampling. The parameters for the operating rate and control equipment variables and all continuous monitoring results shall be recorded during compliance testing and made a part of the test report. The Department will be notified 30 days in advance of the compliance test.

Performance tests for nitrogen oxides to determine emission compliance status shall be requested by the Department when deemed necessary.

10. Visible emissions from the sulfuric acid plant shall not exceed 10% opacity.
11. This permit replaces operating permit No. AO 24-34847. The applicant shall return this operating permit to the Department's Northeast District office within three (3) months of start-up of the unit.
12. The applicant will demonstrate compliance with the condition of the construction permit and submit a complete application for an operating permit to the Department's Northeast District office prior to 90 days of 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 or issuance of an operating permit.

PERMITTEE: Occidental Chemical I. D. Number:
Company Permit Number: AC 24-56211
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

13. Upon obtaining an operating permit, the applicant will be required to submit periodic test reports on the actual operation and emissions of the facility.
14. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700, FAC.
15. The plant shall be allowed to operate continuously (8736 hours per year).
16. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this 17 day of May, 1983.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

___ pages attached.

Table 2

ALLOWABLE EMISSION LIMITS

| SOURCE | POLLUTANT EMISSION | | | | | | | BASIS |
|---------------------------------------|---|------------|--------------------------|-----------------|-----|-----|---------------|--|
| | SO ₂ | PM | Mist | NO _x | CO | VOC | | |
| "E" Sulfuric Acid Plant Standard | 4 lb/ton 100% acid | -- | 0.15 lb/ton 100% acid | --- | --- | --- | NSPS and BACT | |
| Emission Rate(lb/hr) | 416.7 | -- | 15.6 | 14.8 | 0.1 | --- | | |
| "F" Sulfuric Acid Plant Standard | 4 lb/ton 100% acid | -- | 0.15 lb/ton 100% acid | --- | --- | --- | NSPS and BACT | |
| Emission Rate(lb/hr) | 416.7 | -- | 15.6 | 14.8 | 0.1 | --- | | |
| "E" Auxiliary Boiler Emission Rate | 1.1 lb/10 ⁶ BTU heat input and 170.7 lb/hr | -- 13.9 | ---- | ---- | 64 | 5.3 | 1.1 | BACT and Emission rates as estimated by the applicant |

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:

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

Permit Number: AC 24-56215
Date of Issue:
Expiration Date: January 30, 1984
County: Hamilton
Latitude/Longitude: 30° 26' 01"
82° 47' 20"
Project: 36 MMBTU/hr Dryer
Diammonium Phosphate
Plant #2

This permit is issued under the provisions of Chapter(s) 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 modification of a 36 MMBTU/hr No. 2 diammonium phosphate dryer located at Occidental Chemical Suwannee River complex in Hamilton County, Florida. The UTM coordinates are 328.20 Km E and 3,368.82 Km N.

Construction shall be in accordance with the permit application and plans, documents, and drawings, except as otherwise noted on pages 5 through 7 "Specific Conditions", listed below.

1. Application to Construct Air Pollution Sources, DER Form 17-1.122(16).
2. Occidental Chemical's letters of June 18, 1981, November 24, 1981, December 7, 1981, April 26, 1981, June 25, 1982, September 15, 1982, (Responses to technical discrepancies).

PERMITTEE: Occidental Chemical
Company

I. D. Number:

Permit Number: AC 24-56215

Date of Issue:

Expiration Date: January 30, 1984

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 therefor 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 I. D. Number:
Company Permit Number: AC 24-56215
Date of Issue:
Expiration Date: January 30, 1984

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
Company

I. D. Number:

Permit Number: AC 24-56215

Date of Issue:

Expiration Date: January 30, 1984

GENERAL CONDITIONS:

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

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

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

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

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

13. This permit also constitutes:

(X) Determination of Best Available Control Technology (BACT)

(X) 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 I. D. Number:
Company Permit Number: AC 24-56215
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
- c. Records of monitoring information shall include:
- the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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

SPECIFIC CONDITIONS:

1. The No. 2 DAP dryer shall be allowed to operate continuously (8760 hours per year) at up to 60 tons per hour DAP production.
2. The fuel used to fire the dryer will be natural gas or No. 6 fuel oil with a maximum sulfur content of 1.5 percent S. Maximum heat input shall be 36 MMBTU/hr.

