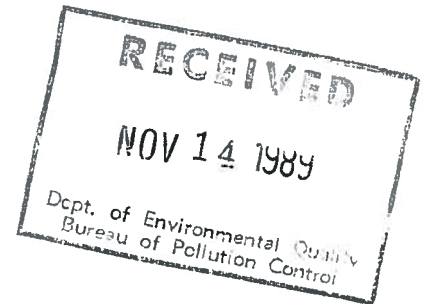




Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

November 9, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
NO. P 814 346 171



C. Adam Smith
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39289-0385

Dear Mr. Smith:

Please find the attached letter and mail receipt for the application filed on September 28, 1989.

Please make the following change. Our Plant Manager is Mr. P. W. Kirkendall.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

CSJ:ml
31

cc: P. W. Kirkendall



Hercules Incorporated
 West 7th Street
 P.O. Box 1937
 Hattiesburg, MS 39401
 (601) 545-3450

September 28, 1989

No. 814 346 163
CERTIFIED MAIL -
RETURN RECEIPTS REQUESTED

Mr. Don Watts
 Bureau of Pollution Control
 P. O. Box 10385
 Jackson, MS 39209

Dear Mr. Watts:

Please find our permit renewal with a confidential section attached.

Very truly yours,

Charles S. Jordan

Charles S. Jordan
 Environmental Supervisor

CSJ:ml
 25

Attachment

| | |
|---|--|
| <p>SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.</p> | |
| <p>1. <input type="checkbox"/> Show to whom delivered, date, and addressee's address. (Extra charge) 2. <input type="checkbox"/> Restricted Delivery (Extra charge)</p> | |
| <p>3. Article Addressed to: <i>Mr. Don Watts</i> <i>Bureau of Pollution Control</i> <i>P.O. Box 10385</i> <i>Jackson, MS. 39209</i></p> | <p>4. Article Number <i>P 814 346 163</i></p> <p>Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise</p> <p>Always obtain signature of addressee or agent and <u>DATE DELIVERED.</u></p> |
| <p>5. Signature - Address X</p> | <p>8. Addressee's Address (ONLY if requested and fee paid)</p> |
| <p>6. Signature - Agent <i>[Signature]</i></p> | |
| <p>7. Date of Delivery <i>OCT 2 1989</i></p> | |



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39289-0385
(601) 961-5171



November 6, 1989

CSJ

Mr. G. R. Yandle, Plant Manager
Hercules, Inc.
P. O. Box 1937
Hattiesburg, Mississippi 39401

Dear Mr. Yandle:

Re: Operating Permit No.
110-0800-00001
Hattiesburg, Mississippi

This letter is for the purpose of alerting you to the fact that the referenced permit expires on April 1, 1990. If you wish the permit to be considered for renewal, you will need to file a new application. Application forms are enclosed.

If you have any questions, please advise.

Very truly yours,

C. Adam Smith

C. Adam Smith
South Air Emission Section

CAS:cdh
Enclosure



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P.O. Box 10385
Jackson, Mississippi 39289-0385
(601) 961-5171



MEMORANDUM

FILE COPY

TO: Dwight K. Wylie

FROM: Don Watts

RE: Hercules, Incorporated
Facility No. 110-0800-00001
Forrest County
Major/South
For May 9, 1989, Permit Board

Operating/Modification

DATE: April 25, 1989

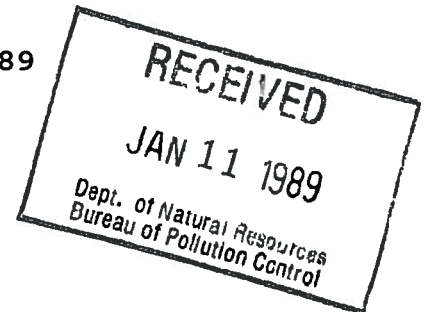
Hercules has operated a new process area, the Neuphor process, under a PEP. Emissions testing has been performed, and no problems are indicated. Therefore, I recommend that the Operating Permit be modified to incorporate this new emission point.



Ford

Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

January 10, 1989



NO. P 814 346 317
CERTIFIED MAIL--RETURN RECEIPT REQUESTED

Mr. Don Watts
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Sir:

In reference to Operating Permit No. 0800-00001, please find the attached semi-annual report detailing all work done for emission point 130.

We will continue to submit this report on a semi-annual basis.

Very truly yours,

C. S. Jordan
Environmental Supervisor

CSJ:sj
1001sj-2

Attachments

cc: P. W. Kirkendall
without attachment

CC: Preston Trotter
David Linde

Hattiesburg, MS
January 6, 1989

To: Charlie Jordan

From: Sushil Prem

OPERATING PERMIT NO. 0800-00001
=====

Re the above permit, Part III, other requirements, (3), the attached semi-annual report is submitted. This report is for July 1, 1988 through Dec. 31, 1988.

