

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional []	Reply Required []	Info. Only []
Date Due: _____	Date Due: _____	

TO: Victoria J. Tschinkel
FROM: Clair Fancy *Clair Fancy*
DATE: December 7, 1984
SUBJ: Modification of Permit Nos. AC 24-56209, 56210, 56211, 56212, 56213, 56214, 56215.

RECEIVED
DEC 7 1984
Office of the Secretary

Attached is a letter for your signature that will extend the expiration date of the above mentioned construction permits issued to Occidental Chemical Company.

The Bureau of Air Quality Management recommends their request be approved.

CHF/WH/s

attachment: letter

DER
DEC 10 1984
BAQM

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

December 07, 1984

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Atwood:

RE: Modifications to Air Construction Permit
Nos. AC 24-56209, 56210, 56211, 56212,
56213, 56214, 56215.

The department is in receipt of your request to modify the above referenced permits. Your request has been reviewed and approved. The expiration dates of your permits are changed as follows:

FROM: September 1, 1984

TO: March 31, 1985

A copy of this letter must be attached to each of the above referenced permits and becomes a part of each permit.

Sincerely,

Victoria J. Tschinkel
Secretary

VJT/rw

cc: Johnny Cole



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

November 9, 1984

Mr. Bill Thomas
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32302

Dear Bill:

With reference to your discussion of November 8, 1984, with John Koogler, Occidental Chemical Agricultural Products, Inc. is requesting that construction permits

AC 24 - 56212
AC 24 - 56214
AC 24 - 56213
AC 24 - 56215
AC 24 - 56209
AC 24 - 56211
AC 24 - 56210

be extended to ~~January 31, 1985~~ *March 31, 1985**. This extension will allow Occidental to continue operating the affected sources under valid permits while minor modifications to the various permits are being negotiated with the Department.

If there are any questions regarding this matter, please do not hesitate to call me or our consultant, John Koogler.

Very truly yours,

W.W. Atwood
Manager, Environmental Control

WVA/jrh

Mr. Bill Thomas
November 9, 1984
Page 2

cc: Willard Hanks - FDER Tallahassee
John Brown - FDER Jacksonville
John Koogler - Sholtes & Koogler
Larry Curtin - Holland & Knight

* March 31, 1985. Date agreed



DER

NOV 2 1984

BAQM

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

October 31, 1984

Mr. W. A. Thomas, P. E.
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

Reference: "B" Auxiliary Boiler, AC24-56212
"C" Auxiliary Boiler, AC24-56214
"D" Auxiliary Boiler, AC24-56213
#2 DAP Plant, AC24-56215

Dear Bill,

On October 29th we met with the District (Messrs. Brown and Cole) and discussed referenced permits. One point of action that evolved was a suggestion, confirmed this morning by Johnny Cole, concerning compliance testing.

As you are aware visible emission (VE) readings are required on the boilers when running on the higher sulfur fuel oil. At the present time, however, they are running on gas. The District has suggested that we request from you a delay on submission of VE tests until the units are oil fired.

This would avoid a special start-up on oil of C & D boilers and de-mothballing of B boiler.

A similar request is made in connection with compliance testing with the use of #6 fuel oil for the dryer in DAP plant #2. It is currently running on gas and the fuel oil stand-by tanks still contain the previously approved fuel.

Sincerely,

A handwritten signature in cursive script, appearing to read "W. W. Atwood".

W. W. Atwood
Manager, Environmental Control

psb

cc: Mr. Johnny Cole, FDER Jacksonville, FL
Mr. R. E. McNeill, Occidental Chemical Company



*Copy
J Brown has orig.*

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

October 19, 1984

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

Dear Mr. Brown:

This will refer to several letters in connection with Certificate of Completion of Construction forms for operating permits. All were associated with a completed PSD review.

Reference: Letter dated August 24, 1984, "B" Auxiliary Boiler

1. Operating Rate: 90 million Btu/hour
Design Capacity: 107 million Btu/hour
Expected Normal: 45-90 million Btu/hour, when operating.

Please refer to Attachment 1 for a requested re-alignment of operating rates for Boilers B, C and D.

2. Fuel Oil Analysis - See Attachment 2
3. Procedure to isolate 1.5% sulfur fuel oil - See Attachment 3.
4. (a) Particulate matter stack test - The intent of our request February 6, 1984 to FDER was to avoid costly stack sampling of the small auxiliary boilers. However, our request and your response only addressed a stack sampling exemption for sulfur dioxide. Attachment 4 provides justification to avoid costly stack testing for particulate matter as required in the construction permits.

(b) VE's - As pointed out in our application transmittal letter, the unit has been fired on natural gas and now has been mothballed for a period at least through 1985. We propose to notify the Department prior to start-up of this unit and test at that time.

5. If, as we intended, FDER approves a certified oil analysis and VE test in lieu of stack testing, the fee of \$100 would apply and this item is contingent on item 4(a) above.

Reference: Letter August 24, 1984 - "C" Auxiliary Boiler

1. Operating Rate: 155 million Btu/hour
Design Capacity: 182.5 million Btu/hour
Expected Normal: 75-155 million Btu/hour, when operating.

Please refer to Attachment 1.

2. Fuel Oil Analysis - See Attachment 2.
3. Procedure to isolate 1.5% sulfur fuel oil - Attachment 3.
4. (a) Particulate matter stack test - The intent of our request February 6, 1984 to FDER was to avoid costly stack sampling of the small auxiliary boilers. However, our request and your response only addressed a stack sampling exemption for sulfur dioxide. Attachment 4 provides justification to avoid costly stack testing for particulate matter as required in the construction permits.

(b) As pointed out in our application transmittal letter, the unit continues to be fired on natural gas. We could start-up and operate on oil in order to run the test if the Department requires.

Reference: Letter August 24, 1984 - "D" Auxiliary Boiler

1. Operating Rate: 155 million Btu/hour
Design Capacity: 182.5 million Btu/hour
Expected Normal: 75-155 million Btu/hour, when operating.

Please refer to Attachment 1.

2. Same as for "C" Auxiliary Boiler (above).
3. Same as for "C" Auxiliary Boiler (above).
4. Same as for "C" Auxiliary Boiler (above).