PERMITTEE: Occidental Chemical
Company

I. D. Number:
Permit/Number: AC 24-65215
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

3. Emissions from the DAP dryer shall not exceed the allowable emissions listed in Table II of the Preliminary Determination for SO₂, PM, and Fluorine.
4. Compliance with all allowable emission limits (Table II) shall be determined by performance tests scheduled in accordance with the attached General Conditions. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference method in Appendix A of 40 CFR 60 or other State approved methods.
 - a. Method 1. Sample and Velocity Traverses
 - b. Method 2. Volumetric Flow Rate
 - c. Method 3. Gas Analysis
 - d. Method 5. Determination of Particulate Emissions for Stationary Sources
 - e. Method 6. Determination of Sulfur Dioxide Emissions from Stationary Sources
 - f. Method 13 A or B. Determination of Total Fluoride Emissions from Stationary Sources.

A compliance test shall consist of the average of three consecutive runs. The Department will be notified 30 days in advance of the compliance test. The test will be conducted at 90 to 100 percent permitted production capacity while burning No. 6 fuel oil.

5. This permit replaces operating permit No. A024-33051. The applicant shall return this operating permit to the Northeast District office within three (3) months of start-up of the unit.
6. The applicant should report any delay in modification of this unit to the Department.
7. The applicant will demonstrate compliance with the condition of the construction permit and submit a complete application for an operating permit to the Department's Northeast District prior to 90 days of the expiration date of the construction permit. The permittee may continue to operate in compliance

PERMITTEE: Occidental Chemical I. D. Number:
Company Permit Number: AC 24-56215
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

with all terms of the construction permit until the expiration date or issuance of an operating permit.

8. Upon obtaining an operating permit, the applicant will be required to submit periodic reports on the actual operation and emission of the facility. These reports will give emission test data, emission test results, hours of production, maximum and average production, fuel oil usage, average and maximum percent sulfur in oil, pressure drop across scrubber, pressure on scrubber header, and flow of water through scrubber.
9. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700 FAC.
10. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this 19 day of May, 1983

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

___ pages attached.

Table 2

ALLOWABLE EMISSIONS⁽¹⁾

| <u>SOURCE/FUEL</u> | <u>PM</u> | | <u>SO₂</u> | | <u>NO_x</u> | | <u>CO</u> | | <u>VOC</u> | |
|---|-----------|------|-----------------------|-------|-----------------------|-------|-----------|------|------------|-----|
| | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY |
| Boiler B Oil (2) | 14.2 | 62.3 | 174.8 | 765.8 | 65.5 | 287.2 | 5.5 | 23.9 | 1.1 | 4.8 |
| This boiler shall be allowed to operate 60% of rated capacity (Specific Condition No. 1). | | | | | | | | | | |
| Boiler C* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 8.9 | 0.4 | 1.6 |
| Oil (2) | 10.7 | 46.7 | 128.7 | 563.9 | 49.2 | 215.5 | 4.1 | 18.0 | 0.8 | 3.6 |
| COM (3) | 3.8 | 16.6 | 130.6 | 572.1 | 54.6 | 239.2 | 4.2 | 18.4 | 1.0 | 4.5 |
| Boiler D* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 9 | 0.4 | 2 |
| Oil (2) | 10.7 | 47 | 128.7 | 564 | 49.2 | 215 | 4.1 | 18 | 0.8 | 4 |
| #2 DAP Dryer Oil (4) | 46 | 193 | 11.8 | 51.5 | | | | | | |

(1) Allowable Emissions as estimated by the applicant based on an operating time of 8760 hours per year

(2) SO₂ emission limit shall not exceed 1.1 lb/MMBTU heat input (Fuel oil with 1% sulfur content).

(3) Coal-Oil mix (COM) with 0.9% sulfur content.

(4) Fuel oil with 1.5% sulfur content. (SO₂ emission limit shall not exceed 0.2 lb/ton DAP).

Fluoride emissions from the DAP Plant shall not exceed 1.74 lb/hr and 0.06#F/Ton P₂O₅.

*Boiler "C" shares a common stack with auxiliary boiler "D".

