



Mississippi Department of Environmental Quality
Office of Pollution Control

I-sys 2000 Master Site Detail Report

Site Name: Hercules Inc

PHYSICAL ADDRESS

LINE 1: 613 West 7th Street

LINE 2:

LINE 3:

MUNICIPALITY: Hattiesburg

STATE CODE: MS

ZIP CODE: 39401-

MAILING ADDRESS

LINE 1: 613 West 7th Street

LINE 2:

LINE 3:

MUNICIPALITY: Hattiesburg

STATE CODE: MS

ZIP CODE: 39401-

OTHER INFORMATION

MASTER ID: 002022

COUNTY: Forrest

REGION SRO

SIC 1: 2822

AIR TYPE: TITLE V

HW TYPE: LARGE QUANTITY

SOLID TYPE:

WATER TYPE: INDUSTRIAL

BRANCH: Chemical

ECED CONTACT:

Yassin, Mohammad

BASIN:

AIR PROGRAMS

☒ SIP

☐ PSD

☐ NSPS

☐ NESHAPS

☒ MACT



**Mississippi Department of Environmental Quality
Office of Pollution Control**

Pemits				
PROGRAM	PERMIT TYPE	PERMIT #	MDEQ PERMIT CONTACT	ACTIVE
HAZ. WASTE	EPA ID	MSD008182081		NO
AIR	TITLE V	080000001	Ketchum, Brian	YES
AIR	SOP	080000001	Ketchum, Brian	NO
WATER	NPDES - MAJOR	MS0001830	Cook, Charles	NO
WATER	NPDES - MAJOR	MS0001830	Cook, Charles	NO
WATER	NPDES - MAJOR	MS0001830	Beasley, Jerry	YES
WATER	PRE-TREATMENT	MSP091286	Tomkins, Tracy	YES
GENERAL	SARA TITLE III	MSR110153	Lavallee, Louis	YES
AIR	TITLE V	0800-00001	Glenn, Montie	NO

Compliance Actions				
MEDIA	ACTIVITY TYPE	SCHEDULED	COMPLETED	INSPECTED B
WATER	CEI - NA	3/17/99	3/17/99	Yassin, Mohammad
WATER	CMI - PRETREATMENT	11/1/99		Sharp, Loyd
WATER	CMI - NPDES	4/1/00		Sharp, Loyd
WATER	CMI - NPDES	11/1/99		Sharp, Loyd
WATER	CEI - NA	9/30/00		Yassin, Mohammad
HAZ WASTE	Compliance Evaluation Inspection	9/30/00		Yassin, Mohammad
AIR	State Compliance Inspection	9/30/00		Yassin, Mohammad
HAZ WASTE	Compliance Evaluation Inspection	6/30/99	6/30/99	Yassin, Mohammad
AIR	State Compliance Inspection	6/29/99	6/29/99	Yassin, Mohammad
WATER	CEI - NA	6/30/99	6/30/99	Yassin, Mohammad

INSPECTION REPORT FORM - GENERAL

Facility Name: HERCULES, INC.

Date: 2-21-89

Address: WEST 7TH STREET

HATTIESBURG, MS. 39401

Inspected By: BECKY COMYNS, JULIE FERO *ec*

Person Contacted: CHARLES JORDAN

Facility No: 110-0800-00001

Is facility major or minor? MAJOR

Purpose of Inspection:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Compliance Verification | <input type="checkbox"/> O&M |
| <input type="checkbox"/> Performance Evaluation | <input type="checkbox"/> VEE |
| <input type="checkbox"/> Complaint Investigation | <input checked="" type="checkbox"/> Annual |
| <input type="checkbox"/> Surveillance | <input type="checkbox"/> Follow-up |
| <input type="checkbox"/> Other (Explain): | |

Current Permit Status: PTO EXPIRES APRIL 1, 1990.

Source Description: PINE ROSINS AND RESINS MANUFACTURING FACILITY.

Applicable Regulations:

- ☒ SIP
☐ PSD
☐ NSPS
☐ NESHAFS

Cite regulation by description or regulatory section number: APC-S-1

State any permit conditions not being complied with and describe noncompliance:
NONE



INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 010/ROSIN PROCESSING AREA

Description of Process:

Raw Materials: PINE STUMPS, ROSIN

Processing Operations: (1) EXTRACT ROSIN FROM STUMPS OR RECEIVE ROSIN BY
TRUCK (2) PROCESS ROSIN TO RESIN.

Products/ByProducts: RESIN

Emissions & Control Devices: OIL SCRUBBER FOR EMISSION POINT 012 AND 013;

NO CONTROLS ON EMISSION POINT 011.
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

ONLY EMISSION POINT 013, THE OIL SCRUBBER SERVING THE PEXITE PLANT,
WAS IN OPERATION. THERE WERE NO VISIBLE EMISSIONS.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 030/POLY-PALE PLANT

Description of Process:

Raw Materials: ROSIN

Processing Operations: POLYMERIZE ROSIN WITH ACID CATALYST

Products/ByProducts: POLY-PALE

Emissions & Control Devices: HC - SCRUBBER

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

THERE WERE NO VISIBLE EMISSIONS FROM EITHER DOWTHERM (EMISSION POINT
031 AND 032). EMISSION POINT 033 HAS BEEN SPLIT INTO TWO VENTS; THERE
WERE NO VISIBLE EMISSIONS. EMISSION POINT 034 HAS BEEN ELIMINATED.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 040/ROSIN SHED

Description of Process:

Raw Materials: ROSIN

Processing Operations: FLAKE AND DRUM ROSIN

Products/ByProducts: N/A

Emissions & Control Devices: SCRUBBERS ON FLAKING OPERATION.

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

THERE WERE NO VISIBLE EMISSIONS FROM EITHER THE DRUMMING OPERATION

(EMISSION POINT 041) OR THE FLAKING OPERATION (EMISSION POINTS 042, 043).

INSPECTION REPORT FORM - BOILERS

Facility Name: HERCULES, INC.