SP:sp

Attachment

File: Pilot Plant holder

Sushil Prem.

| EQUIPMENT | DAYS | MATERIALS | PRODUCT | POTENTIAL EMISSIONS | CONTROL EQUIPMENT | TYPE VENT |
|-----------|------|-----------|---------|---------------------|-------------------|-----------|
|-----------|------|-----------|---------|---------------------|-------------------|-----------|

KEITILE

| | | | | | | |
|---|---|-----------------------------|-------|--|-----------|------------------------|
| A | 2 | See confidential attachment | Resin | Water of reaction Para tertiary butyl phenol Para formaldehyde | Condenser | Vapors disch. in water |
| B | 4 | See confidential attachment | Resin | Water of reaction Nonyl phenol Para formaldehyde | Condenser | Vapors disch. in water |



Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

NO. P 814 346 323
CERTIFIED MAIL--RETURN RECEIPT REQUESTED

RECEIVED

AUG 29 1988

Dept. of Natural Resources
Bureau of Pollution Control

Mr. Don Watts
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Watts:

The purpose of this letter is to inform you of the following changes necessary to comply with Hercules Safety and loss prevention standards.

We propose to replace two, obsolete, fire tube dowtherm boilers (one million Btu/hr, each) at our Poly-pale plant with one two million Btu/hr dowtherm boiler. The new efficiently designed dowtherm boiler will also be located a safe distance from the Poly-pale plant.

If I can answer any additional questions please call me.

Very truly yours,

Charles Jordan
Environmental Supervisor

CJ:sj
1001sj-2

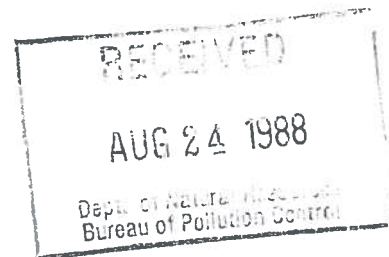


Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

August 22, 1988

P 814 346 321
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Don Watts
Air Division
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209



Dear Mr. Watts:

In reference to Operating Permit No. 0800-00001 and your August 19, 1988 letter, please find the attached semi-annual report detailing all work done for emission point 130.

We will continue to submit this report on a semi-annual basis.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

CSJ:sj
jordan:19

Attachments

CC: Preston Trotter
David Linde

Hattiesburg, MS
August 15, 1988

To: Charlie Jordan

From: Sushil Prem

OPERATING PERMIT NO. 0800-00001
=====

Re the above permit, Part III, other requirements, (3), the attached semi-annual report is submitted. This report is for Jan. 1, 1988 through June 30, 1988.

SP:sp

Attachment

Sushil Prem.

| EQUIPMENT | DAYS | MATERIALS | PRODUCT | POTENTIAL EMISSIONS | CONTROL EQUIPMENT | TYPE VENT |
|-----------|------|-----------|---------|---------------------|-------------------|-----------|
|-----------|------|-----------|---------|---------------------|-------------------|-----------|

POLYMERIZER

| | | | | | | |
|---|---|-----------------------------|---------|--------------------------------------|-----------|-----------|
| A | 6 | See Confidential Attachment | Polymer | Dicyclopentadiene Cyclopentadiene | Condenser | Vent pipe |
|---|---|-----------------------------|---------|--------------------------------------|-----------|-----------|

KETTLE

| | | | | | | |
|---|---|-----------------------------|-------|--|-----------|------------------------|
| A | 2 | See Confidential Attachment | Resin | Water of reaction Para tertiary butyl phenol Para formaldehyde | Condenser | Vapors disch. in water |
|---|---|-----------------------------|-------|--|-----------|------------------------|

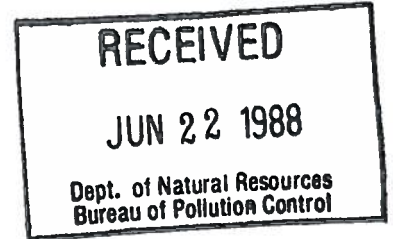
| | | | | | | |
|---|---|-----------------------------|-------|--|-----------|------------------------|
| B | 5 | See Confidential Attachment | Resin | Water of reaction Diethylene glycol | Condenser | Vapors disch. in water |
|---|---|-----------------------------|-------|--|-----------|------------------------|



Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

June 17, 1988

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED
P 004 497 687



Mr. Don Watts
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Watts:

Operating Permit No. 0800-00001

Please find the enclosed emissions testing data and storage tank data forms as required by Part III, other requirements, Item (8).

Enclosed are:

- (1) October 6, 1987 letter - outlining the scope of the work requirements, with an update.
- (2) Emissions testing data.
- (3) Storage tank data forms.

As discussed in our phone conversation, when you receive this information packet please call me at your convenience to discuss if any additional information may be needed to complete this requirement.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

CSJ:ml
jordan/4

Enclosure

BONNER ANALYTICAL TESTING COMPANY
RT. 14, BOX 509
HATTIESBURG, MS 39402
(601)264-2854

June 20, 1988

Hercules, Inc.
Charlie Jordan
P.O. Drawer 1937
Hattiesburg, MS 39401

Dear Mr. Jordan:

We have delivered under separate cover the results of point source emission analyses performed at the Hercules, Inc., Hattiesburg, MS manufacturing plant.