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:

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

Permit Number: AC 24-56214
Date of Issue:
Expiration Date: January 30, 1984
County: Hamilton
Latitude/Longitude: 30° 26' 27"
82° 47' 16"
Project: 120 MMBTU/hr Auxiliary
Auxiliary Boiler "C"

This permit is issued under the provisions of Chapter(s) 403
17-2 and 17-4, 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 modification, use of fuel with 1.0 percent sulfur, of a 120
MMBTU/hr auxiliary boiler "C" located at Occidental Chemical
Suwannee River complex in Hamilton County, Florida. The UTM
coordinates are 328.320 Km E and 3,368.810 Km N.

Construction shall be in accordance with the permit application
and plans, documents, and drawings, except as otherwise noted on
pages 5 through 7 "Specific Conditions", listed below.

1. Application to Construct Air Pollution Sources, DER Form
17-1.122(16).
2. Occidental Chemical's letters of June 18, 1981, November 24,
1981, December 7, 1981, April 26, 1981, June 25, 1982,
September 15, 1982, (Responses to technical discrepancies).

PERMITTEE: Occidental Chemical
Company

I. D. Number:

Permit Number: AC 24-56214

Date of Issue:

Expiration Date: January 30, 1984

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 therefor 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 I. D. Number:
Company Permit Number: AC 24-56214
Date of Issue:
Expiration Date: January 30, 1984

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 I. D. Number:
Company Permit Number: AC 24-56214
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

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

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

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

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

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

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) 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 I. D. Number:
Company Permit Number: AC 24-56214
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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

SPECIFIC CONDITIONS:

1. The maximum operating rate for boiler "C" shall not exceed 120 MMBTU/hr heat input.
2. Auxiliary boiler "C" shall be allowed to operate continuously. (8760 hours per year).
3. The boiler will be fired with natural gas, and No. 6 fuel oil or a coal-oil mixture. Emissions shall not exceed the allowable emission listed in Table II of the Preliminary Determination for SO₂, NO_x, PM, VOC, and CO.

PERMITTEE: Occidental Chemical
Company

I. D. Number:
Permit/Number: AC 24-65214
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

4. The sulfur content of fuel oil fired in the boiler shall not exceed 1.0 percent.
5. The sulfur content of the coal-oil mixture shall not exceed 0.9 percent.
6. Compliance with all allowable emission limits (Table II) shall be determined by performance tests scheduled in accordance with the attached General Conditions. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference method in Appendix A of 40 CFR 60 or other State approved methods.
 - a. Method 1. Sample and Velocity Traverses
 - b. Method 2. Volumetric Flow Rate
 - c. Method 3. Gas Analysis
 - d. Method 5. Determination of Particulate Emissions for Stationary Sources
 - e. Method 6. Determination of Sulfur Dioxide Emissions from Stationary Sources
 - f. Method 7. Determination of Nitrogen Oxide Emissions from Stationary Sources
 - g. Method 9. Determination of the Opacity of Emissions from Stationary Sources
 - h. Method 10. Determination of Carbon Monoxide Emissions from Stationary Sources.

A compliance test shall consist of the average of three consecutive runs. The boiler shall operate within 10 percent of maximum capacity during sampling, using the fuel that most likely will emit the greater quantity of pollutants being sampled. The Department shall be notified 30 days in advance of the compliance test.

7. Performance tests for NO_x, and CO to determine emission compliance status shall be requested by the Department when deemed necessary.
8. The opacity of the boiler flue gases shall not exceed 20 percent except for one six-minute period per hour during which the opacity shall not exceed 27 percent.
9. The applicant should report any delay in modification of this unit to the Department.

PERMITTEE: Occidental Chemical I. D. Number:
Company Permit Number: AC 24-56214
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

10. This permit replaces operating permit No. AO 24-21059. The applicant shall return any current operating permit from this boiler to the Department's Northeast District office within three (3) months of modification of the unit.
11. The applicant will demonstrate compliance with the condition of the construction permit and submit a complete application for an operating permit to the Department's Northeast District office prior to 90 days of the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until the expiration date or issuance of an operating permit.
12. Upon obtaining an operating permit, the applicant will be required to submit periodic reports on the actual operation and emission of the facility. These reports will give emission test data, emission test results, hours of operation, maximum and average fuel oil consumption and sulfur content.
13. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700 FAC.
14. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this 17 day of May, 1983