Reference: Letter August 24, 1984, "E" Auxilliary Boiler

1. Operating Rate: 156 million Btu/hour
Design Capacity: 218.4 million Btu/hour
Expected Normal: 75-156 million Btu/hour, when operating.
2. Same as for "C" Auxilliary Boiler (above).
3. Same as for "C" Auxilliary Boiler (above).
4. Same as for "C" Auxilliary Boiler (above) relative to stack testing. Visible emission compliance test included as Attachment 5.

Reference: Letter August 24, 1984, No. 2 DAP Plant

1. Tests will be performed when No. 6 fuel oil is used. At the present time the plant is running on natural gas and the fuel tank contains the lower sulfur No. 5 fuel oil. We propose to notify the Department prior to start-up of this unit on No. 6 fuel oil and the subsequent testing at that time.
2. Certificate will be obtained when No. 6 fuel oil is purchased for the DAP plant.
3. Procedure noted above is in Attachment 3.

Sincerely,

OCCIDENTAL CHEMICAL
AGRICULTURAL PRODUCTS DIVISION



W. W. Atwood
Manager, Environmental Control

WWA:sc
Attachments

cc: R. E. McNeill



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

SKEC 102-75-06

October 19, 1984

Mr. W. C. Thomas, P.E.
 Florida Department of
 Environmental Regulation
 Twin Towers Office Building
 2600 Blair Stone Road
 Tallahassee, Florida 32301

Subject: Occidental Chemical Agricultural Products, Inc.
 Modification to Boiler Input Rates and Pollutant
 Emission Rates
 Auxilliary Boiler B, AC24-56212
 Auxilliary Boiler C, AC24-56214
 Auxilliary Boiler D, AC24-56213

Dear Bill,

During the meeting that Wes Atwood and I had with you in your office on October 12, 1984, we discussed some inconsistencies between permitted and designed heat input rates for the B, C and D auxilliary boilers located at Occidental's Suwannee River Chemical Complex in Hamilton, Florida. Specifically, Auxilliary Boilers C and D each have a designed maximum heat input rate of 182.5 million BTU per hour, and a permitted maximum heat input rate of 120.0 million BTU per hour, each, and Boiler B has a maximum heat designed input rate of 106.9 million BTU per hour and a maximum permitted heat input rate of 160.0 million BTU per hour. The total maximum designed heat input rate for the three boilers combined is 471.9 million BTU per hour and the maximum permitted heat input rate to the three boilers combined is 400.0 million BTU per hour.

Occidental is requesting a modification to the three referenced permits to redistribute the maximum permitted heat input rate to the three boilers. The proposed maximum permitted heat input rates will be 155.0 million BTU per hour to Boiler C, 155.0 million BTU per hour to Boiler D, and 90.0 million BTU per hour to Boiler B. The total redistributed heat input is still 400.0 million BTU per hour. The designed, permitted and proposed heat inputs are also summarized in Table 1. The proposed maximum heat input to each of the three boilers is approximately 85 percent of the maximum designed heat input rate.

160 135
 120 155
 120 90
 110

These heat input rates will allow each boiler to operate with reasonable margin safety and, furthermore, will not impose any operating inconvenience on Occidental.

The redistribution of heat input rates to the three boilers will result in changes in steam production for each boiler as summarized in Table 1. The total proposed steam production for the three boilers is 325,000 pounds per hour; a production rate identical to the presently permitted total steam production rate. The proposed steam production rate for each boiler is approximately 93 percent of the designed steam production rate for the boiler.

The redistribution of maximum heat input rates will also affect the air pollutant emission rates from the boilers. The modified annual pollutant emission rates for sulfur dioxide, particulate matter and nitrogen oxides are also summarized in Table 1. In all cases, it will be noted that the presently permitted and proposed annual emission rates are identical.

In addition to redistributing the maximum allowable annual air pollutant emission rates, an assessment was made to evaluate the impact of these changes on ambient ground-level concentrations of the pollutants. The assessment was semi-quantitative and involved looking at changes in air pollutant emission rates, stack heights, stack temperatures and stack gas flow rates. The stack and stack gas parameters for Boilers B, C and D under permitted and proposed conditions are summarized in Table 2.

The proposed changes in emission rates will result in approximately a 44 percent decrease in emissions from Boiler B and approximately a 38 percent increase in the emissions from both Boiler C and D. The proposed changes in the emission rates result in a decrease in the emissions from the boiler with the shortest stack height and lowest stack gas flow rate (plume buoyancy) and an increase in the pollutant emission rates of the boilers with a highest stack height and a highest stack gas flow rate (plume buoyancy). Both the permitted and proposed gas temperatures are the same (460°F) and therefore cancel out of the analysis.

Since air pollutant emissions are being transferred from a source with a low physical stack height and the lesser plume buoyancy to a source with a greater physical stack height and a greater plume buoyancy, the impact of the proposed modification will result in a reduced ground-level impact of all air pollutant emitted by the three boilers.

100.00
100.00
12.5.0

44% decrease
38% increase

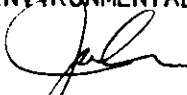
Mr. W. C. Thomas, P.E.
Florida Department of
Environmental Regulation

October 19, 1984
Page -3-

If after reviewing the enclosed information, you feel additional information is needed to support this request of modifications, please give me a call.

Very truly yours,

SHOLTES & KOOGLER,
ENVIRONMENTAL CONSULTANTS


A handwritten signature in dark ink, appearing to read 'John B. Koogler', is written over the printed name below.

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

JBK:ldh
Enclosure

cc: Mr. Wes Atwood
Mr. Johnny Cole

EASTERN SEABOARD PETROLEUM COMPANY, INC.