Date: 2-21-89

Emission Point No./Name: 050/BOILER NO. 5

Rated Boiler Size: 156 MMBTUH

OR

1b's steam/hr @ psig

Operating Rate @ Insp: MMBTUH

OR

80,000 lbs steam/hr @ _____ psig

Fuel(s) Being Used:

(X) Natural Gas @ 104 MCFH

() Fuel Oil, No. _____ @ _____ Gal/hr

() Coal @ _____ tons/hr; _____ type; _____ %
ash; _____ % sulfur

() Woodwaste: () Sawdust @ tons/hr

() Shavings @ _____ tons/hr

() Hogged Fuel @ _____ tons/hr

() Bark @ tons/hr

() Other Fuels, Explain:

For Solid Fuels, Describe Fuel Stoking Method:

Soot Blowing: () Periodic () Manual
 () Continuous () Automatic

Schedule: NONE

Air Pollution Controls: (X) None () Baghouse

() Cyclone () ESP

() Multiclone

() Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity * % By () VEE () CEM

Sulfur Dioxide N/A 1bs/MMBTU by CEM

Nitrogen Oxides N/A 1bs/MMBTU by CEM

*NO VISIBLE EMISSIONS WERE NOTED.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 060/VINSOL RESINS PROCESS

Description of Process:

Raw Materials: SEE CONFIDENTIAL ATTACHMENT

Processing Operations: _____

Products/ByProducts: _____

Emissions & Control Devices: _____

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

SCRUBBERS 063 AND 064 WERE REPLACED WITH A MORE EFFICIENT

SCRUBBER (BOTH KETTLES VENT TO THE NEW SCRUBBER).

NO EMISSIONS WERE NOTED FROM EMISSION POINTS 061, 062, OR FROM THE
NEW SCRUBBER.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 070/TRULINE FLAKING AND PACKAGING AREA

Description of Process:

Raw Materials: SEE CONFIDENTIAL ATTACHMENT

Processing Operations: _____

Products/ByProducts: _____

Emissions & Control Devices: BAGHOUSE FOR EMISSION POINT 072.

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

EMISSION POINT 073, THE PANGBORN BAGHOUSE, HAS BEEN ELIMINATED.

NO VISIBLE EMISSIONS WERE NOTED FROM THE FLAKING BELT VAPOR HOOD VENT

(EMISSION POINT 071) OR FROM THE DRACCO BAGHOUSE (EMISSION POINT 072).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 080/HARD RESINS AREA

Description of Process:

Raw Materials: ROSIN

Processing Operations: PROCESSING ROSIN TO RESIN

Products/ByProducts: RESIN

Emissions & Control Devices: HC - SCRUBBER

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

THERE WERE NO VISIBLE EMISSIONS FROM EITHER THE DOWTHERM (EMISSION
POINT 081) OR THE SCRUBBER (EMISSION POINT 082).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 090/CONTINUOUS ESTERIFICATION PROCESS AREA

Description of Process:

Raw Materials: ROSIN

Processing Operations: ESTERIFICATION

Products/ByProducts: ESTERIFIED ROSIN

Emissions & Control Devices: NO CONTROLS

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

NO VISIBLE EMISSIONS WERE NOTED FROM THE DOWTHERM (EMISSION POINT 091);

A STEAM PLUME ONLY WAS NOTED FROM THE CONTINUOUS ESTERIFICATION UNIT

(EMISSION POINT 092).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 100/HARD RESINS FLAKING HOUSE

Description of Process:

Raw Materials: N/A

Processing Operations: FLAKING BELT

Products/ByProducts: FLAKE RESIN

Emissions & Control Devices: SCRUBBER AND BAGHOUSE

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

THERE WERE NO VISIBLE EMISSIONS FROM EITHER THE BAGHOUSE (EMISSION

POINT 101) OR THE SCRUBBER (EMISSION POINT 102).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 120/HYDROGEN FURNACE

Description of Process:

Raw Materials: NATURAL GAS

Processing Operations: CRACK NATURAL GAS

Products/ByProducts: HYDROGEN GAS

Emissions & Control Devices: CO₂

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

NO VISIBLE EMISSIONS WERE NOTED.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 140/RESIN 731 AREA

Description of Process:

Raw Materials: SEE CONFIDENTIAL ATTACHMENT

Processing Operations: _____

Products/ByProducts: _____

Emissions & Control Devices: NO CONTROLS

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

NO VISIBLE EMISSIONS WERE NOTED.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC.

Date: 2-21-89

Emission Point No./Name: 150/STILLS AND DRESINATE AREA

Description of Process:

Raw Materials: ROSIN

Processing Operations: DISTILLATION

Products/ByProducts: DIFFERENT CUTS OF ROSIN

Emissions & Control Devices: NO EMISSIONS FROM PROCESS (CLOSED SYSTEM)

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

THERE WERE NO VISIBLE EMISSIONS FROM THE DOWTHERM (EMISSION POINT 151).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 160/KYMENE PLANT

Description of Process:

Raw Materials: SEE CONFIDENTIAL ATTACHMENT

Processing Operations: _____

Products/ByProducts: _____

Emissions & Control Devices: DUST COLLECTOR FOR EMISSION POINT 162.

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

THERE WERE NO VISIBLE EMISSIONS FROM EITHER THE KETTLE VENT WATER
ASPIRATOR (EMISSION POINT 161), OR THE DUST COLLECTOR (EMISSION POINT 162).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 170/DEFOAMER PLANT

Description of Process:

Raw Materials: ROSIN

Processing Operations: MIXING

Products/ByProducts: DEFOAMER

Emissions & Control Devices: PARTICULATES; BAG FILTER

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

THERE WERE NO VISIBLE EMISSIONS FROM EITHER THE SILICA DRIER FURNACE
(EMISSION POINT 171), OR THE DUST BAG (EMISSION POINT 172).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 180/ROSIN AMINE D PLANT

Description of Process:

Raw Materials: SEE CONFIDENTIAL ATTACHMENT

Processing Operations: _____

Products/ByProducts: _____

Emissions & Control Devices: _____

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

THERE WERE NO VISIBLE EMISSIONS FROM THE DOWTHERM

(EMISSION POINT 181), THE AMMONIATION VENT SCRUBBER

(EMISSION POINT 182), OR THE AMINE REACTOR VENT

(EMISSION POINT 183).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC.