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

Table 2

ALLOWABLE EMISSIONS⁽¹⁾

| <u>SOURCE/FUEL</u> | <u>PM</u> | | <u>POLLUTANT</u> | | <u>NO_x</u> | | <u>CO</u> | | <u>VOC</u> | |
|---|-----------|------|------------------|-------|-----------------------|-------|-----------|------|------------|-----|
| | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY |
| Boiler B Oil (2) | 14.2 | 62.3 | 174.8 | 765.8 | 65.5 | 287.2 | 5.5 | 23.9 | 1.1 | 4.8 |
| This boiler shall be allowed to operate 60% of rated capacity (Specific Condition No. 1). | | | | | | | | | | |
| Boiler C* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 8.9 | 0.4 | 1.6 |
| Oil (2) | 10.7 | 46.7 | 128.7 | 563.9 | 49.2 | 215.5 | 4.1 | 18.0 | 0.8 | 3.6 |
| COM (3) | 3.8 | 16.6 | 130.6 | 572.1 | 54.6 | 239.2 | 4.2 | 18.4 | 1.0 | 4.5 |
| Boiler D* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 9 | 0.4 | 2 |
| Oil (2) | 10.7 | 47 | 128.7 | 564 | 49.2 | 215 | 4.1 | 18 | 0.8 | 4 |
| #2 DAP Dryer Oil (4) | 46 | 193 | 11.8 | 51.5 | | | | | | |

(1) Allowable Emissions as estimated by the applicant based on an operating time of 8760 hours per year.

(2) SO₂ emission limit shall not exceed 1.1 lb/MMBTU heat input (Fuel oil with 1% sulfur content).

(3) Coal-Oil mix (COM) with 0.9% sulfur content.

(4) Fuel oil with 1.5% sulfur content. (SO₂ emission limit shall not exceed 0.2 lb/ton DAP).

Fluoride emissions from the DAP Plant shall not exceed 1.74 lb/hr and 0.06#F/Ton P₂O₅.

*Boiler "C" shares a common stack with auxiliary boiler "D".

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:

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

Permit Number: AC 24-56212
Date of Issue:
Expiration Date: January 30, 1984
County: Hamilton
Latitude/Longitude: 30° 26' 27"
82° 47' 16"
Project: 160 MMBTU/hr Auxiliary
Auxiliary Boiler "B"

This permit is issued under the provisions of Chapter(s) 403
17-2 and 17-4, 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 modification, use of fuel with 1.0 percent sulfur, of a 160
MMBTU/hr auxiliary boiler "B" located at Occidental Chemical
Suwannee River complex in Hamilton County, Florida. The UTM
coordinates are 328.320 Km E and 3,368.810 Km N.

Construction shall be in accordance with the permit application
and plans, documents, and drawings, except as otherwise noted on
pages 5 through 7 "Specific Conditions", listed below.

1. Application to Construct Air Pollution Sources, DER Form
17-1.122(16).
2. Occidental Chemical's letters of June 18, 1981, November 24,
1981, December 7, 1981, April 26, 1981, June 25, 1982,
September 15, 1982, (Responses to technical discrepancies).

PERMITTEE: Occidental Chemical
Company

I. D. Number:
Permit Number: AC 24-56212
Date of Issue:
Expiration Date: January 30, 1984

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 therefor 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 I. D. Number:
Company Permit Number: AC 24-56212
Date of Issue:
Expiration Date: January 30, 1984

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 I. D. Number:
Company Permit Number: AC 24-56212
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

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

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

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

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

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

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) 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 I. D. Number:
Company Permit Number: AC 24-56212
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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

SPECIFIC CONDITIONS:

- 1. The maximum operating rate for boiler "B" shall not exceed 60% of rated capacity (96 MMBTU/hr heat input) when sulfuric acid plants "C" and "D" will be operating at 100% capacity. Auxiliary boiler "B" shall be allowed to operate at 100% of rated capacity (160 MMBTU/hr heat input) when either the "C" or "D" sulfuric acid plant is shut down.
- 2. The boiler will be fired with natural gas, and No. 6 fuel oil. Emissions shall not exceed the allowable emission listed in Table II of the Preliminary Determination for SO₂, NO_x, PM, VOC, and CO.