P. O. BOX 3233, STATION F—8531 EVERGREEN AVE.

JACKSONVILLE, FLORIDA 32208

TELEPHONE 904/355-9678

CABLE ADDRESS
EASTPETOFFICES
JACKSONVILLE
TAMPA

September 5, 1984

Mr. John Boren
Materials Management
Occidental Chemical Company
Post Office Box 300
State Road 137
White Springs, Florida 32096

Dear Mr. Boren:

The specifications for various fuels supplied to Occidental Corporation as as follows:

	<u>1.0% #6 Fuel</u>	<u>#2 Fuel</u>	<u>Comm. Dist.</u>	<u>No. 5 Flotation</u>	<u>50/50 Blend</u>
API Gravity	<u>10.0</u>	<u>36.4</u>	<u>29.7</u>	<u>25.0</u>	<u>20.1</u>
Sulfur % Wt ASTM	<u>.9</u>	<u>.21</u>	<u>.81</u>	<u>1.27</u>	<u>1.78</u>
Pour Point ASTM	<u>+5</u>	<u>+5</u>	<u>+5</u>	<u>+5</u>	<u>+5</u>
Flash Point	<u>175</u>	<u>175</u>	<u>175</u>	<u>180</u>	<u>175</u>
Visc. SSU @ 100	<u>373</u>	<u>36.0</u>	<u>47.5</u>	<u>78.5</u>	<u>201</u>
BSW % Wt	<u>.01</u>	<u>.01</u>	<u>.01</u>	<u>.01</u>	<u>.01</u>

The above is a composite analysis on the laboratory results. If we can be of further assistance, please contact us.

Very truly yours,


Ceil Cabler

cc: Marshall Griggs
Al Csontos
Steve Kemp

cc: AES
TVT

FUEL OIL ISOLATION PROCEDURE

1. Vendor will be informed not to accept a verbal (phone) order for 1.5% No. 6 fuel.
2. Purchasing will order the 1.5% fuel following receipt of an authorized purchase request.
3. Traffic will be informed of the delivery date by Purchasing. When the truck arrives at the weigh station, Traffic will contact the Granulation Superintendent who will assign someone to meet the truck.
4. The person assigned from Granulation will direct the truck personally to the proper storage tank for DAP #2 and see that the truck offloads to that tank.
5. Receipts will be logged on the DAP #2 plant operating log sheet.



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

SKEC 102-75-06

October 19, 1984

Mr. W. C. Thomas, P.E.
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Subject: Occidental Chemical Agricultural Products, Inc.
Modification to Method of Determining Particulate
Matter Emission Compliance
Auxiliary Boiler B, AC24-56212
Auxiliary Boiler C, AC24-56214
Auxiliary Boiler D, AC24-56213
Auxiliary Boiler E, AC24-56210

Dear Bill,

Pursuant to the meeting that Wes Atwood and I had with you and Ed Palagy on October 12, 1984 and the telephone conversations that I had with you and Ed on this date, Occidental is requesting a modification to the method for determining compliance with the permitted particulate matter emission limit established in the referenced construction permits for fossil fuel fired steam boilers B, C, D and E. Boilers B, C and D are located at Occidental's Suwannee River Chemical Complex (SRCC) and boiler E is located at Occidental's Swift Creek Chemical Complex (SCCC); all in Hamilton County, Florida.

The referenced construction permits for boilers B, C and D were issued in May, 1983 following PSD review of PSD-FL-083 and the permit for boiler E was also issued in May, 1983 following PSD review of PSD-FL-082. All four construction permits specify that compliance with the sulfur dioxide emission limiting standard be determined by EPA Method 6 as described in 40 CFR 60, Appendix A and that compliance with the particulate matter emission limit be determined by EPA Method 5, also described in 40 CFR 60, Appendix A.

Boilers B, C, D and E are all "small boilers" as defined by Chapter 17-2, FAC; that is all have a heat input rate of less than 250 million BTU per hour. The emission limiting standards for small boilers, as set forth in 17-2.600(6) require that both the particulate matter and sulfur dioxide emission limits be based upon a Best

Available Control Technology (BACT) determination. The referenced PSD reviews, both addressing fuel modifications for the four existing boilers, addressed sulfur dioxide emissions from the boilers only. Changes in the particulate matter emission rates resulting from the requested fuel changes were less than the de minimus rate increases; thus exempting particulate matter from the PSD review. J

The BACT determination made by the Department for the four boilers, and dated November 7, 1982, states: "compliance with the SO₂ emission limit will be based upon the sulfur content of the fuel fired." Consistent with this BACT determination, Occidental requested by letter dated February 6, 1984 that the specific conditions in the four construction permits requiring that compliance with the sulfur dioxide emission limit be determined by EPA Method 6, be changed to the method of compliance specified by the BACT determination; i.e., compliance based on the sulfur content of the fuel fired. In this letter, however, the matter of establishing compliance with the particulate matter emission limiting standard was inadvertently overlooked.

On February 22, 1984, Occidental received a letter from the Department changing the specific conditions in all four permits and specifying that the method of determining compliance with the sulfur dioxide emission limiting standard be determined by monitoring the sulfur content of the fuel fired in the boilers.

The purpose of this letter is to request a modification to the specific conditions of all four boiler permits to allow the determination of compliance with the particulate matter emission limiting standard to be based upon compliance with the permitted visible emission limit and compliance with the fuel sulfur limit.

This request is based upon two facts. First, neither of the PSD reviews covering the four boilers, addressed particulate matter because changes in particulate matter emission rates were less than the de minimus emission rate increases allowed by PSD regulations. Because of this, there appears to be no reason for changing conditions in the permits under which the boilers were operating prior to the PSD reviews as they apply to determining compliance with particulate matter emission limits. These permit conditions required only visible emission observations.

Secondly, and perhaps more importantly, the particulate matter emission limits established for the four boilers in the referenced permits are all established by the AP-42 emission factor for particulate matter. This emission factor equation is:

46

$$P = 10(S)+3$$

where,

P = the particulate matter emission rate in pounds per
thousand gallons of fuel oil fired, and
S = the sulfur content of the fuel oil in percent.

It is apparent from this equation that the particulate matter emission limit is very much dependent upon the sulfur content of the fuel oil fired.

Since the BACT determinations made pursuant to both PSD-FL-082 and PSD-FL-083 specify that compliance with the sulfur dioxide emission limiting standard be based on the measured sulfur content of the fuel oil, it follows that compliance with the particulate matter emission limit should also be based upon the sulfur content of the fuel oil because of the dependence of particulate matter emissions on the fuel sulfur content.