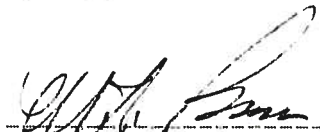
All analyses are complete except analyses for Maleic Anhydride concentration at location 038 and 082. As you are aware there is no published method for this analytical parameter.

Our attempts at quantitating Maleic have met with limited success thus far.

We will continue work on the development of an acceptable methodology for this parameter.

Analysis will be performed when we have developed an effective method.

Sincerely,



Michael S. Bonner, Ph.D.
BONNER ANALYTICAL TESTING COMPANY

TABLE OF CONTENTS

- I. 013 - Pexite Plant Oil Scrubber
 - A. EPA Method 25 - VOC

- II. 033 - Water Scrubber - Polypale East
 - A. EPA Method 25 - VOC
 - B. Sulfur Dioxide Impinger Trap
 - C. Toluene via G.C.

- 033 - Water Scrubber - Polypale West
 - A. EPA Method 25 - VOC
 - B. Sulfur Dioxide Impinger Trap
 - C. Toluene via G.C.

- III. 038 - Neuphor Effluent
 - A. EPA Method 25 - VOC

- IV. 042 - Flaking Belt Vapor Water Scrubber
 - A. EPA Method 25 - VOC

- V. 043 - Flaking Belt Dust Water Scrubber
 - A. EPA Method 5 - Particulates

- VI. 063 - Water Scrubber Kettle No. 1
 - A. EPA Method 25 - VOC

- VII. 071 - Flaking Belt Vapor Water Scrubber
 - A. EPA Method 25 - VOC

- VIII. 072 - Dracco Baghouse Model 20-S
 - A. EPA Method 5 - Particulates

- IX. 082 - Water Scrubber
 - A. EPA Method 25 - VOC

- X. 101 - Bvell Norbo Dust Collector
 - A. EPA Method 5 - Particulates

- XI. 102 - Flaking Belt Vapor Water Scrubber
 - A. EPA Method 25 - VOC

- XII. 112 - Hydrogen Process
 - A. EPA Method 25 - VOC

- XIII. 161 - Kettle Water Aspirator
 - A. EPA Method 25 - VOC
 - B. Epichlorohydrin via G.C.

- XIV. 162 - Dust Collector
 - A. EPA Method 5 - Particulates

- XV. 172 - Dust Collector
 - A. EPA Method 5 - Particulates

TABLE OF CONTENTS, continued

- XVI. 182 - Ammoniation Water Scrubber
 - A. EPA Method 25 - VOC
 - B. Ammonia Impinger Trap

- XVII. 183 - Amine Reactor Water Scrubber
 - A. EPA Method 25 - VOC

- XVIII. 190 - Polyrad and Polyol Area
 - A. Storage tank data forms
 - B. EPA Method 25 - VOC
 - C. Ethylene Oxide via G.C.

- XIV. 230 - Carbon Regeneration Furnace Scrubber
 - A. EPA Method 25 - VOC



Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

October 6, 1987

Mr. Don Watts
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Don:

Operating Permit No. 0800-00001

Please find the attached plan as required by Part III, other requirements, Item (8). Also, please reference my July 22, 1987 letter and in particular your subsequent air emissions inspection visit during which we discussed the required sampling and procedures. We are in agreement that if an area is not operating and not sampled by the end of CY-87, it will be sampled within 30 days after start-up.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

CSJ/de
de0016

Attachments

bcc: D. J. Keilman - HO/5142 NW (W.O. Att.)
G. R. Yandle - (W.O. Att.)
E. P. Trotter - (W.O. Att.)
D. T. Smith

m10011

SAMPLING PLAN

| <u>Emission Point</u> | <u>Definition</u> | <u>Sampling</u> | <u>UPDATE</u> |
|-----------------------|---|--|---|
| 010 | Rosin Process Area | Storage tank data forms | TANKS E, L, P, R, W, Y, TX |
| 011 | Mill Room Area | Area down. ✓ | |
| 012 | Extractor, Refinery, and Still House Combination Water and Oil Scrubber | Area down. ✓ | |
| 013 | Pexite Plant Oil Scrubber | EPA Method 25 for VOC. | COMPLETE |
| 020 | Delnav Plant | Area permanently shut down by year's end. | NEW CONTRACT UNDER NEGOTIATION |
| 021 | Flare Tower | Calculation for sulfur dioxide for banking. | 124,288 lbs H ₂ S → 233,954 lbs SO ₂ (1987) |
| 022 | Limestone Tank No. 1 | See Emission Point 020. ✓ | |
| 023 | Limestone Tank No. 2 | See Emission Point 020. ✓ | |
| 024 | Digestion Sump Vent | EPA Method 25 for VOC for banking. | AREA DOWN |
| 030 | Poly-Pale Plant | Storage tank data forms | TANKS T |
| 031 | McKee Boiler | By calculation for natural gas | 2,475 MCF/YR |
| 032 | McKee Boiler | By calculation for natural gas | 2,475 MCF/YR |
| 033 | Water Scrubber (2 vents) | EPA Method 25 for VOC, plus sulfur dioxide impinger trap, plus toluene by G.C. | COMPLETE |
| 034 | Heat Treatment | No vent ✓ | |
| 040 | Rosin Shed | Storage tank data forms | TANKS B |
| 041 | Drumming Operation | Per our discussion we propose not to sample. ✓ | |
| 042 | Flaking Belt Vapor Water Scrubber | EPA Method 25 for VOC | COMPLETE |