PERMITTEE: Occidental Chemical
Company

I. D. Number:
Permit/Number: AC 24-56212
Date of Issue:
Expiration Date: July 30, 1983

SPECIFIC CONDITIONS:

3. The sulfur content of fuel oil fired in the boiler shall not exceed 1.0 percent.
4. Auxiliary boiler "B" shall be allowed to operate continuously (8760 hours per year).
5. Compliance with all allowable emission limits (Table II) shall be determined by performance tests scheduled in accordance with the attached General Conditions. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference method in Appendix A of 40 CFR 60 or other State approved methods.
 - a. Method 1. Sample and Velocity Traverses
 - b. Method 2. Volumetric Flow Rate
 - c. Method 3. Gas Analysis
 - d. Method 5. Determination of Particulate Emissions for Stationary Sources
 - e. Method 6. Determination of Sulfur Dioxide Emissions from Stationary Sources
 - f. Method 7. Determination of Nitrogen Oxide Emissions from Stationary Sources
 - g. Method 9. Determination of the Opacity of Emissions from Stationary Sources
 - h. Method 10. Determination of Carbon Monoxide Emissions from Stationary Sources.

A compliance test shall consist of the average of three consecutive runs. The boiler shall operate within 10 percent of maximum capacity during sampling, using the fuel that most likely will emit the greater quantity of pollutants being sampled. The Department shall be notified 30 days in advance of the compliance test.

6. Performance tests for NO_x , and CO to determine emission compliance status shall be requested by the Department when deemed necessary.
7. The opacity of the boiler flue gases shall not exceed 20 percent except for one six-minute period per hour during which the opacity shall not exceed 27 percent.
8. The applicant should report any delay in modification of this unit to the Department.

PERMITTEE: Occidental Chemical I. D. Number:
Company Permit Number: AC 24-56212
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

9. This permit replaces operating permit No. AO24-34186. The applicant shall return any current operating permit from the boiler to the Department's Northeast District office within three (3) months of modification of the unit.
10. The applicant will demonstrate compliance with the condition of the construction permit and submit a complete application for an operating permit to the Department's Northeast District office prior to 90 days of the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until the expiration date or issuance of an operating permit.
11. Upon obtaining an operating permit, the applicant will be required to submit periodic reports on the actual operation and emission of the facility. These reports will give emission test data, emission test results, hours of operation, maximum and average fuel oil consumption and sulfur content.
12. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700 FAC.
13. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this 17 day of May, 1983

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

Table 2

ALLOWABLE EMISSIONS⁽¹⁾

| <u>SOURCE/FUEL</u> | <u>PM</u> | | <u>SO₂</u> | | <u>NO_x</u> | | <u>CO</u> | | <u>VOC</u> | |
|---|-----------|------|-----------------------|-------|-----------------------|-------|-----------|------|------------|-----|
| | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY |
| Boiler B Oil (2) | 14.2 | 62.3 | 174.8 | 765.8 | 65.5 | 287.2 | 5.5 | 23.9 | 1.1 | 4.8 |
| This boiler shall be allowed to operate 60% of rated capacity (Specific Condition No. 1). | | | | | | | | | | |
| Boiler C* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 8.9 | 0.4 | 1.6 |
| Oil (2) | 10.7 | 46.7 | 128.7 | 563.9 | 49.2 | 215.5 | 4.1 | 18.0 | 0.8 | 3.6 |
| COM (3) | 3.8 | 16.6 | 130.6 | 572.1 | 54.6 | 239.2 | 4.2 | 18.4 | 1.0 | 4.5 |
| Boiler D* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 9 | 0.4 | 2 |
| Oil (2) | 10.7 | 47 | 128.7 | 564 | 49.2 | 215 | 4.1 | 18 | 0.8 | 4 |
| #2 DAP Dryer Oil (4) | 46 | 193 | 11.8 | 51.5 | | | | | | |

(1) Allowable Emissions as estimated by the applicant based on an operating time of 8760 hours per year.

(2) SO₂ emission limit shall not exceed 1.1 lb/MMBTU heat input (Fuel oil with 1% sulfur content).

(3) Coal-Oil mix (COM) with 0.9% sulfur content.

(4) Fuel oil with 1.5% sulfur content. (SO₂ emission limit shall not exceed 0.2 lb/ton DAP).