Based upon information presented above, Occidental requests that the specific conditions in the four boiler permits be modified to allow determination of compliance with the particulate matter emission limit to be based upon the sulfur content of the fuel oil fired to the boilers.

If there are any questions or if additional information is needed to support this requested modification, please do not hesitate to contact me.

Very truly yours,

SHOLTES & KOGLER,
ENVIRONMENTAL CONSULTANTS



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

JBK:ldh
Enclosures

cc: Mr. W. W. Atwood

VISIBLE EMISSION OBSERVATION FORM

ATTACHMENT 5

SOURCE NAME <i>Occidental Chem Co</i>			OBSERVER'S NAME (PRINT) <i>Dale M Baker</i>			
ADDRESS <i>P.O. Box 300 White Springs</i>			ORGANIZATION <i>Occidental Chem Co</i>			
STATE <i>Fla</i>	ZIP	TELEPHONE <i>397-8265</i>	CERTIFIED BY <i>Eastern Tech Assoc.</i>		DATE <i>6-7-84</i>	
SOURCE ID NUMBER <i>AC 24-56210</i>			OBSERVATION DATE <i>10-8-84</i>			
PROCESS <i>Steam</i>			OPERATING MODE <i>Oil Fired</i>			
CONTROL EQUIPMENT <i>N/A</i>			OPERATING MODE <i>#2 Oil</i>			
DESCRIBE EMISSION POINT <i>Out Boiler E at Swift Creek Chem. Comp</i>						
HEIGHT ABOVE GROUND LEVEL <i>50'</i>		HEIGHT RELATIVE TO OBSERVER <i>133'</i>				
DISTANCE FROM OBSERVER <i>123'</i>		DIRECTION FROM OBSERVER <i>West</i>				
DESCRIBE EMISSIONS						
EMISSION COLOR		PLUME TYPE <input type="checkbox"/> INTERMITTENT <input checked="" type="checkbox"/> CONTINUOUS <input type="checkbox"/> FUGITIVE <input type="checkbox"/>				
WATER DROPLETS PRESENT NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>		IF YES, IS PLUME ATTACHED <input type="checkbox"/> DETACHED <input type="checkbox"/>				
AT WHAT POINT WAS OPACITY DETERMINED <i>At stack exit</i>						
DESCRIBE BACKGROUND <i>Partly Cloudy</i>						
BACKGROUND COLOR <i>Blue + white</i>		SKY CONDITIONS <i>Partly Cloudy</i>				
WIND SPEED <i>2mph</i>		WIND DIRECTION <i>NE</i>				
AMBIENT TEMPERATURE		RELATIVE HUMIDITY <i>84%</i>				
COMMENTS						
SOURCE LAYOUT SKETCH DRAW NORTH ARROW						
AVERAGE OPACITY FOR FOR HIGHEST PERIOD						
NUMBER OF READINGS ABOVE						
WERE						
RANGE OF OPACITY READINGS						
MINIMUM MAXIMUM						
○ ○						
OBSERVER'S SIGNATURE <i>Dale M Baker</i>			DATE <i>10-8-84</i>			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						

TABLE 1

SUMMARY OF PERMITTED AND PROPOSED OPERATING CONDITIONS FOR BOILERS B, C AND D

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.
 SUWANNEE RIVER CHEMICAL COMPLEX
 HAMILTON COUNTY, FLORIDA

Boiler	Permit	Heat Input (million BTU/hr)			Steam Production (lb/hr)			Air Pollutant Emissions (tons per year)					
		Design	Permit	Proposed	Design	Permit	Proposed	Sulfur Dioxide		Part. Matter		NOx	
								Permitted	Proposed	Permitted	Proposed	Permitted	Proposed
D	AC24-56213	182.5	120.0	155.0	135,000	100,000	125,500	564.0	730.8	47.0	60.5	215.0	278.0
C	AC24-56214	182.5	120.0	155.0	135,000	100,000	125,500	563.9	730.8	46.7	60.5	215.5	278.0
B	AC24-56212	106.9	160.0	90.0	80,000	125,000	74,000	765.8	432.1	62.3	35.0	287.2	161.7
TOTAL		471.9	400.0	400.0	350,000	325,000	325,000	1893.7	1893.7	156.0	156.0	717.7	717.7

↑

60%

6%

96M MBTU/hr

c. D 100% cap rates ⇒

160MM BTU, 100%

down c. D

TABLE 2

STACK AND STACK GAS PARAMETERS FOR BOILERS B, C AND D

OCCIDENTAL CHEMICAL AGRICULTURAL PRODUCTS, INC.
SUWANNEE RIVER CHEMICAL COMPLEX
HAMILTON COUNTY, FLORIDA

Boiler	Stack Height (feet)	Stack Temperature (°F)		Stack Gas Flow (Acfm)	
		Permitted	Proposed	Permitted	Proposed
D	104	468	468	50,000	62,000
C	104	468	468	50,000	62,000
B	35	468	468	34,000	36,000

↑

90
90
106?

No. 0156563

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

SENT TO	
Mr. W. W. Atwood	
STREET AND NO.	
P.O., STATE AND ZIP CODE	
POSTAGE	\$
CERTIFIED FEE	c
SPECIAL DELIVERY	c
RESTRICTED DELIVERY	c
OPTIONAL SERVICES	
RETURN RECEIPT SERVICE	
SHOW TO WHOM AND DATE DELIVERED	c
SHOW TO WHOM, DATE, AND ADDRESS OF DELIVERY	c
SHOW TO WHOM AND DATE DELIVERED WITH RESTRICTED DELIVERY	c
SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	c
TOTAL POSTAGE AND FEES	\$
POSTMARK OR DATE	
9/14/84	

PS Form 3800, Apr. 1976

PS Form 3811, Jan. 1978

● SENDER: Complete items 1, 2, and 3.
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)
 Show to whom and date delivered.....
 Show to whom, date and address of delivery.....
 RESTRICTED DELIVERY
 Show to whom and date delivered.....
 RESTRICTED DELIVERY.
 Show to whom, date, and address of delivery.....
 (CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
 Mr. W. W. Atwood
 P. O. Box 300
 White Springs, FL 32096