| <u>Point</u> | <u>Definition</u> | <u>Sampling</u> | <u>UPDATE</u> |
|--------------|------------------------------------|--|---|
| 043 | Flaking Belt Dust Water Scrubber | EPA Method 5 for particulates | COMPLETE |
| 050 | Package Boiler No.5 | By calculation for natural gas | 842,277 MCF |
| 060 | Vinsol Resin Process | Storage tank data forms | TANKS VN |
| 061 | Sealas Furnace No.1 | By calculation for natural gas | 121 MCF |
| 062 | Sealas Furnace No.2 | Identical to Emission Point 061 | SPARE |
| 063 | Water Scrubber Kettle No. 1 | EPA Method 25 for VOC | COMPLETE |
| 064 | Water Scrubber Kettle No. 2 | Identical to Emission Point 063 | SPARE |
| 070 | Truline Flaking and Packaging Area | Storage tank data forms | TANKS VN |
| 071 | Flaking Belt Vapor Water Scrubber | EPA Method 25 for VOC | COMPLETE |
| 072 | Dracco Baghouse Model 20-S | EPA Method 5 for particulates | COMPLETE |
| 073 | Pangborn Baghouse Model 600 | EPA Method 5 for particulates | NOT USED |
| 080 | Hard Resins Area | Storage tank data forms | TANKS S |
| 081 | Struthers-Wells Boiler | By calculation for natural gas | 35,146 MCF/YR |
| 082 | Water Scrubber | EPA Method 25 for VOC, plus Maleic Anhydride by G.C. | COMPLETE |
| 090 | Continuous Esterification Area | Storage tank data forms | TANKS S |
| 091 | Foster Wheeler Boiler | By calculation for natural gas | 11,715 MCF/YR |
| 092 | Continuous Esterification Unit | EPA Method 25 for VOC | MAJOR REPAIRS, SAMPLE 1ST MONTH OPERATION |

Point Definition Sampling W.P. DATE

| | | | |
|-----|-----------------------------------|---|---------------|
| 100 | Hard Resins Flaking House | Storage tank data forms | TANKS S |
| 101 | Bvell Norbo Dust Collector | EPA Method 5 for particulates | COMPLETE |
| 102 | Flaking Belt Vapor Water Scrubber | EPA Method 25 for VOC | COMPLETE |
| 110 | Foral and Staybelite Plant | Storage tank data forms | TANKS FL, H |
| 111 | Struthers-Wells Boiler | By calculation for natural gas | 10,462 MCF/YR |
| 112 | Hydrogen Process | EPA Method 25 for VOC | COMPLETE |
| 120 | Hydrogen Furnace | Storage tank data forms | TANK H |
| 130 | Pilot Plant Area | Storage tank data forms | TANKS LB |
| 131 | Struthers-Wells Boiler | By calculation for natural gas | 232 MCF/YR |
| 132 | Vent No. 1 | Area down. ✓ | |
| 133 | Vent No. 2 | Area down. ✓ | |
| 140 | Resin 731 Area | Storage tank data forms | TANKS D |
| 150 | Stills and Dresinate Area | Storage tank data forms | TANKS O, PS |
| 151 | Foster-Wheeler Boiler | By calculation for natural gas | 8,160 MCF/YR |
| 160 | Kymene Plant | Storage tank data forms | TANKS K |
| 161 | Kettle Water Aspirator | EPA Method 25 for VOC, plus Epichlorohydrin by G.C. | COMPLETE |
| 162 | Dust Collector | EPA Method 5 for particulates | COMPLETE |
| 170 | Defoamer Plant | Storage tank data forms | TANKS DP |

| <u>Point</u> | <u>Definition</u> | <u>Sampling</u> | <u>WSP DATE</u> |
|--------------|--------------------------------------|--|--|
| 171 | Silica Drier Furnace | By calculation for natural gas | 1918 MCF/YR |
| 172 | Dust Collector | EPA Method 5 for particulates | COMPLETE |
| 180 | Rosin Amine D Plant | Storage tank data forms | TANKS RA |
| 181 | Struthers-Wells Boiler | By calculation for natural gas | 24,515 MCF/YR |
| 182 | Ammoniation Water Scrubber | EPA Method 25 for VOC plus ammonia impinger trap | COMPLETE |
| 183 | Amine Reactor Water Scrubber | EPA Method 25 for VOC | COMPLETE |
| 190 | Polyrad and Polyol Area | Storage tank data forms, plus EPA Method 25 for VOC, plus ethylene oxide by G.C. | COMPLETE |
| 200 | Para-menthane-Unit | Area down. ✓ | |
| 210 | Para-menthane Hydroperoxide Unit | Area down. ✓ | |
| 220 | Sulfate Turpentine Refining Unit | Area down. ✓ | |
| 230 | Carbon Regeneration Furnace Scrubber | EPA Method 25 for VOC | COMPLETE |
| 240 | Murry Boiler | By calculation for natural gas | 267,443 MCF/YR, 33,520 GALS/YR #2 Fuel Oil |
| 152 | Stills and Dresinate Area | Storage tank data forms | 24,444 GALS/YR SOLVENT |
| 250 | Para-cymene Unit | Storage tank data forms | TANKS D, PS |
| 260 | Synthetic Pine Oil Facility | Storage tank data forms | TANKS HP |
| 270 | Paracol Plant | Storage tank data forms | TANKS TC |
| | | | TANKS DP |