Fluoride emissions from the DAP Plant shall not exceed 1.74 lb/hr and 0.06#F/Ton P₂O₅.

*Boiler "C" shares a common stack with auxiliary boiler "D".

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

PERMITTEE:

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

Permit Number: AC 24-56213
Date of Issue:
Expiration Date: January 30, 1984
County: Hamilton
Latitude/Longitude: 30° 26' 27"
82° 47' 16"
Project: 120 MMBTU/hr Auxiliary
Auxiliary Boiler "D"

This permit is issued under the provisions of Chapter(s) 403
17-2 and 17-4, 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 modification, use of fuel with 1.0 percent sulfur, of a 120
MMBTU/hr auxiliary boiler "D" located at Occidental Chemical
Suwannee River complex in Hamilton County, Florida. The UTM
coordinates are 328.320 Km E and 3,368.810 Km N.

Construction shall be in accordance with the permit application
and plans, documents, and drawings, except as otherwise noted on
pages 5 through 7 "Specific Conditions", listed below.

1. Application to Construct Air Pollution Sources, DER Form
17-1.122(16).
2. Occidental Chemical's letters of June 18, 1981, November 24,
1981, December 7, 1981, April 26, 1981, June 25, 1982,
September 15, 1982, (Responses to technical discrepancies).

PERMITTEE: Occidental Chemical
Company

I. D. Number:

Permit Number: AC 24-56213

Date of Issue:

Expiration Date: January 30, 1984

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 therefor 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 I. D. Number:
Company Permit Number: AC 24-56213
Date of Issue:
Expiration Date: January 30, 1984

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
Company

I. D. Number:
Permit Number: AC 24-56213
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

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

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

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

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

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

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) 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 I. D. Number:
Company Permit Number: AC 24-56213
Date of Issue:
Expiration Date: January 30, 1984

GENERAL CONDITIONS:

- b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the date(s) analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

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

SPECIFIC CONDITIONS:

1. The maximum operating rate for boiler "D" shall not exceed 120 MMBTU/hr heat input.
2. Auxiliary boiler "D" shall be allowed to operate continuously. (8760 hours per year).
3. The boiler will be fired with natural gas, and No. 6 fuel oil. Emissions shall not exceed the allowable emission listed in Table II of the Preliminary Determination for SO₂, NO_x, PM, VOC, and CO.

PERMITTEE: Occidental Chemical
Company

I. D. Number:
Permit/Number: AC 24-65213
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

4. The sulfur content of fuel oil fired in the boiler shall not exceed 1.0 percent.
5. Compliance with all allowable emission limits (Table II) shall be determined by performance tests scheduled in accordance with the attached General Conditions. Except as provided under 40 CFR 60.8(b), the performance tests shall be in accordance with the provisions of the following reference method in Appendix A of 40 CFR 60 or other State approved methods.
 - a. Method 1. Sample and Velocity Traverses
 - b. Method 2. Volumetric Flow Rate
 - c. Method 3. Gas Analysis
 - d. Method 5. Determination of Particulate Emissions for Stationary Sources
 - e. Method 6. Determination of Sulfur Dioxide Emissions from Stationary Sources
 - f. Method 7. Determination of Nitrogen Oxide Emissions from Stationary Sources
 - g. Method 9. Determination of the Opacity of Emissions from Stationary Sources
 - h. Method 10. Determination of Carbon Monoxide Emissions from Stationary Sources.

A compliance test shall consist of the average of three consecutive runs. The boiler shall operate within 10 percent of maximum capacity during sampling, using the fuel that most likely will emit the greater quantity of pollutants being sampled. The Department shall be notified 30 days in advance of the compliance test.

6. Performance tests for NO_x , and CO to determine emission compliance status shall be requested by the Department when deemed necessary.
7. The opacity of the boiler flue gases shall not exceed 20 percent except for one six-minute period per hour during which the opacity shall not exceed 27 percent.
8. The applicant should report any delay in modification of this unit to the Department.