3. ARTICLE DESCRIPTION:
 REGISTERED NO. CERTIFIED NO. INSURED NO.
 0156563
 (Always obtain signature of addressee or agent)

I have received the article described above.
 SIGNATURE Addressee Authorized agent
Clarence Rogers

4. DATE OF DELIVERY 9-17-84 POSTMARK JACKSON FL 15 SEP 1984

5. ADDRESS (Complete only if requested)

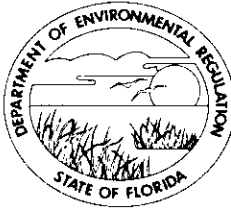
6. UNABLE TO DELIVER BECAUSE: CLERK'S INITIALS

RETURN RECEIPT, REGISTERED, INSURED AND CERTIFIED MAIL

☆GPO : 1979-300-469

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

September 12, 1984

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

Dear Mr. Atwood:

The department has received your August 28, 1984, request for an extension of two state permits (AC 24-56209 and AC 24-56211). These permits were issued to modify two sulfuric acid plants on May 17, 1983. The initial expiration date of January 30, 1984, for these permits was later extended to September 1, 1984. Federal permit PSD-FL-082 was also issued for the modifications to the sulfuric acid plants.

Chapter 17-4, FAC, states the department will issue permits for the time necessary to construct the facility. You are requesting six years be allowed to engineer, purchase, deliver equipment, and modify the plants. To justify a construction permit extension of this length, we request you furnish the department with a more detailed description of the modifications that are to be made to each sulfuric acid plant and a schedule (such as a critical flow diagram) showing (for example) when engineering will be completed, specifications released for bid, bids evaluated, contract let, material ordered and received, off-site fabrication initiated, on-site construction begun and completed, plants shut down to install equipment, facilities tested, and application for permit to operate submitted.

We also need confirmation that the original monitoring results are still valid. We suggest, initially, you submit a list on any new sulfur dioxide sources in your area and the ambient air concentration on sulfur dioxide currently being measured near your plant.

Federal permit No. PSD-FL-082 was issued for these plants on November 7, 1983. Federal permits may become invalid if construction is not begun within eighteen months of the date the

Mr. W. H. Atwood
September 12, 1984
Page two

permit is issued, if construction is discontinued for eighteen months or more, or if construction is not completed within a reasonable time (40 CFR 52.21). To confirm that this condition has been complied with, please submit a log showing the construction activities on "E" and "F" sulfuric acid plants since permit PSD-FL-082 was issued.

Your reply to the information requested in this letter will allow us to determine how to process your request. If you have any questions on what information is needed, please call Willard Hanks at (904) 488-1344.

Sincerely,



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

CHF/WH/agh

cc: James T. Wilburn
Doug Dutton
John Koogler



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

August 28, 1984

Mr. Bill Thomas
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida

Re: AC-24-56211; AC-24-56209 - Swift Creek
Chemical Complex Sulfuric Acid Plant

Dear Mr. Thomas:

This is to request an extension of the referenced construction permits from September 1, 1984 to May 1, 1989 to allow for engineering, purchase, delivery of equipment and completion of the work.

As you know the first step taken in this revision was to improve the catalyst loading to increase the efficiency at the higher production rates. The next step is to enlarge the gas handling capacity together with additional heat recovery equipment. This work is expected to be completed in the next several years.

I plan to review this with you in Tallahassee on August 29, 1984, to answer any question you may have.

Sincerely,

A handwritten signature in cursive script that reads "Wes Atwood".

W.W. Atwood, Manager
Environmental Control

WWA/tb
cc: Mr. R.E. McNeill

SENDER: Complete items 1, 2, and 3.
Add your address in the "RETURN TO" space on reverse.

1. The following service is requested (check one.)
 Show to whom and date delivered.....
 Show to whom, date and address of delivery.....
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 Show to whom and date delivered.....
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(CONSULT POSTMASTER FOR FEES)

2. ARTICLE ADDRESSED TO:
 Mr. M. P. McArthur
 Post Office Box 300
 White Springs, FL 32096

3. ARTICLE DESCRIPTION:

REGISTERED NO.	CERTIFIED NO.	INSURED NO.
	0158260	

(Always obtain signature of addressee or agent)

I have received the article described above.
 SIGNATURE Addressee Authorized agent

Clarence Rogers

4. DATE OF DELIVERY: 2-29-84

5. ADDRESS (Complete only if requested):

6. UNABLE TO DELIVER BECAUSE:

POSTMARK: WHITE SPRINGS, FEB 29 PM 1984, CLERK'S INITIALS 32096

☆GPO : 1979-300-459

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No. 0158260

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

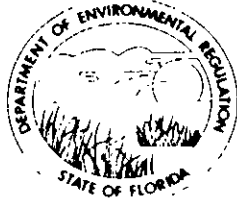
SENT TO	
Mr. M. P. McArthur	
STREET AND NO.	
P.O., STATE AND ZIP CODE	
POSTAGE	\$
CONSULT POSTMASTER FOR FEES	
CERTIFIED FEE	c
SPECIAL DELIVERY	c
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OPTIONAL SERVICES	
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SHOW TO WHOM AND DATE DELIVERED	c
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SHOW TO WHOM, DATE AND ADDRESS OF DELIVERY WITH RESTRICTED DELIVERY	c
TOTAL POSTAGE AND FEES	\$
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PS Form 3800, Apr. 1976

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

February 22, 1984

CERTIFIED MAIL-RECEIPT REQUESTED

Mr. M. P. McArthur
Vice President and General Manager
Occidental Chemical Company
Post Office Box 300
White Springs, Florida 32096

Dear Mr. McArthur:

The department is in receipt of your request for a modification of your construction permit numbers: AC 24-56209, AC 24-56210, AC 24-56211, AC 24-56212, AC 24-56213, AC 24-56214, AC 24-56215.

This request is acceptable and the conditions are changed and added as follows:

Specific Conditions

The expiration date of the permits: AC 24-56209, AC 24-56210, AC 24-56211, AC 24-56212, AC 24-56213, AC 24-56214, and AC 24-56215 will be changed from January 30, 1984 to September 1, 1984.