Jordan
Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

May 31, 1988

No. P 004 497 681

CERTIFIED MAIL--RETURN RECEIPT REQUESTED

Mr. Don Watts
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Watts:

Please find the following information relative to storage tank data forms and emissions tests results as required in our permit to operate. We are pleased to report sampling is essentially complete with the following exceptions and we will compile and report the results by mid-June.

We are in the process of signing a new contract for our Delnav facility. This signing should be completed in June or July and we will sample Delnav as soon as the unit is in operation. Also a couple of other units were not operational, major maintenance repairs, etc., which should be completed in June and these will be sampled as soon as they are in operation. These emission points are noted in the report.

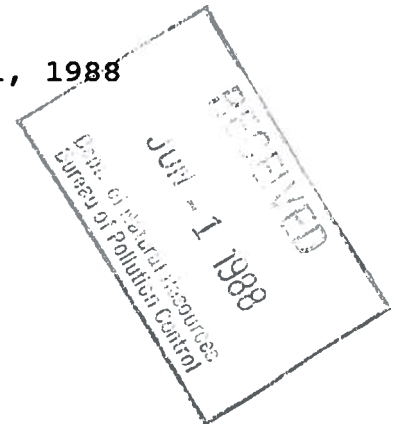
Due to the rush in sampling, compiling, and submitting this large amount of data before the deadline, please excuse this short delay in submitting the final report. If I can answer any questions please call me.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

CSJ:sj
jordan:3
Attachment

cc: P. W. Kirkendall



Forest



Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

RECEIVED
APR 18 1988
Dept. of Natural Resources
Bureau of Pollution Control

April 14, 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
P 004 497 667

Mr. Don Watts
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Mr. Watts:

Re our 4/13/88 phone conversation, the purpose of this letter is to confirm emission testing for our Neuphor facility on 4/22/88.

If I can answer any questions, please call me.

Very truly yours,

Charles Jordan
Environmental Supervisor

CSJ:sj
1027sj-8

cc: Mike Bonner
Bonner Analytical
Route 13, Box 85
Hattiesburg, MS 39401

P. W. Kirkendall

Changed to 4/27/88 per 4/21/88 phone call



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



MEMORANDUM

FILE COPY

TO: *Jerry B. Banks*

FROM: *Don Watts*

RE: *Hercules, Incorporated* *Operating/Modification*
Facility No. 110-0800-00001
Forrest County
Major/South
For March 8, 1988, Permit Board

DATE: *February 25, 1988*

Hercules has requested another extension in their deadline for submittal of current emissions data due to delays in the contractor being able to perform the testing. I recommend that their request be granted and that the Permit Board modify their Permit to give them until June 1, 1988, to submit their data as they requested.



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



February 24, 1988

*Mr Charles S. Jordan
Environmental Supervisor
Hercules Incorporated
P.O. Box 1937
Hattiesburg, Mississippi 39401*

Dear Mr. Jordan:

*Re: Operating Permit No. 0800-00001
Hattiesburg, Mississippi*

We have received your letter of February 19, 1988, requesting an extension of the report submittal deadline shown in Part III, No. (8) of your Operating Permit. We will recommend to the Permit Board that the deadline be extended to June 1, 1988, as you requested. However, we feel strongly that the date established in this extension should be strictly adhered to and failure to meet this date would subject you to enforcement action.

If you have any questions, please contact us.

Very truly yours,

*Don Watts
South Air Emissions Section*

DW:sr

FILE COPY

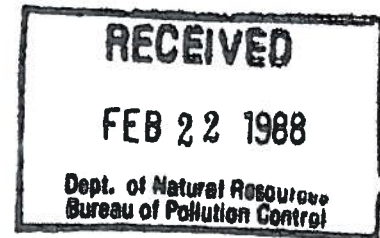


Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

February 19, 1988

Receipt No. P 004 497 644
CERTIFIED MAIL--RETURN RECEIPT REQUESTED

Mr. Don Watts
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209



Dear Mr. Watts:

Re our 2/17/88 phone conversation and operating permit 0800-00001 we are requesting a 90 day extension of the report submittal deadline to June 1, 1988.

As shown in the attached purchase order agreement (dated 11/2/87) we acquired the services of Bonner Analytical Testing Company to perform all testing. However, analytical delays (equipment) have prevented testing. Bonner indicates that they should be able to start testing by the end of this month. Additional information can be obtained from Mike Bonner at (601) 264-2854.