Date: 2-21-89

Emission Point No./Name: 230/CARBON REGENERATION FURNACE

Description of Process:

Raw Materials: CONTAMINATED CARBON

Processing Operations: REGENERATE CARBON

Products/ByProducts: CARBON

Emissions & Control Devices: PARTICULATES; SCRUBBER

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

THERE WERE NO VISIBLE EMISSIONS.

INSPECTION REPORT FORM - BOILERS

Facility Name: HERCULES, INC. **Date:** 2-21-89

Emission Point No./Name: 240/BOILER NO. 6

Rated Boiler Size: 65 MMBTUH
OR
 lbs steam/hr @ psig

Operating Rate @ Insp: _____ MMBTUH
OR
49,000 lbs steam/hr @ _____ psig

Fuel(s) Being Used:

(X) Natural Gas @ 63.7 MCFH

() Fuel Oil, No. @ Gal/hr

() Coal @ tons/hr; type; % ash; % sulfur

() Woodwaste: () Sawdust @ tons/hr

() Shavings @ tons/hr

() Hogged Fuel @ tons/hr

() Bark @ tons/hr

() Other Fuels, Explain: _____

For Solid Fuels, Describe Fuel Stoking Method: _____

Soot Blowing: () Periodic () Manual
 () Continuous () Automatic

Schedule: NONE

Air Pollution Controls: (X) None () Baghouse
() Cyclone () ESP
() Multiclone
() Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity * % By () VEE () CEM
Sulfur Dioxide N/A lbs/MMBTU by CEM
Nitrogen Oxides N/A lbs/MMBTU by CEM

*THERE WERE NO VISIBLE EMISSIONS.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC.

Date: 2-21-89

Emission Point No./Name: 250/PARA-CYMENE UNIT

Description of Process:

Raw Materials: ROSIN

Processing Operations: DEHYDROGENATION

Products/ByProducts: DEHYDROGENATED DIPENTENE

Emissions & Control Devices: NO PROCESS EMISSIONS (CLOSED SYSTEM)

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

NO VISIBLE EMISSIONS WERE NOTED.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC. Date: 2-21-89

Emission Point No./Name: 270/PARACOL PLANT

Description of Process:

Raw Materials: SEE CONFIDENTIAL ATTACHMENT

Processing Operations: _____

Products/ByProducts: _____

Emissions & Control Devices: NO EMISSIONS (CLOSED SYSTEM)

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

NO VISIBLE EMISSIONS WERE NOTED.

HERCULES, INC. - FORREST COUNTY
2-21-89

The following Emission Points were not in operation:

<u>Emission Point No.</u>	<u>Description</u>
020	Delnav Plant
110	Foral and Staybelite Hydrogenation Plant
130	Pilot Plant
190	Polyrad and Polyol Process Area
200	Para-Menthane Unit
210	Para-Menthane Hydroperoxide Unit
220	Sulfate Turpentine Refining Unit
260	Synthetic Pine Oil Facility

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated Date: September 25, 1987

Emission Point No./Name: 010/Rosin Processing Area

Description of Process:

Raw Materials: Pine stumps, rosin

Processing Operations: (1) Extract rosin from stumps or receive rosin by truck. (2) Process rosin to resin.

Products/By-Products: Resin

Emissions & Control Devices: Oil scrubber for Emission Point 012 and 013; no controls on Emission Point 011.
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

Only Emission Point 013, the oil scrubber serving the Pexite Plant, was in operation. There were no visible emissions.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated

Date: September 25, 1987

Emission Point No./Name: 020/Delnav Plant

Description of Process:

Raw Materials:

Processing Operations: Produce pesticide

Products/By-Products: Delnav

Emissions & Control Devices: H_2S to flare (Emission Point 021); $HC1$ to limestone tanks.

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

There were no visible emissions from the flare.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated Date: September 25, 1987

Emission Point No./Name: 030/Poly-Pale Plant

Description of Process:

Raw Materials: Rosin

Processing Operations: Polymerize rosin with acid catalyst

Products/By-Products: Poly-pale

Emissions & Control Devices: HC - scrubber.
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

There were no visible emissions from either Dowtherm (Emission Point 031 and 032). Emission Point 033 has been split into two vents; there were no visible emissions. Emission Point 034 has been eliminated.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated

Date: September 25, 1987

Emission Point No./Name: 040/Rosin Shed

Description of Process:

Raw Materials: Rosin

Processing Operations: Flake and drum rosin

Products/By-Products: NA

Emissions & Control Devices: Scrubbers on flaking operation
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

No flaking was being done. There were no visible emissions from the drumming operation.

INSPECTION REPORT FORM - BOILERS

Facility Name: Hercules Incorporated

Date: September 25, 1987

Emission Point No./Name: 050/Boiler No. 5

Rated Boiler Size: 156 MMBTUH

OR

 lbs steam/hr @ psig

Operating Rate @ Insp: MMBTUH

OR

82,000 lbs steam/hr @ psig

Fuel(s) Being Used:

☒ Natural Gas @ 95 MCFH

☐ Fuel Oil, No. @ Gal/hr

☐ Coal @ tons/hr; type; % ash;
 % sulfur

☐ Woodwaste: ☐ Sawdust @ tons/hr

☐ Shavings @ tons/hr

☐ Hoggged Fuel @ tons/hr

☐ Bark @ tons/hr

☐ Other Fuels, Explain:

For Solid Fuels, Describe Fuel Stoking Method:

Soot Blowing: ☐ Periodic ☐ Manual
☐ Continuous ☐ Automatic

Schedule: None

Air Pollution Controls: ☒ None ☐ Baghouse
☐ Cyclone ☐ ESP
☐ Multiclone
☐ Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 0 % By ☒ VEE ☐ CEM
Sulfur Dioxide lbs/MMBTU by CEM
Nitrogen Oxides lbs/MMBTU by CEM