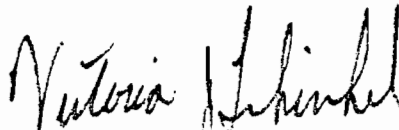
PERMITTEE: Occidental Chemical I. D. Number:
Company Permit Number: AC 24-56213
Date of Issue:
Expiration Date: January 30, 1984

SPECIFIC CONDITIONS:

9. This permit replaces operating permit No. AO24-21059. The applicant shall return any current operating permit from the boiler to the Department's Northeast District office within three (3) months of modification of the unit.
10. The applicant will demonstrate compliance with the condition of the construction permit and submit a complete application for an operating permit to the Department's Northeast District office prior to 90 days of the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until the expiration date or issuance of an operating permit.
11. Upon obtaining an operating permit, the applicant will be required to submit periodic reports on the actual operation and emission of the facility. These reports will give emission test data, emission test results, hours of operation, maximum and average fuel oil consumption and sulfur content.
12. Stack sampling facilities will include the eyebolt and angle described in Chapter 17-2.700 FAC.
13. The source shall comply with the provisions and requirements of the attached general conditions.

Issued this 11 day of May, 1983

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION



VICTORIA J. TSCHINKEL, Secretary

_____ pages attached.

Table 2

ALLOWABLE EMISSIONS⁽¹⁾

| <u>SOURCE/FUEL</u> | <u>PM</u> | | <u>POLLUTANT</u> | | <u>NO_x</u> | | <u>CO</u> | | <u>VOC</u> | |
|---|-----------|------|------------------|-------|-----------------------|-------|-----------|------|------------|-----|
| | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY | lb/hr | TPY |
| Boiler B Oil (2) | 14.2 | 62.3 | 174.8 | 765.8 | 65.5 | 287.2 | 5.5 | 23.9 | 1.1 | 4.8 |
| This boiler shall be allowed to operate 60% of rated capacity (Specific Condition No. 1). | | | | | | | | | | |
| Boiler C* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 8.9 | 0.4 | 1.6 |
| Oil (2) | 10.7 | 46.7 | 128.7 | 563.9 | 49.2 | 215.5 | 4.1 | 18.0 | 0.8 | 3.6 |
| COM (3) | 3.8 | 16.6 | 130.6 | 572.1 | 54.6 | 239.2 | 4.2 | 18.4 | 1.0 | 4.5 |
| Boiler D* | | | | | | | | | | |
| Gas | 1.2 | 5.3 | 0.1 | 0.3 | 21.0 | 92.0 | 2.0 | 9 | 0.4 | 2 |
| Oil (2) | 10.7 | 47 | 128.7 | 564 | 49.2 | 215 | 4.1 | 18 | 0.8 | 4 |
| #2 DAP Dryer Oil (4) | 46 | 193 | 11.8 | 51.5 | | | | | | |

(1) Allowable Emissions as estimated by the applicant based on an operating time of 8760 hours per year.

(2) SO₂ emission limit shall not exceed 1.1 lb/MMBTU heat input (Fuel oil with 1% sulfur content).

(3) Coal-Oil mix (COM) with 0.9% sulfur content.

(4) Fuel oil with 1.5% sulfur content. (SO₂ emission limit shall not exceed 0.2 lb/ton DAP).

Fluoride emissions from the DAP Plant shall not exceed 1.74 lb/hr and 0.06#F/Ton P₂O₅.

*Boiler "C" shares a common stack with auxiliary boiler "D".

GENERAL CONDITIONS

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.
2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.
3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitations contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within forty-five (45) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.
4. The permittee shall retain records of all information resulting from monitoring activities and information indicating operating parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.
5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall immediately notify the State District Manager by telephone and provide the District Office and the permitting authority with the following information in writing within four (4) days of such conditions:
 - (a) description for noncomplying emission(s),
 - (b) cause of noncompliance,
 - (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,

(d) steps taken by the permittee to reduce and eliminate the noncomplying emission,

and

(e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit may then be made by the permitting authority to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein.
7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority.
8. The permittee shall allow representatives of the State environmental control agency or representatives of the Environmental Protection Agency, upon the presentation of credentials:
 - (a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;
 - (b) to have access to any copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;
 - (c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;

(d) to sample at reasonable times any emission of pollutants;

and

(e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

9. All correspondence required to be submitted to this permit to the permitting agency shall be mailed to:

Mr. James T. Wilburn
Chief, Air Management Branch
Air & Waste Management Division
U.S. EPA, Region IV
345 Courtland Street, NE
Atlanta, GA 30365

10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.