Our storage tank data forms are approximately 75% complete and we will be submitting these forms once they are complete and typed.

We feel this amount of time is necessary to generate accurate data for the permit requirement.

If I can answer any questions please call me.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

CSJ:sj
jordan:3

Attachment



Hercules Incorporated

Purchase Order

| | | | | | | | | | | | | |
|---------------|------|------|-----------|--------------------|-----------|-----------------|----------|------|------|-------|----------------|-----------------|
| DELIVERY DATE | DEPT | DIV | ISS. OFF. | PURCHASE ORDER NO. | | CONTRACT | PAY TO | | TYPE | CORP. | PURCHASE ORDER | |
| | 72 | 1 | 042 | 042 | 8340111 | RES | CO. NAME | LOC. | | CODE | 11 | 02 87 |
| SHIP DATE | PPD | COLL | FRT. RATE | EQ. RATE | UNIT FRT. | MAILED FROM | | | | | ALT. NO. | ALTERATION DATE |
| SEE BELOW | | | | | | Hattiesburg, MS | | | | | | |

| | | |
|----------------|---|--|
| VENDOR SHIP TO | Bonner Analytical Testing Company Rt. 13, Box 85 Hattiesburg, MS 39401 | INSTRUCTIONS TO VENDOR: 1- MAIL FOUR COPIES OF YOUR INVOICE TO: Hercules Incorporated P. O. Drawer 1937 Hattiesburg, MS 39401 |
| | Hercules Incorporated West 7th Street Hattiesburg, MS 39401 | 2-MAIL ATTACHED ACKNOWLEDGMENT TO: Hercules Incorporated P. O. Drawer 1937 Hattiesburg, MS 39401 |
| | | |

| | | | |
|------|------|-------|---------------------|
| ORIG | DEST | ROUTE | MODE |
| VIA | | | |
| | | | TERMS Net 30 |

FOB **Plantsite**

| ITEM | DESCRIPTION | CODE | QUANTITY | PRICE | UNIT | AMOUNT |
|------|---|------|----------|-------|------|--|
| | <p>This Agreement and Contract consists in its entirety of:</p> <ul style="list-style-type: none"> (1) Purchase Order Form. (2) Signed Purchase Order Acknowledgement. (3) Appendix A - General Conditions for a Lump Sum Construction Contract (one copy attached). (4) "General Safety Guide for Contractors and Their Employees" (two copies attached). <p>Bonner Analytical Testing Company (hereinafter referred to as "Contractor") agrees to furnish all necessary work including supervision, labor, equipment, and material to sample and furnish reports on all plant vent emissions, as required in air permits to operate, in accordance with the attached proposal and shall not exceed those quantities.</p> <p>Sampling shall commence and shall be completed as directed by C. S. Jordan.</p> | | | | | <p>Not to exceed \$32,321.00 Total</p> |

| | |
|-------------------------------|----------------------------|
| USE MATERIAL FOR | REQUISITIONED BY |
| APPROVED BY | ORDERED BY |
| R. E. Shows, Purchasing Supv. | C. S. Jordan:fb |
| | R. E. Shows |
| | PURCHASE ORDER NO. 0940111 |



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



MEMORANDUM

FILE COPY

TO: Jerry B. Banks

FROM: Don Watts

RE: Hercules, Incorporated **Operating/Modification**
Facility No. 110-0800-00001
Forrest County
Major/South
For February 9, 1988, Permit Board

DATE: January 27, 1988

Hercules has applied for approval to manufacture hard resins in equipment which is currently idle. Hard resins are currently produced in another part of the facility. Approval of this request will enable Hercules to meet additional demand.

There are no toxic or carcinogenic emissions. Particulate emissions from the process will be controlled by a scrubber; actual emissions are essentially nil.

Based on the information presented, I recommend that the Operating Permit be modified to allow production of hard resins in the process area formerly used for Vinsol Resins and Truline Flaking and packaging.

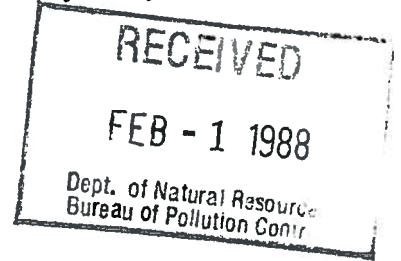
Forrest



Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

January 28, 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
P 004 497 632



Mr. Don Watts
Air Division
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

Dear Mr. Watts:

In reference to Operating Permit No. 0800-0001, please find the attached semi-annual report detailing all work done for emission point 130.

We will continue to submit this report on a semi-annual basis.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

CSJ:m1
0001:2

Attachments



cc: D. W. Linde
D. T. Smith, Jr.

To: C. S. Jordan

From: C. W. O. Eilo

Operating Permit No. 08000-0001 Hattiesburg, Ms.

With reference to the above permit, Part III, other requirements, 4, the attached semi-annual report is submitted. This report is for July 1, 1987 through January 1, 1988.