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated

Date: September 25, 1987

Emission Point No./Name: 080/Hard Resins

Description of Process:

Raw Materials: Rosin

Processing Operations: Processing

Products/By-Products: Resin

Emissions & Control Devices: HC - scrubber
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

There were no visible emissions from either the Dowtherm (Emission Point 081) or the scrubber (Emission Point 082).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated Date: September 25, 1987

Emission Point No./Name: 090/Continuous Esterification Process Area

Description of Process:

Raw Materials: Rosin

Processing Operations: Esterification

Products/By-Products: Esterified Rosin

Emissions & Control Devices: No controls
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

No visible emissions from Dowtherm (Emission Point 091); steam plume only from Continuous Esterification Unit.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated Date: September 25, 1987

Emission Point No./Name: 100/Hard Resins Flaking House

Description of Process:

Raw Materials: NA

Processing Operations: Flaking belt

Products/By-Products: Flake resin

Emissions & Control Devices: Scrubber and baghouse
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

There were no visible emissions from either the baghouse (Emission Point 101) or the scrubber (Emission Point 102).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated Date: September 25, 1987

Emission Point No./Name: 120/Hydrogen Furnace

Description of Process:

Raw Materials: Natural gas

Processing Operations: Crack natural gas

Products/By-Products: Hydrogen gas

Emissions & Control Devices: CO₂
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated Date: September 25, 1987

Emission Point No./Name: 150/Stills & Dresinate Area

Description of Process:

Raw Materials: Rosin

Processing Operations: Distillation

Products/By-Products: Different cuts of rosin

Emissions & Control Devices: No emissions from process.
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

There were no visible emissions from the Dowtherm (Emission Point 151).

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated Date: September 25, 1987

Emission Point No./Name: 170/Defoamer Plant

Description of Process:

Raw Materials: Rosin

Processing Operations: Mixing

Products/By-Products: Defoamer

Emissions & Control Devices: Particulate - bag filter
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

There were no visible emissions from either Emission Point 171, the Silica Drier Furnace, or Emission Point 172, the Dust Bag.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated Date: September 25, 1987

Emission Point No./Name: 230/Carbon Regeneration Furnace

Description of Process:

Raw Materials: Contaminated carbon

Processing Operations: Regenerate carbon

Products/By-Products: Carbon

Emissions & Control Devices: Particulate - scrubber
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

There were no visible emissions.

INSPECTION REPORT FORM - BOILERS

Facility Name: Hercules Incorporated

Date: September 25, 1987

Emission Point No./Name: 240/Boiler No. 6

Rated Boiler Size: 65 MMBTUH

OR

 lbs steam/hr @ psig

Operating Rate @ Insp: MMBTUH

OR

12,900 lbs steam/hr @ psig

Fuel(s) Being Used:

☒ Natural Gas @ 15 MCFH

☐ Fuel Oil, No. @ Gal/hr

☐ Coal @ tons/hr; type; % ash;
 % sulfur

☐ Woodwaste: ☐ Sawdust @ tons/hr

☐ Shavings @ tons/hr

☐ Hoggged Fuel @ tons/hr

☐ Bark @ tons/hr

☐ Other Fuels, Explain:

For Solid Fuels, Describe Fuel Stoking Method:

Soot Blowing: ☐ Periodic ☐ Manual

☐ Continuous ☐ Automatic

Schedule: None

Air Pollution Controls: ☒ None ☐ Baghouse

☐ Cyclone ☐ ESP

☐ Multiclone

☐ Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 0 % By ☒ VEE ☐ CEM

Sulfur Dioxide lbs/MMBTU by CEM

Nitrogen Oxides lbs/MMBTU by CEM

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated Date: September 25, 1987

Emission Point No./Name: 250/Para-Cymene Unit

Description of Process:

Raw Materials: Rosin

Processing Operations: dehydrogenation

Products/By-Products: dehydrogenated dipentene

Emissions & Control Devices: There are no process emissions
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None

The following Emission Points were not in operation:

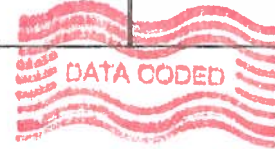
<u>Emission Point No.</u>	<u>Description</u>
060	Vinsol Resins Process
070	Truline Flaking and Packaging Area
110	Foral and Staybelite Hydrogenation Plant
130	Pilot Plant
140	Resin 731 Area
160	Kymene Plant
180	Rosin Amine D Plant
190	Polyrad and Polyol Process Area
200	Para-Menthane Unit
210	Para-Menthane Hydroperoxide Unit
220	Sulfate Turpentine Refining Unit
260	Synthetic Pine Oil Facility
270	Paracol Plant

Mississippi Department of Natural Resources
Bureau of Pollution Control
Visible Emissions Evaluation Record

Plant Name: Hercules Inc
Address: West 7th Street
City: Hattiesburg
Emission Point: Boiler No. 5 (05D)
Date: 9/25/87
Is emission point operation normal? Yes