The following paragraphs will be added to conditions No. 5, (boiler B), No. 6 (boiler C), No. 5 (boiler D), No. 4 (boiler E), and No. 4 (No. 2 DAP dryer) respectively.

Compliance with the SO₂ emission limit will be based upon the sulfur content of the fuel fired. Each shipment of fuel delivered to the facility will be sampled and the sulfur content determined and recorded. A certified analysis from the applicants fuel supplier may be substituted for on-site analysis. Applicable test methods by the American Society for Testing Material (A.S.T.M.) will be used.

The applicant shall prepare a procedure for department approval to prevent the unloading of No. 6 oil containing 1.5% sulfur into the tank(s) which contain No. 6 oil having a lower sulfur content. A record of the amount of 1.5% sulfur oil received will be kept by the applicant. The records shall be made available to the department upon request.

Mr. M. P. McArthur
Page Two
February 22, 1984

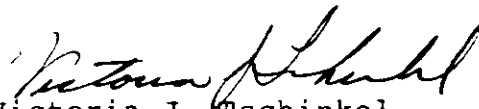
Method 6. Determination of Sulfur Dioxide Emissions from Stationary sources shall be requested by the department when deemed necessary.

Attachments:

Mr. W. W. Atwood's modification request letters of January 30, 1984, February 2, 1984, and February 6, 1984.

This letter and attachments must be attached to your permits, AC 24-56209, AC 24-56210, AC 24-56211, AC 24-56212, AC 24-56213, AC 24-56214, and AC 24-56215 and shall become a part of each permit.

Sincerely,


Victoria J. Tschinkel
Secretary

VJT/s

cc: John Koogler, Sholtes and Koogler
Environmental Consultants
Johnny Cole, Northeast District Office

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

INTEROFFICE MEMORANDUM

For Routing To District Offices And/Or To Other Than The Addressee		
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
To: _____	Loctn.: _____	
From: _____	Date: _____	
Reply Optional []	Reply Required []	Info. Only []
Date Due: _____	Date Due: _____	

TO: Victoria J. Tschinkel, Secretary
FROM: Clair Fancy, Deputy Bureau Chief
DATE: February 22, 1984

RECEIVED
FEB 24 1984
Clair Fancy
Office of the Secretary

SUBJ: Approval and signature of a modification to the air construction permits, No. AC 24-56209 through AC 24-56215 for Occidental Chemical Company, issued on May 17, 1983, and modified on February 22, 1984.

Enclosed is a modification to the referenced air construction permits (AC 24-56209 through AC 24-56215). The bureau recommends approval.

TH/s



DER
FEB 09 1984
BAQM

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

February 6, 1984

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

Dear Bill:

Please refer to Dr. J. Koogler's letter of January 30, 1984, requesting extension of construction permit expiration date.

We inadvertently left off associated permits in the PSD approval which also had the January 30, 1984 date.

Therefore, please extend in a similar way the following permits to September 1, 1984.

Auxiliary Boiler B (AC-24-56212)
Auxiliary Boiler C (AC-24-56214)
Auxiliary Boiler D (AC-24-56213)
Auxiliary Boiler E (AC-24-56210)
DAP #2 (AC-24-56215)

In connection with compliance testing for the higher sulfur fuel oil allowed, Occidental requests that it be allowed to calculate the SO₂ emission based on a certificate of oil analysis instead of the costly stack sampling method imposed by 40 CFR 60 Appendix A.

It is my understanding that under certain circumstances this is allowable if approved 40CFR 60.8(b).

Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script, appearing to read "W. W. Atwood".

W. W. Atwood
Manager, Environmental Control

WWA/psb
Attachment

cc: R. E. McNeill
W. M. Miller
Johnny Cole, DER
John Koogler, SKEC



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

February 2, 1984

DER
FEB 06 1984
BAQM

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

Reference: Permit No. AC-24-56210 (Sulfuric Acid Plant E)
Permit No. AC-24-56209 (Sulfuric Acid Plant F)

Dear Bill:

This will confirm our telephone conversation of January 31, 1983, concerning Occidental's permitting and compliance monitoring plans for the "E" and "F" Sulfuric Acid plants at the Swift Creek Chemical Complex.

During the first half of 1983, we plan to increase catalyst loading to allow for production rates of about 2300 STPD of 100 percent sulfuric acid. Following this we will test for compliance with reference permits and submit operating permit applications to CAP.

In 1985, physical changes in the size of the economizer and the gas handling system are expected which will allow permitted throughput of 2500 STPD of 100 percent sulfuric acid on each facility.

We will keep you informed of our progress.

Sincerely

A handwritten signature in cursive script, appearing to read "Wes Atwood".

W. W. Atwood
Manager, Environmental Control

WWA/psb

cc: Mr. Greg DeMuth, FDER, Gainesville, FL
Mr. Johnny Cole, FDER, Jacksonville, FL
Mr. Rick Davis, OXY



SHOLTES & KOOGLER, ENVIRONMENTAL CONSULTANTS
1213 N.W. 8th Street Gainesville, Florida 32601 (904) 377-5822

Teresa

SKEC 102-75-06

January 30, 1984

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

Subject: Hamilton County - AP
Occidental Chemical Company
AC24-56211 Sulfuric Acid Plant "E"
AC24-56209 Sulfuric Acid Plant "F"

DER

FEB 01 1984

BAQM

Dear Bill:

With reference to our telephone conversation of this date regarding the construction permits for the "E" and "F" sulfuric acid plants located at the Occidental Chemical Company Swift Creek Chemical Complex, Occidental requests that the expiration date of these two permits be extended from January 30, 1984 to September 1, 1984. This extension will provide Occidental with the time necessary to complete plant modifications and to conduct the necessary air pollutant emission compliance tests with the plants operating within 10 percent of the 2,500 tons per day permitted operating rate.

If there are further questions regarding this matter or if additional information is necessary for the extension to be granted, please contact me. Your cooperation in this matter is very much appreciated.