**PROPRIETARY
HERCULES INCORPORATED
THIS DOCUMENT, AND THE INFORMATION
THEREIN, IS THE EXCLUSIVE PROPERTY OF HER-
CULES INCORPORATED, AND MAY NOT BE USED,
REPRODUCED, OR DISCLOSED TO OTHERS WITHOUT
THE WRITTEN PERMISSION OF HERCULES
INCORPORATED.**

Pilot Plant Development Projects: July 1, 1987 - January 1, 1988

| <u>Equipment</u> | <u>Operating Date</u> | <u>Days</u> |
|------------------------|-----------------------|-------------|
| Batch Reactor (Kettle) | 8/24/87 - 9/3/87 | 11 |
| | 9/30/87 - 10/17/87 | 18 |

Product
Pentaerythritol Ester of Tall Oil Rosin
Phenolic Resin (Res-D-2098)

**PROPRIETARY
HERCULES INCORPORATED**
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THE WRITTEN PERMISSION OF HERCULES
INCORPORATED.

Raw Materials

| | |
|----------------------------|----------------------------|
| Refined Tall Oil Rosin | Wood Rosin |
| Mono-pentaerythritol | Para tertiary butyl phenol |
| Calcium Formate | Paraformaldehyde |
| Santonox | Maleic Anhydride |
| Antioxidant (Irganox 1035) | Mono-pentaerythritol |
| Nitrogen | |

Assessment of Emissions

Potential Emissions
Nitrogen
Acrolein Vapors
Paraformaldehyde Vapors

Control Equipment
Vent condenser

Vent Type
Water seal



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



January 20, 1988

Certified Mail No. P 165 464 597

Mr. G. R. Yandle, Plant Manager
Hercules, Incorporated
P.O. Box 1937
Hattiesburg, Ms. 39401



Dear Mr. Yandle:

Re: Performance Evaluation
Permit No. 0800-00001
Hattiesburg, Mississippi

Enclosed please find the above referenced permit for operation of the permitted air emission equipment during startup and performance evaluation. This permit expires on May 20, 1988.

Any appeal of this permit action must be made within the 30 day period provided for in Section 49-17-29(4)(b) Mississippi Code of 1972.

Very truly yours,

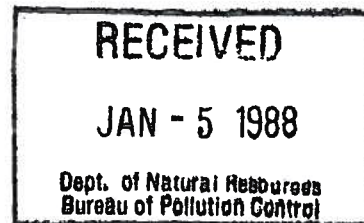
Don Watts
South Air Emissions Section

DW:sr
Enclosure



Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

December 29, 1987



CERTIFIED MAIL--RETURN RECEIPT REQUESTED

Mr. Don Watts
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209

Dear Don:

Re my May 1, 1987 letter, the purpose of this letter is to submit adduct construction certification for the Neuphor process and request a performance evaluation permit. Our plans are to start up the adduct part of the project the week of January 11, 1987.

If I can answer any questions, please call me.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

Charles A. McMahan, P.E.

CSJ/vrf
DW122987

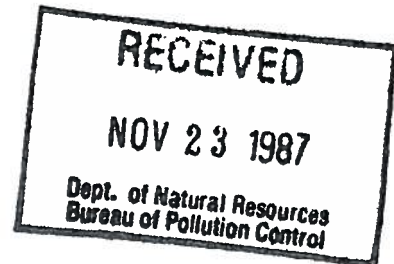


Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

November 19, 1987

CERTIFIED MAIL--RETURN RECEIPT REQUESTED

Mr. Don Watts
Bureau of Pollution Control
P. O. Box 10385
Jackson, MS 39209



Dear Don:

Permit Application for Hard Resins Expansion

Please find the attached permit application for Hard Resins expansion.

In order to meet increased sales volume our plans are to modify the existing Vinsol Resin process (Emission point 060) and the Truline flaking and packaging area (Emission point 070) to produce additional Hard Resins product.

A process description is included in the confidential attachment. If I can answer any additional questions please call me.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

CSJ:sj
jordan:3

Attachment

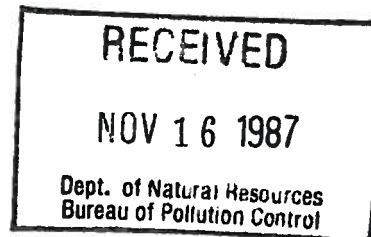
cc: G. R. Yandle
D. T. Smith



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

Forrest

9 NOV 1987



Mr. Douglas Kielman
Hercules, Inc.
Hercules Plaza-5142
Wilmington, Delaware 19894

Dear Mr. Kielman:

As you may know, the United States Environmental Protection Agency (EPA), under Section 112 of the Clean Air Act, has been collecting background information on epichlorohydrin (EPI) emissions from plants that manufacture EPI or that use EPI as a raw material in the production of glycerine, epoxy and polyamide resins, elastomers, surfactants, and flame retardants. The data collection has been primarily related to short-term emissions of EPI, which are emissions under normal operating conditions as well as episodes during which emission rates significantly exceed the annual average emission rate for an emission source.

After studies on short-term, noncancer health effects of EPI exposure using the data collected in early 1986, it became apparent that more information, covering a broader time period, was needed to assess accurately the short-term data from the producers and users of EPI. Therefore, EPA has decided to collect additional information on short-term EPI emissions by requesting data spanning a 3-year period of time.