V. E. Observer: Don Watts
Certification Expiration: 10/87

Set No.	Time		Opacity	
	Start	End	Sum	Average
1	10:33	10:39	0	0

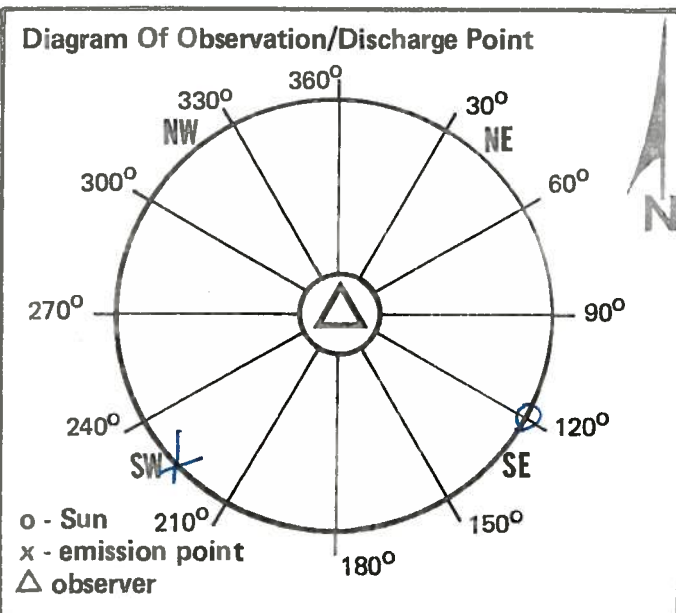


Distance to discharge 30 ft
Height of observation point 0 ft
Height of discharge 50 ft
Plume color -
Plume background sky
Water vapor in plume? NO
Wind direction (from) S-SE
Wind speed 0-5 mph
Ambient temperature 65°F
Discharge temperature 331°F
Sky conditions Clear

Min.	Seconds			
	0	15	30	45
0	0	0	0	0
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks: _____

Received By: C Jordan



Mississippi Department of Natural Resources
Bureau of Pollution Control
Visible Emissions Evaluation Record

Plant Name: Hercules Inc
Address: West 7th St.
City: Hattiesburg
Emission Point: Boiler No. 6 (240)
Date: 9/25/87
Is emission point operation normal? Yes

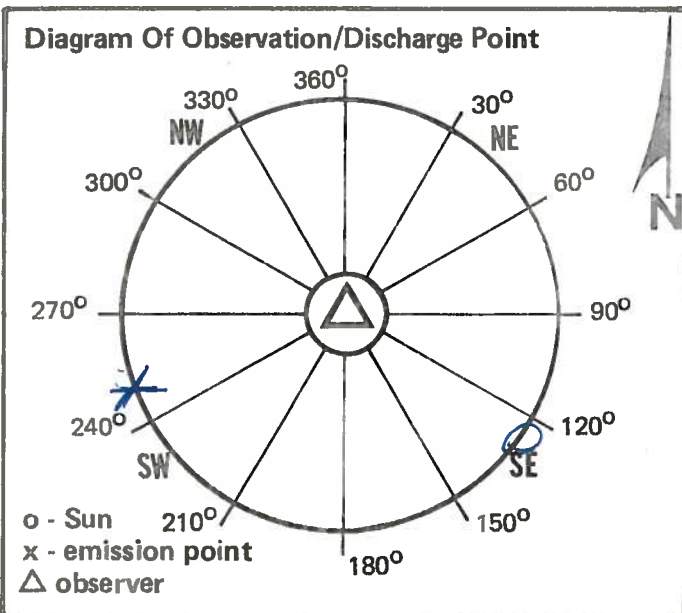
V. E. Observer: Don Watts
Certification Expiration: 10/87

Set No.	Time		Opacity	
	Start	End	Sum	Average
1	10:33	10:39	0	0



Distance to discharge 100 ft
Height of observation point 0 ft
Height of discharge 50 ft
Plume color —
Plume background sky
Water vapor in plume? NO
Wind direction (from) S-SE
Wind speed 0-5 mph
Ambient temperature 65°F
Discharge temperature 429°F
Sky conditions Clear

Min.	Seconds			
	0	15	30	45
0	0	0	0	0
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				



Remarks: _____

Received By: C Jordan

Forest

INSPECTION REPORT FORM - GENERAL

Facility Name: Hercules Incorporated

Date: September 25, 1987

Address: West 7th Street
Hattiesburg, Mississippi 39401

Inspected By: Don Watts

Person Contacted: Charles Jordan

Facility Number: 110-0800-00001

Is Facility Major or Minor: Major

Purpose of Inspection:

<input checked="" type="checkbox"/> Compliance Verification	<input type="checkbox"/> O&M
<input type="checkbox"/> Performance Evaluation	<input type="checkbox"/> VEE
<input type="checkbox"/> Complaint Investigation	<input checked="" type="checkbox"/> Annual
<input type="checkbox"/> Surveillance	<input type="checkbox"/> Follow-Up
<input type="checkbox"/> Other, Explain	



Current Permit Status: Permit to Operate expires April 1, 1990.

Source Description: Pine rosins and resins manufacturing facility

Applicable Regulations:

☒ SIP
☐ PSD
☐ NSPS
☐ NESHAPS

Cite regulation by description or regulatory section number: APC-S-1.

State any permit conditions not being complied with and describe noncompliance:

None.

Forrest

INSPECTION REPORT FORM - GENERAL

Facility Name: HERCULES, INC. Date: 4-24-86

Address: WEST 7TH STREET
HATTIESBURG, MS. 39401

Inspected By: REBECCA COMYNS, DETRICH B. ALLEN *ms*

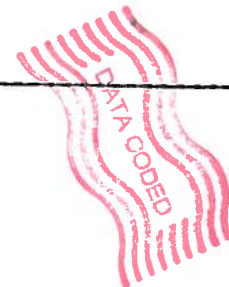
Person Contacted: LARRY POLK

Facility No: 110-0800-00001

Is facility major or minor? MAJOR

Purpose of Inspection:

<input type="checkbox"/> Compliance Verification	<input checked="" type="checkbox"/> O&M
<input type="checkbox"/> Performance Evaluation	<input checked="" type="checkbox"/> VEE
<input type="checkbox"/> Complaint Investigation	<input type="checkbox"/> Annual
<input type="checkbox"/> Surveillance	<input type="checkbox"/> Follow-up
<input type="checkbox"/> Other (Explain): _____	



Current Permit Status: PTO EXPIRES NOVEMBER 1, 1986.

Source Description: PINE RESINS MANUFACTURING FACILITY.

Applicable Regulations:

☐ SIP
☐ PSD
☐ NSPS
☐ NESHAPS

Cite regulation by description or regulatory section number: _____

State any permit conditions not being complied with and describe noncompliance:

MR. POLK STATED THE PLANT WILL BE CONVERTING BOILER #4 TO

NATURAL GAS IN APPROXIMATELY TWO WEEKS.