Very truly yours,

SHOLTES & KOOGLER,
ENVIRONMENTAL CONSULTANTS, INC.


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

JBK:sc

cc: Mr. W. W. Atwood



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JAN 9 1984

REF: 4AW-AM

Mr. M. P. McArthur
Vice President & General Manager
Occidental Chemical Company
P. O. Box 300
White Springs, Florida 32096

RE: PSD-FL-082, 083 Swift Creek and Suwannee River
Chemical Complexes

Dear Mr. McArthur:

This is to notify you that no petitions have been filed with the Administrator regarding the above issued Prevention of Significant Deterioration (PSD) permits which you received on November 14, 1983, for the modifications at the phosphate fertilizer complexes in White Springs, Florida. Therefore, in accordance with the provisions of the above permits, the effective dates are December 15, 1983. If construction does not commence within 18 months after this effective date, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, these permits shall expire and authorization to construct shall become invalid.

Please direct any questions you may have to Mr. Jesse Baskerville, Acting Chief, Air Engineering Section of my staff at 404/881-7654.

Sincerely yours,

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

cc. Mr. Clair Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental
Regulation

~~Butler~~ → ~~Taylor~~
Patty, file see district

DER

JAN 12 1984

BAQM



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

July 5, 1983

DER

JUL 5 1983

BAQM

BY HAND DELIVERY THIS DATE

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

Re: Surplus Solid Sulfur Storage Facility
Occidental Chemical Company
Swift Creek Chemical Complex
Hamilton County, Florida
Permit Application No. AC-24-61435

Dear Mr. Fancy:

This will respond to your request to M. P. McArthur of June 30, 1983, for additional information on Occidental Chemical Company's ("Occidental") modification of the above-referenced construction permit application to employ "in-situ" sulfur melters. Accordingly, the following responses are provided in reply to the Department of Environmental Regulation's ("Department") request for further information:

1. Department's Request: "A detailed description of the in-situ melter to be used at the facility is needed. This information should include melting rate of the in-situ melter, the number of melters required, the amount of steam required, and the source of the steam."

Occidental's Response:

The in-situ melter is a direct contact type melter consisting of sulfur melting elements mounted on a mobile chassis with a hydraulically retractable tandem undercarriage. The melter element support mast has a hydraulic cylinder attached to the traveling sub-frame for raising and lowering the mast. The traveling sub-frame provides 10 feet of lateral movement to the mast and melter elements when actuated by a counterweight system which is connected by a cable take-up winch between the main frame of the mobile chassis and the traveling sub-frame. The melter is mounted on a hydraulic driven track vehicle that will propel forward and backward with steering capability. An electrically powered hydraulic control package is provided for all hydraulic operations. An electrical control panel to operate the winch and other electrical requirements is mounted on the chassis. (See attachment "1" for general assembly drawing and attachment "2" for a descriptive brochure.)

Molten sulfur from the block face is collected and drained through aluminum sulfur transfer tubes to a pump pit or launder system. Two melters will be required for a melting rate of 40 TPH.

Steam consumption is 225 lbs. per hour per ton of sulphur melted at a minimum of 75 psi. Electric power requirements are 50 KVA at 480 volts. The source of steam for the in-situ sulfur melter will be the existing Swift Creek Chemical Complex steam system. This existing steam system is fueled primarily from the burning of sulfur to produce sulfuric acid in two double absorption sulfuric acid plants.

2. Department's Request: "No estimate of emissions occurring during the operation of the in-situ melters was provided. An estimate of any criteria pollutant emissions must be made."

Occidental's Response:

The use of an in-situ melter to reclaim sulfur from the block will result in no air pollutant emissions other than those that have been addressed in the permit application amendments submitted to the Department on June 16, 1983.

C. H. Fancy, P.E.
July 5, 1983
Page Three

There will be no particulate matter emissions resulting from operation of the in-situ melter.

There will be some hydrogen sulfide emissions associated with the in-situ melting operation. In the materials submitted to the Department on April 20, 1983, it was conservatively estimated that the sulfur would contain 100 ppm of dissolved hydrogen sulfide and that all would be emitted to the atmosphere as the sulfur went through the block sulfur storage cycle. Under previously proposed conditions (stationary melter) a fraction of this total hydrogen sulfide emission would result from the operation of the stationary sulfur melter. Under presently proposed conditions (in-situ melter) that portion of the hydrogen sulfide originally associated with the stationary melter will be associated with the in-situ melter.

Since the calculation of hydrogen sulfide emissions previously submitted to the Department on April 20, 1983, assumes that all hydrogen sulfide contained in the sulfur will be released, the use of the in-situ melter will not affect the calculated hydrogen sulfide emissions. Likewise, the emissions of sulfur dioxide resulting from the in-situ melter will be the same as previously submitted to the Department since it was previously estimated that all of the sulfur dioxide associated with the sulfur passing through the solid sulfur storage facility would be released.

No other criteria pollutants will be generated as a result of the use of the in-situ melter just as no other criteria pollutants were generated during the use of a stationary melter.

3. Department's Request: "Preliminary calculations indicate that a four-inch increase in vat height would require 1,169 tons of sulfur. This conflicts with the limitation of 1,000 tons per day of sulfur poured to the vat".

Occidental's Response:

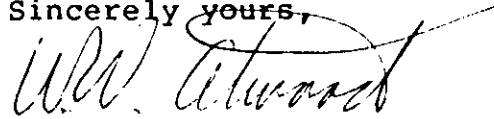
Subsections V-1 and V-3.1.1 of the attached revised Section V, SUPPLEMENTAL REQUIREMENTS OF CONSTRUCTION PERMIT APPLICATION SUBMITTED ON 10/13/83, as submitted to the Department on June 16, 1983, are hereby amended to increase the maximum daily pour rate from 1000 to 1500 TPD. This change in the daily sulfur pouring rate will have no effect on annual fugitive particulate matter emissions. The only change is the daily particulate matter emission rate. At a pouring rate of 1000 tons per day, the maximum

C. H. Fancy, P.E.
July 5, 1983
Page Four

daily particulate matter emission rate resulting from sulfur pouring would be 10.6 pounds per day. With a pour rate of 1500 tons per day, the daily fugitive particulate matter emission rate will be 15.9 pounds per day. The annual fugitive particulate matter emission rate associated with pouring will remain unchanged at 1.6 TPY because there will be no change in the annual tons of sulphur poured.