This letter is to request from Hercules information about EPI emissions and emission controls at your facilities in Savannah, Georgia; Chicopee, Massachusetts; Hattiesburg, Mississippi; Portland, Oregon; and Milwaukee, Wisconsin. The information requested is itemized in Enclosure 1 to this letter. This information, along with analogous information from other companies, will be used to assess the health effects from exposure to short-term emissions of EPI from user and producer facilities; to define the current status of emission control; and to assess the economic feasibility of installation and operation of emission control techniques. We are sensitive to the amount of labor required to respond to this request; however, we have tried to limit it to features important to regulatory development and to minimize demands on your time. Also, you may merely respond "not applicable" to questions that do not apply to your plant.

Please note that the format of Enclosure 1 is intended to be used as a guide for providing your responses. Any additional comments, upset/maintenance notification reports, or caveats regarding your responses are welcome and appreciated. A separate copy of Enclosure 1 should be completed for each of your facilities that use or produce EPI. Please make additional copies of Enclosure 1 as necessary.

The authority for EPA's information gathering is included in Section 114 of the Clean Air Act, as amended (42 U.S.C. 7414). Enclosure 2 contains a summary of this authority. If you believe that disclosure of specific pieces of information you submit would reveal a trade secret, you should clearly identify such pieces of information. Please do not label an entire response "confidential" if only certain portions consist of trade secret information. Refer to Enclosure 2 for the information EPA may require, at a later time, to support your confidentiality claims. Any information subsequently determined to constitute a trade secret will be protected under 18 U.S.C. 1905. If no claim of confidentiality accompanies the information when it is received by EPA, it may be made available to the public by EPA without further notice (40 CFR Part 2.203, September 1, 1986). All emission data, however, will be available to the public. It will expedite the study and simplify problems if you would separate any data claimed to be confidential from the balance of the data.

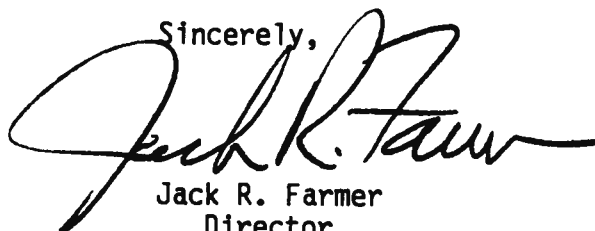
The EPA has contracted with MRI (Contract No. 68-02-4379) to obtain information pertinent to the industry. Thus, as noted in Enclosure 3, MRI has been designated by EPA as an authorized representative of the Agency. As a designated representative of the Agency, MRI is subject to the provisions of 42 U.S.C. 7414(c) respecting confidentiality of methods or processes entitled to protection as trade secrets.

Enclosure 4 summarizes Agency and Emission Standards and Engineering Division policies and procedures for handling privileged information and describes EPA contractor commitments and procedures for use of confidential materials. It is EPA's policy that compliance by an authorized representative with the requirements detailed in Enclosure 4 provides sufficient protection for the rights of submitters of privileged information.

If your company submitted a Section 114 information request during the 1986 survey or an earlier 1983 survey, a copy of the nonconfidential version of the completed response(s) is included as Enclosure 5 for your review. Items such as process component counts for units may be verified and resubmitted since this information will, in many cases, remain the same regardless of the time span for which data are requested.

Because of time constraints that you may have in completing this response, please understand that the information pertaining to short-term emissions is desired first so that the modeling phase of the project can be initiated as soon as possible. If you have any questions regarding this request or are unable to provide responses to the enclosed questions by January 18, 1987, please contact Mr. Mark L. Meech of our office at (919) 541-5499.

Sincerely,



Jack R. Farmer
Director
Emission Standards and
Engineering Division

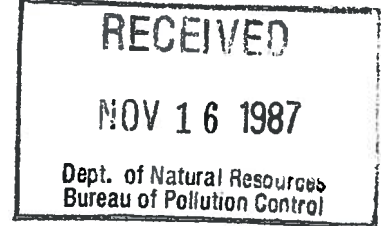
5 Enclosures

cc: Thomas Bispham, Oregon Department of
Environmental Quality
Robert Collom, Jr., Georgia Environmental
Protection Division
Kenneth Hagg, Massachusetts Department
of Environmental Quality Engineering
Don Thieler, Wisconsin Department of
Natural Resources
Dwight Wylie, Mississippi Department
of Natural Resources
Louis Gitto, Region I
Winston Smith, Region IV
David Kee, Region V
Gary O'Neal, Region X



Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

November 13, 1987



Mr. Don Watts
Air Division
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

Dear Don:

As we discussed by phone our plans are to evaluate an activated carbon adsorption canister as a replacement for the water scrubber shown on the application for a Maleic Anhydride storage tank. We will evaluate the canister while keeping emissions at a minimum and following the evaluation we will inform you of our decision for the best emission control equipment.

If I can answer any additional questions please call me.

Very truly yours,

Charles S. Jordan
Environmental Supervisor

CSJ:sj
jordan:3