5/13/86 PHONE CALL FROM C. JORDAN - NO PLANS
TO CONVERT #4 TO GAS; HOWEVER, NEW GAS BOILER
HAS BEGUN OPERATION

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC.

Date: 4-24-86

Emission Point No./Name: _____

Description of Process: _____

Raw Materials: RESINS, ADDITIVES

Processing Operations: HYDROGENATION, STEARIFICATION

Products/ByProducts: RESINS AND PIGMENTS/LIGHT OILS AND RESIDUES.

Emissions & Control Devices: FOUR WOODWASTE BOILERS WITH TWO STACKS.

NO CONTROLS.

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

NONE

INSPECTION REPORT FORM - BOILERS

Facility Name: HERCULES, INC.

Date: 4-24-86

Emission Point No./Name: 009/BOILER #1

Rated Boiler Size: _____ MMBTUH

OR
100,000 lbs steam/hr @ 300 psig

Operating Rate @ Insp: MMBTUH

OR
45,000 lbs steam/hr @ 285 psig

Fuel(s) Being Used: () Natural Gas @ _____ MCFH
 () Fuel Oil, No. _____ @ _____ Gal/hr
 () Coal @ _____ tons/hr; _____ type; _____ %
 ash; _____ % sulfur
 (X) Woodwaste: () Sawdust @ _____ tons/hr
 COMBINED TOTAL: () Shavings @ _____ tons/hr
 7.3 TONS/HR. () Hogged Fuel @ _____ tons/hr
 () Bark @ _____ tons/hr

() Other Fuels, Explain: SCRAP RESIN MIXED IN WITH WOOD FUEL.

For Solid Fuels, Describe Fuel Stoking Method:

Soot Blowing: (X) Periodic () Manual
 () Continuous () Automatic

Schedule:

Air Pollution Controls: (X) None () Baghouse
() Cyclone () ESP
() Multiclone
() Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 21.6 % By (X) VEE () CEM
Sulfur Dioxide N/A lbs/MMBTU by CEM
Nitrogen Oxides N/A lbs/MMBTU by CEM

INSPECTION REPORT FORM - BOILERS

Facility Name: HERCULES, INC.

Date: 4-24-86

Emission Point No./Name: 010/BOILER #4

Rated Boiler Size: MMBTUH

OR
100,000 lbs steam/hr @ psig

Operating Rate @ Insp: MMBTUH

OR
20,000 lbs steam/hr @ 285 psig

Fuel(s) Being Used: ☐ Natural Gas @ MCFH
 ☐ Fuel Oil, No. @ Gal/hr
 ☐ Coal @ tons/hr; type; %
 ash; % sulfur
 ☒ Woodwaste: ☐ Sawdust @ tons/hr
COMBINED TOTAL: ☐ Shavings @ tons/hr
7.3 TONS/HR. ☐ Hogged Fuel @ tons/hr
 ☐ Bark @ tons/hr

☐ Other Fuels, Explain:

For Solid Fuels, Describe Fuel Stoking Method:

Soot Blowing: ☒ Periodic ☐ Manual
 ☐ Continuous ☐ Automatic

Schedule: ONCE/SHIFT, 3 TIMES DAILY

Air Pollution Controls: ☐ None ☐ Baghouse
 ☐ Cyclone ☐ ESP
 ☐ Multiclone
 ☐ Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 5.0 % By ☒ VEE ☐ CEM
 Sulfur Dioxide N/A lbs/MMBTU by CEM
 Nitrogen Oxides N/A lbs/MMBTU by CEM

Forest

INSPECTION REPORT FORM - GENERAL

Facility Name: HERCULES, INC.

Date: 3-31-86

Address: WEST 7TH STREET

HATTIESBURG, MS. 39401

Inspected By: DETRICH B. ALLEN *DBA*

Person Contacted: LARRY POLK

Facility No: 110-0800-00001

Is facility major or minor? MAJOR

Purpose of Inspection:

<input type="checkbox"/> Compliance Verification	<input checked="" type="checkbox"/> O&M
<input type="checkbox"/> Performance Evaluation	<input checked="" type="checkbox"/> VEE
<input type="checkbox"/> Complaint Investigation	<input type="checkbox"/> Annual
<input type="checkbox"/> Surveillance	<input type="checkbox"/> Follow-up
<input type="checkbox"/> Other (Explain): _____	

Current Permit Status: PTO EXPIRES NOVEMBER 1, 1986.

Source Description: PINE RESINS MANUFACTURING FACILITY.

Applicable Regulations:

☐ SIP
☐ PSD
☐ NSPS
☐ NESHAPS

Cite regulation by description or regulatory section number: _____

State any permit conditions not being complied with and describe noncompliance:

NONE

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC.

Date: 3-31-86

Emission Point No./Name: _____

Description of Process:

Raw Materials: RESINS, ADDITIVES

Processing Operations: HYDROGENATION, STEARIFICATION

Products/ByProducts: RESINS AND PIGMENTS/LIGHT OILS AND RESIDUES.

Emissions & Control Devices: FOUR WOODWASTE BOILERS WITH TWO STACKS.

NO CONTROLS.

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

NONE

INSPECTION REPORT FORM - BOILERS

Facility Name: HERCULES, INC.

Date: 3-31-86

Emission Point No./Name: 010/BOILER NO. 4

Rated Boiler Size: MMBTUH

OR

100,000 lbs steam/hr @ _____ psig

Operating Rate @ Insp: MMBTUH

OR

35,000 lbs steam/hr @ 285 psig

Fuel(s) Being Used: () Natural Gas @ _____ MCFH
() Fuel Oil, No. _____ @ _____ Gal/hr
() Coal @ _____ tons/hr; _____ type; _____ %
ash; _____ % sulfur
(X) Woodwaste: () Sawdust @ _____ tons/hr
() Shavings @ _____ tons/hr
COMBINED TOTAL: () Hogged Fuel @ _____ tons/hr
2½ TONS/HR. () Bark @ _____ tons/hr

() Other Fuels, Explain: _____

For Solid Fuels, Describe Fuel Stoking Method: _____

Soot Blowing: (X) Periodic (X) Manual
() Continuous () Automatic

Schedule: ONCE/SHIFT, 3 TIMES DAILY.