We trust that the foregoing adequately responds to the Department's request for additional information. We would be glad to discuss this or any further questions you may have and we are prepared to meet with you this week for that purpose, if needed.

Sincerely yours,



W. W. Atwood
Manager, Environmental Control

WWA/rf

cc: J. D. Boone Kuersteiner, Esq.
Akerman, Senterfitt & Eidson

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

M. P. McArthur, Vice President
and General Manager
Occidental Chemical Company



FEATURES:

- The new insitu sulfur remelting system for the reclamation of sulfur from block storage without dust, fuss or noise.
- Capable of recovering sulfur from storage blocks of heights up to fifty feet.
- Self-propelled on job site.
- Transportable to job site by normal highway tractor.
- Operation requires only one person.

BACKGROUND:

Ernie Ellithorpe has been in the sulfur handling, forming and transportation business since 1955 and has developed many bulk handling, forming and liquid systems over these years.

The most recent of these systems is the insitu remelter which has proven successful and environmentally acceptable. This patented Ellithorpe Sulfur Remelt System has been assigned to the firm of Western Sulfur Remelters Ltd. of Calgary

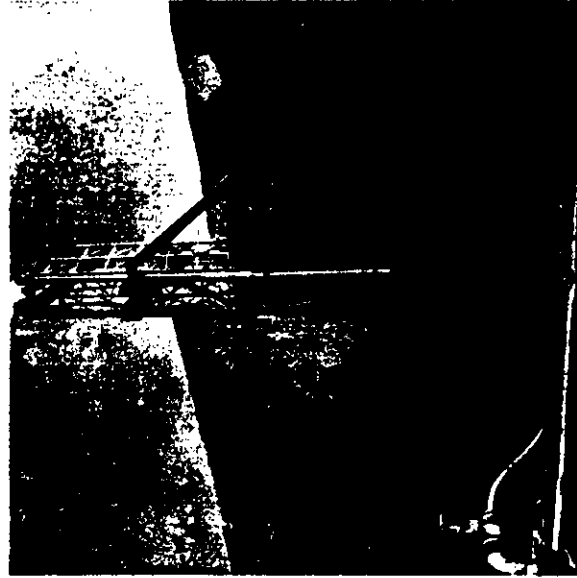
SPECIFICATIONS:

Melter can attain a reclamation rate of .84 long tons per hour, per foot of block height in normally clean sulfur. e.g. — Block height of 40 feet would produce 33.6 long tons per hr.

Steam requirements are approximately 225 lbs. per ton of sulfur melted.

Electrical requirements are 50 K.V.A. to operate the mechanical, hydraulic, lights, and automatic controls.

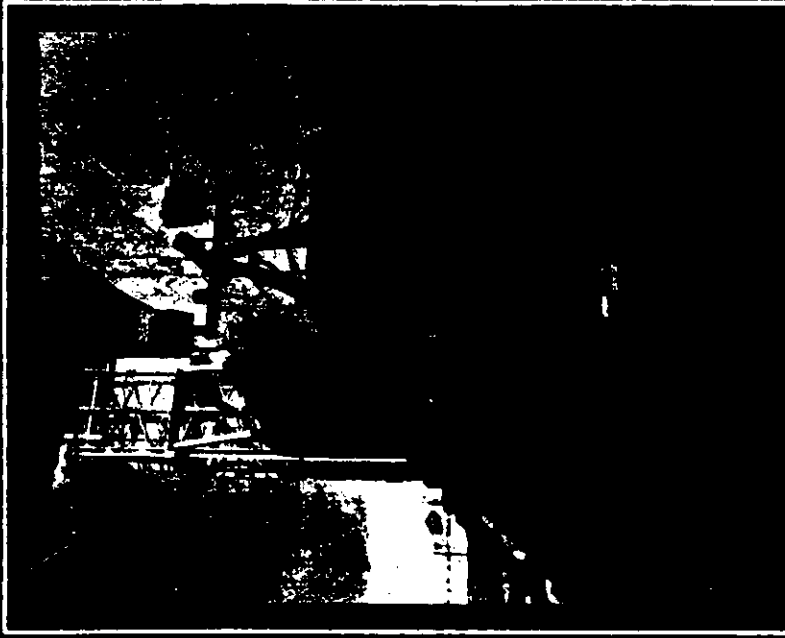
Minimal training program is required for personnel. Usually one person per shift is adequate.



WESTERN SULFUR REMELTERS LTD.

#8, 1935-30th AVE. N.E.
CALGARY, ALBERTA
T2E 6Z5

PHONE: (403) 230-1707



“WESURE”

WESTERN SULFUR REMELTERS LTD



SECTION V, SUPPLEMENTAL REQUIREMENTS
OF CONSTRUCTION PERMIT APPLICATION
SUBMITTED ON 10/13/82

1. Section V-1 as Amended 6/16/83 and
7/5/83
2. Section V-3 as Amended 11/17/82,
2/4/83, 4/20/83, 6/16/83 and
7/5/83

SECTION V - SUPPLEMENTAL REQUIREMENTS

V-1. Use Rate

Sulfur will be pumped to the surplus solid sulfur storage area from existing molten sulfur storage facilities at a maximum rate of 270 tons per hour (600 gal/min). This sulfur will be poured to form a solid block with a maximum capacity of 150,000 tons. The maximum quantity of sulfur poured to block during a 24-hour period will be 1,500 tons.

Sulfur will be reclaimed from the block with an in situ melter and delivered to existing molten sulfur facilities at a maximum rate of 40 tons per hour (960 tons/day).

V-3.1.1 Conditions

1. Maximum annual rate that sulfur is poured to block will be 300,000 tons per year.
2. Maximum pouring rate to the sulfur block will be 270 tons per hour or 1500 tons per day.

3. Average wind speed at Occidental is 7 miles per hour (10.1 fps).

Note: The change in the daily pouring rate does not affect the emission rates calculated in subsequent Sections.