

BLW-NC-1

TURN COMPLETED FORM TO:

Bureau of Land and Water Resources
P.O. Box 10631
Jackson, Mississippi 39209
Telephone (601) 961-6200

For Office Use Only:	
County:	Forrest
Date Received:	1-15-86
Permit No.:	MS-SW00238
Quad Map:	
Water Management Dist:	
Hydrologic River Basin:	

NOTICE OF CLAIM FOR CONTINUED USE OF SURFACE/GROUND WATERS FOR BENEFICIAL USE

Pursuant to the laws of the State of Mississippi, namely §51-3-5 (2) or (3), as amended, I, the landowner, _____

HERCULES INC. (Name) 51-0033450 (S/S or Tax ID No.)
WEST 7TH STREET (Address) HATTIESBURG (City or Town) MS 39401 (State and Zip)
(601) 546 3450 (Telephone Number), do hereby file claim for the continued use of: (circle one)

surface water ground water for the following beneficial use: (circle one or more)

municipal; irrigation; recreation; livestock water; fish culture; Industrial

Other _____ (Specify)

1. Name & Address of agent or applicant if different from landowner.

 (Name) (S/S or Tax ID No.) (Address)

 (City or Town) (State and Zip) (Telephone Number)

2. Location of point of diversion/withdrawal (include location map with claim)

SE 1/4 of SW 1/4 of Section 33 Township 5N Range 13W County Forrest

3. Volume of water diverted/withdrawn:

(1) _____ acre feet per year, diverted/withdrawn at a maximum rate of _____ gallons per minute; or
 (2) 2628 million gallons per ^{Year} ~~day~~, diverted/withdrawn at a maximum rate of 8500 gallons per minute.

4. Description of lands on which water will be used:

(a) Copy legal description of property upon which water is to be used (may be copied word for word from your deed).

Attach separate sheet if necessary Section 4 and 5, Township 4N, Range 13W

(b) Has the above described land any water right or source of water supply other than that herein applied for?

(Water Rights Number(s) _____) Describe the nature and amount of any additional supply _____

THREE (3) LAYNE WELLS - 1000 gpm each

SECTION A (to be completed if source of water is from surface supply)

1. Prior water rights permit/license number 0003, dated August 23, 1957

2. Source of supply is Bowie River which drains into Leaf River
which drains into Pascagoula River

3. Description of diversion works:

(a) Water obtained directly from stream: Bowie River (Name)

Pump Four (4) centrifugal Power Unit 2-150HP AND 2-75HP (Size and type)

Lift 2-180FT AND 2-140FT ft. Maximum capacity 2-2500gpm AND 2-175gpm gpm

(b) Storage reservoir _____ (Name)

Height of dam _____ feet. Surface area at normal pool _____ acre:

Storage capacity at normal pool _____ acre fee



HWJ7C
REPORT DATE 8/13/25

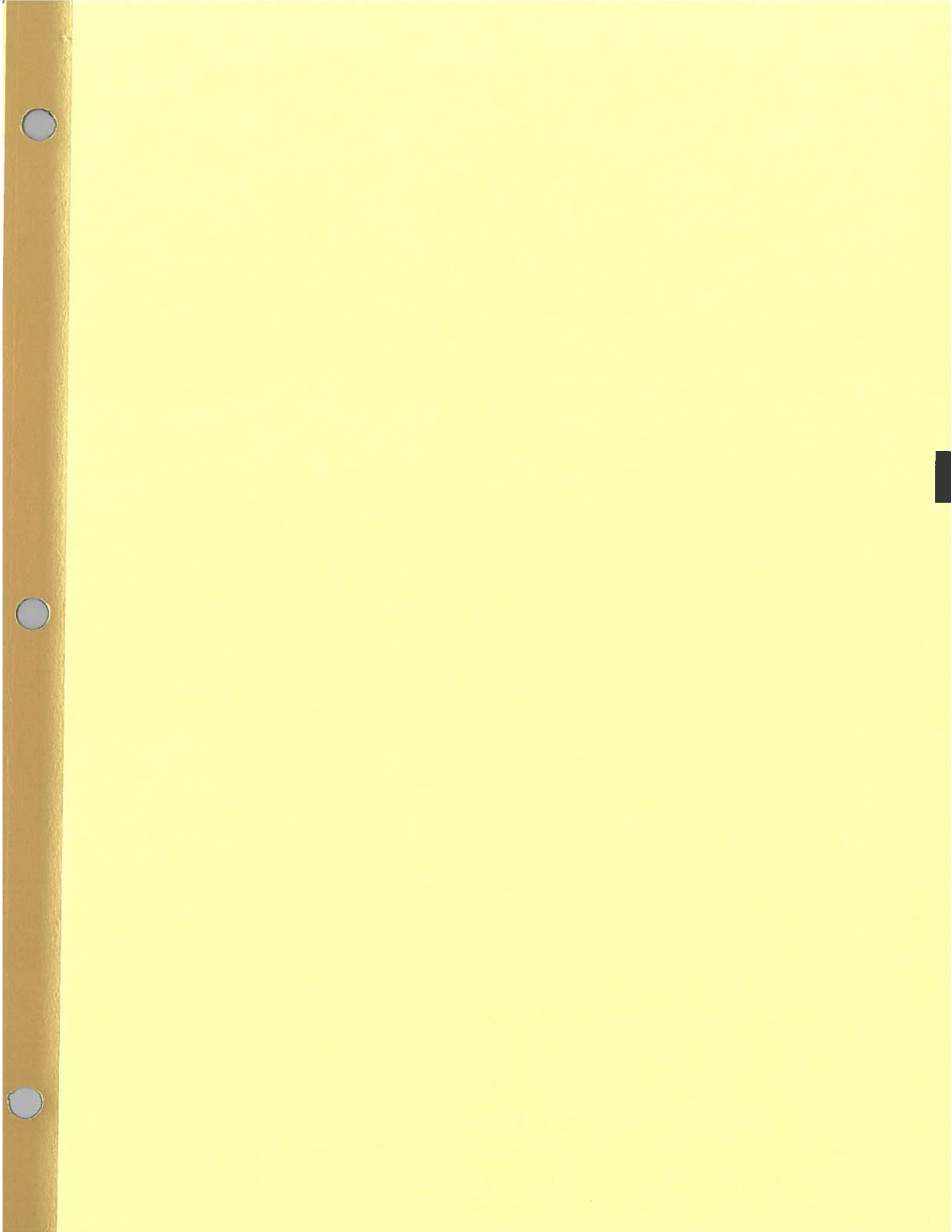
HWJMS LISTING
BY COUNTY

PAGE 24

FACILITY ID CNTY#	COUNTY NAME	FACILITY NAME	NOTIF DATE	MAIL STREET LOC STREET	MAIL CITY LOC CITY	ST MZIP ST LZIP	G T U I C D E R S I N N F N N D C T I N	FACIL: PERMIT IN STATUS	STATUS	DL ID SE
MSD985946589 035	FORREST	ACE BODY SHOP		1153 BOJIE ST. 1153 BOJIE ST.	HATTIESBURG HATTIESBURG	MS 39401 MS 39401	2			
MSD982106700 035	FORREST	B.F. GODDRICH CO.		1301 WEST SEVENTH STREET 1301 WEST SEVENTH STREET	HATTIESBURG HATTIESBURG	MS 39401 MS 39401	1			
MSD981743401 035	FORREST	CAMP SHELBY TRAINING SITE		CAMP SHELBY	CAMP SHELBY	MS 39407	2			
MSD991290560 035	FORREST	CHEVRON USA INC 3047	810116	PO BOX 1706 1400 JERSEY STRLET	ATLANTA HATTIESBURG	GA 30301 MS 39401		00	C303-9	
MSD982770455 035	FORREST	CMC FALK STEEL	890921	P. O. BOX 247 HIGHWAY 61 NORTH BUSINESS	VICKSBURG VICKSBURG	MS 39180 MS 39180	2			
MSD981919731 035	FORREST	COURTESY MOTORS, INC		P. O. BOX 352 1416 WEST PINE STREET	HATTIESBURG HATTIESBURG	MS 39401 MS 39401	2			
MSD912770125 035	FORREST	DDSSSETT PONTIAC	890707	1058 N. PINE	HATTIESBURG	MS 39401	2			
MSD050912799 035	FORREST	DOMEL SCHLUMBERGER INC	800818	ROUTE 2 BOX 514 1232 JAMES STREET	HATTIESBURG HATTIESBURG	MS 39401 MS 39401	X	Y OD	C119-1 C303-1	C1105-6
MSD981931157 035	FORREST	ENTERPRISE PRODUCTS CO.		P. O. BOX 506 HIGHWAY 11 NORTH	PETAL	MS 39465	1			
MSD981480742 035	FORREST	FAULKNER CONCRETE PIPE CU.		P.O. BOX 16987 HIGHWAY 49 NORTH	HATTIESBURG	MS 39404	2			
MSD100653476 035	FORREST	FORREST COUNTY AGR HIGH SCHOOL		P. O. BOX 9 OLD 49 SOUTH	BROOKLYN	MS 39425	2			
MSD094180270 035	FORREST	GEORGIA-PACIFIC CORP	800812	PJUTE 10 BOX 566-A 4911 OLD RAMLS SPRINGS RD	HATTIESBURG HATTIESBURG	MS 39401 MS 39401	2			
MSD008182081 035	FORREST	HERCULES INC	800818	PJ BOX 1937 M 7TH ST	HATTIESBURG HATTIESBURG	MS 39401	1			C1105-6
MSD000833434 035	FORREST	JANNIK SERVICES INCORPORATED	800817	103 REGENCY DRIVE 103 REGENCY DRIVE	HATTIESBURG HATTIESBURG	MS 39401 MS 39401	X			
MSD9862770026 035	FORREST	JERRY'S WRECKER SERVICE PAINT		604 63RD STREET 890626 604 63RD STREET	HATTIESBURG	MS 39401	2			