Air Pollution Controls: () None () Baghouse
() Cyclone () ESP
() Multiclone
() Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 5.0 % By (X) VEE () CEM
Sulfur Dioxide N/A lbs/MMBTU by CEM
Nitrogen Oxides N/A lbs/MMBTU by CEM

INSPECTION REPORT FORM - BOILERS

Facility Name: HERCULES, INC.

Date: 3-31-86

Emission Point No./Name: 005/BOILER #5

Rated Boiler Size: _____ MMBTUH

OR
100,000 lbs steam/hr @ 300 psig

Operating Rate @ Insp: _____ MMBTUH

OR
31,000 lbs steam/hr @ 285 psig

Fuel(s) Being Used:

(X) Natural Gas @ AVAILABLE MCF/hr

() Fuel Oil, No. _____ @ _____ Gal/hr

() Coal @ _____ tons/hr; _____ type; _____ % ash; _____ % sulfur

() Woodwaste: () Sawdust @ _____ tons/hr

() Shavings @ _____ tons/hr

() Hogged Fuel @ _____ tons/hr

() Bark @ _____ tons/hr

() Other Fuels, Explain:

For Solid Fuels, Describe Fuel Stoking Method:

Soot Blowing: (X) Periodic (X) Manual
 () Continuous () Automatic

Schedule:

Air Pollution Controls: () None () Baghouse
() Cyclone () ESP
() Multiclone
() Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 0 % By () VEE () CEM
Sulfur Dioxide N/A lbs/MMBTU by CEM
Nitrogen Oxides N/A lbs/MMBTU by CEM

**Mississippi Department of Natural Resources
Bureau of Pollution Control
Visible Emissions Evaluation Record**

Plant Name: Hercules, Inc.
 Address: West 7th Street
 City: Hattiesburg, MS. 39401
 Emission Point: North Stack
 Date: 3-31-86
 Is emission point operation normal? yes

V. E. Observer: Detrick B. Allen
 Certification Expiration: April 1986

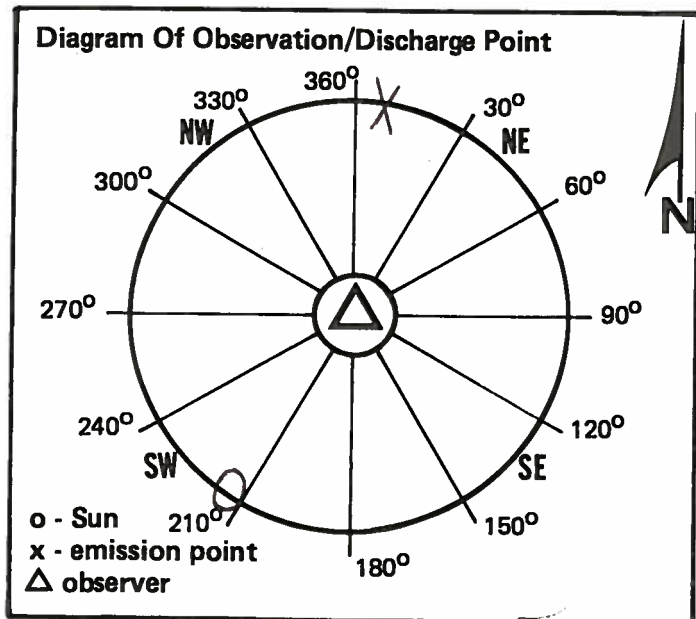
Set No.	Time		Opacity	
	Start	End	Sum	Average
1	1:36	1:42	120	5
2	1:42	1:48	120	5
3	1:48	1:54	120	5

Overall Average: 5%

	Initial	Final
Distance to discharge	<u>500</u>	
Direction to discharge	<u>N</u>	
Height of observation point	<u>0</u>	
Height of discharge	<u>225'</u>	
Plume color	<u>Colorless</u>	
Plume background	<u>SKY</u>	
Water vapor in plume?	<u>No</u>	
Wind direction (from)	<u>SE</u>	
Wind speed	<u>2-5 mph</u>	
Ambient temperature	<u>82°</u>	
Discharge temperature	<u>-</u>	
Sky conditions	<u>p. cloudy</u>	

Min.	Seconds			
	0	15	30	45
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5

Remarks: _____



Received By: P. C. Felt

Don W

INSPECTION REPORT FORM - GENERAL

Facility Name: HERCULES, INC.

Date: 2-18-86

Address: WEST 7TH STREET

HATTIESBURG, MS. 39401

Inspected By: DETRICH B. ALLEN *ml*

Person Contacted: LARRY POLK

Facility No: 110-0800-00001

Is facility major or minor? MAJOR

Purpose of Inspection:

<input type="checkbox"/>	Compliance Verification	<input checked="" type="checkbox"/>	O&M
<input type="checkbox"/>	Performance Evaluation	<input checked="" type="checkbox"/>	VEE
<input type="checkbox"/>	Complaint Investigation	<input type="checkbox"/>	Annual
<input type="checkbox"/>	Surveillance	<input type="checkbox"/>	Follow-up
<input type="checkbox"/>	Other (Explain):		

Current Permit Status: PTO EXPIRES MAY 1, 1986.

Source Description: PINE RESINS MANUFACTURING FACILITY.

Applicable Regulations:

☐ SIP
☐ PSD
☐ NSPS
☐ NESHAPS

Cite regulation by description or regulatory section number:

State any permit conditions not being complied with and describe noncompliance:

NONE, TO MY KNOWLEDGE.

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: HERCULES, INC.

Date: 2-18-86

Emission Point No./Name: _____

Description of Process: _____

Raw Materials: RESINS, ADDITIVES

Processing Operations: HYDROGENATION, STEARIFICATION

Products/ByProducts: RESINS AND PIGMENTS/LIGHT OILS AND RESIDUES

Emissions & Control Devices: FOUR WOODWASTE BOILERS WITH TWO STACKS;

NO CONTROLS.

(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

NONE

INSPECTION REPORT FORM - BOILERS

Facility Name: HERCULES, INC.

Date: 2-18-86

Emission Point No./Name: 010/BOILER NO. 4

Rated Boiler Size: _____ MMBTUH

OR
100,000 lbs steam/hr @ _____ psig

Operating Rate @ Insp: MMBTUH

OR
22,000 lbs steam/hr @ 285 psig

Fuel(s) Being Used:

()	Natural Gas @	_____	MCFH	
()	Fuel Oil, No. _____	@	_____	Gal/hr
()	Coal @	_____	tons/hr;	_____ type; _____%
	ash; _____%	sulfur		
(X)	Woodwaste:	()	Sawdust @	_____ tons/hr
		()	Shavings @	_____ tons/hr
COMBINED TOTAL:		()	Hogged Fuel @	_____ tons/hr
80 TONS/HR.		()	Bark @	_____ tons/hr

() Other Fuels, Explain:

For Solid Fuels, Describe Fuel Storing Method:

Soot Blowing: (X) Periodic (X) Manual
 () Continuous () Automatic

Schedule: ONCE/SHIFT, 3 TIMES DAILY

Air Pollution Controls: () None () Baghouse
() Cyclone () ESP
() Multiclone
() Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 7.6 % By (☒) VEE (☐) CEM
Sulfur Dioxide N/A lbs/MMBTU by CEM
Nitrogen Oxides N/A lbs/MMBTU by CEM

INSPECTION REPORT FORM - BOILERS

Facility Name: HERCULES, INC.

Date: 2-18-86

Emission Point No./Name: 005/BOILER #5

Rated Boiler Size: MMBTUH

OR

100,000 lbs steam/hr @ 300 psig

Operating Rate @ Insp: MMBTUH

OR

42,000lbs steam/hr @ 285 psig

Fuel(s) Being Used:

(X) Natural Gas @ NOT AVAILABLE MCFH

() Fuel Oil, No. @ Gal/hr

() Coal @ _____ tons/hr; _____ type; _____ %

ash; sulfur

() Woodwaste: () Sawdust @ tons/hr

) Shavings @ _____ tons/hr

) Hogged Fuel @ tons/hr

) Bark @ tons/hr

() Other Fuels, Explain:

For Solid Fuels, Describe Fuel Stoking Method:

Soot Blowing: (X) Periodic (X) Manual
 () Continuous () Automatic

Schedule:

Air Pollution Controls: () None () Baghouse

() Cyclone () ESP

() Multiclone

() Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 0 % By () VEE () CEM

Sulfur Dioxide N/A lbs/MMBTU by CEM

Nitrogen Oxides N/A lbs/MMBTU by CEM

INSPECTION REPORT FORM - GENERAL

Facility Name: Hercules Incorporated

Date: January 21, 1986

Address: West 7th Street
Hattiesburg, Mississippi

Inspected By: Don Watts

Person Contacted: Charles Jordan

Facility Number: 110-0800-00001

Is Facility Major or Minor: Major

Purpose of Inspection:

- | | |
|---|------------------------------------|
| <input checked="" type="checkbox"/> Compliance Verification | <input type="checkbox"/> O&M |
| <input checked="" type="checkbox"/> Performance Evaluation | <input type="checkbox"/> VEE |
| <input type="checkbox"/> Complaint Investigation | <input type="checkbox"/> Annual |
| <input type="checkbox"/> Surveillance | <input type="checkbox"/> Follow-Up |
| <input type="checkbox"/> Other, Explain | |

Current Permit Status: PTO expires September 1, 1986. PEP for Emission Point 015 expires January 28, 1986.

Source Description: Resin/Rosin Processing

Applicable Regulations:

- ☒ SIP
- ☐ PSD
- ☐ NSPS
- ☐ NESHAPS

Cite regulation by description or regulatory section number: APC-S-1

State any permit conditions not being complied with and describe noncompliance:
None.

Construction of the new Gas-fired Boiler (Emission Point 037) is almost complete.

DW:els



INSPECTION REPORT FORM - BOILERS

Facility Name: Hercules Incorporated

Date: January 21, 1986

Emission Point No./Name: 010/Boiler No. 4

Rated Boiler Size: MMBTUH

OR

100,000 lbs steam/hr @ psig

Operating Rate @ Insp: MMBTUH

OR

20,000 lbs steam/hr @ psig

Fuel(s) Being Used:

- () Natural Gas @ MCFH
() Fuel Oil, No. @ Gal/hr
() Coal @ tons/hr; type; % ash;
 % sulfur
(X) Woodwaste: () Sawdust @ tons/hr
 () Shavings @ tons/hr
 () Hogged Fuel @ tons/hr
 () Bark @ tons/hr

() Other Fuels, Explain:

For Solid Fuels, Describe Fuel Stoking Method:

Soot Blowing: () Periodic () Manual
 () Continuous () Automatic

Schedule: Grates cleaned once per shift. Cleaning began at 7:30 and is still in progress.

Air Pollution Controls: () None () Baghouse
 () Cyclone () ESP
 (X) Multiclone
 () Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 10.8 % By (X) VEE () CEM
Sulfur Dioxide lbs/MMBTU by CEM
Nitrogen Oxides lbs/MMBTU by CEM

DW:els

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Hercules Incorporated

Date: January 21, 1986

Emission Point No./Name: 015/Hard Resins Area

Description of Process:

Raw Materials: Tall oil rosin adduct, toluene, metal oxides

Processing Operations: Reaction in batch reactor.

Products/By-Products: Metal resinsates

Emissions & Control Devices: Hydrocarbons are controlled by total condensers.
(Complete Appropriate Control Device Sheets)

Permit conditions not being complied with and description of noncompliance:

None.

This process was operating satisfactorily. A PTO will be issued for this
Emission Point as soon as possible.

DW:els