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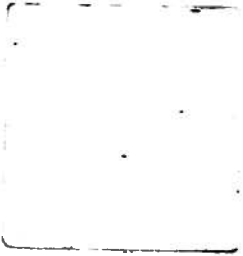




HERCULES POWDER COMPANY
INCORPORATED



HATTIESBURG
PLANT



TOUR NOTES



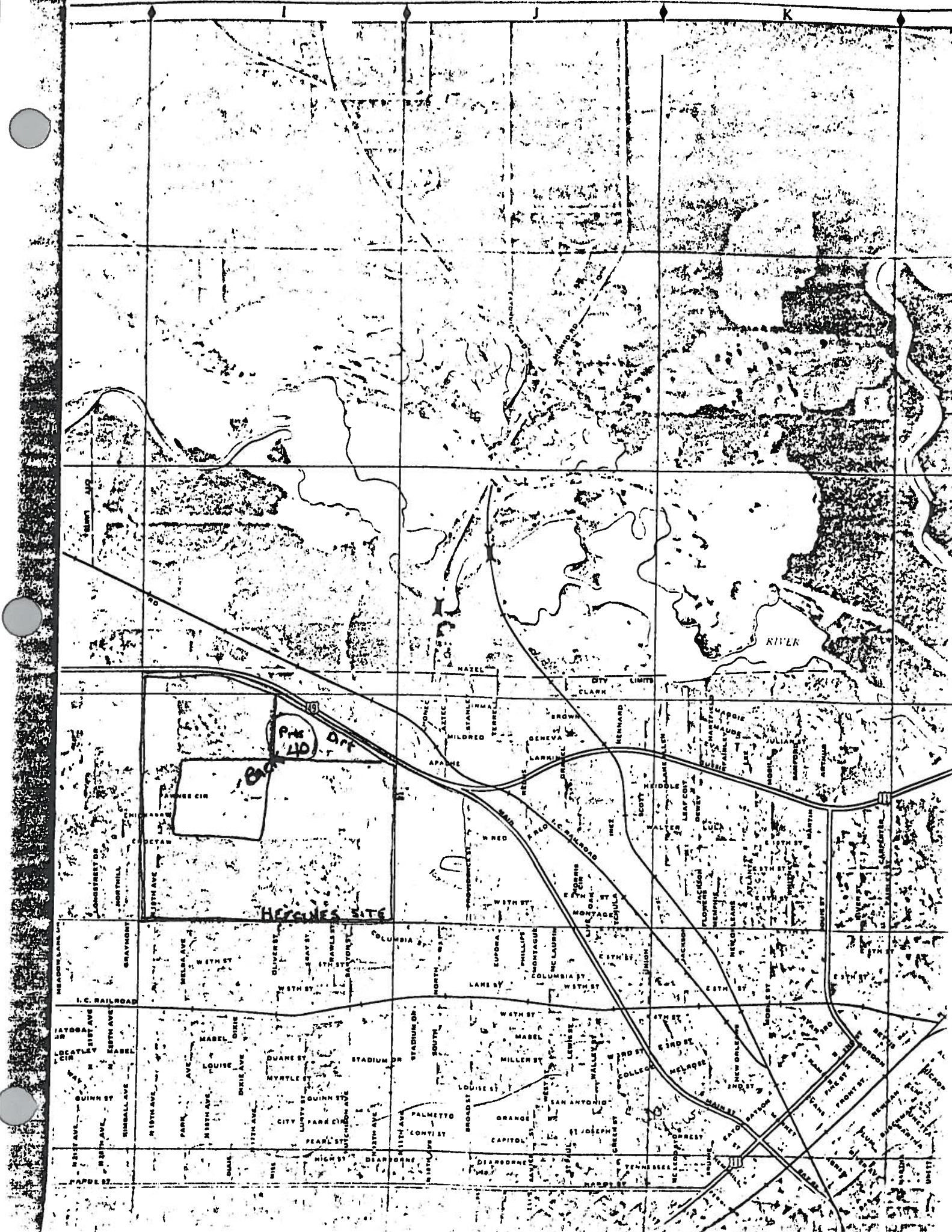
HERCULES INC.

The
HATTIESBURG
PLANT

Welcomes You!

R. H. HELLER
Plant Manager

I N F O R M A T I O N



Pkg 40
DPT

HERCULES PLATE

RIVER

CITY LIMITS

I.C. RAILROAD

I.C. RAILROAD

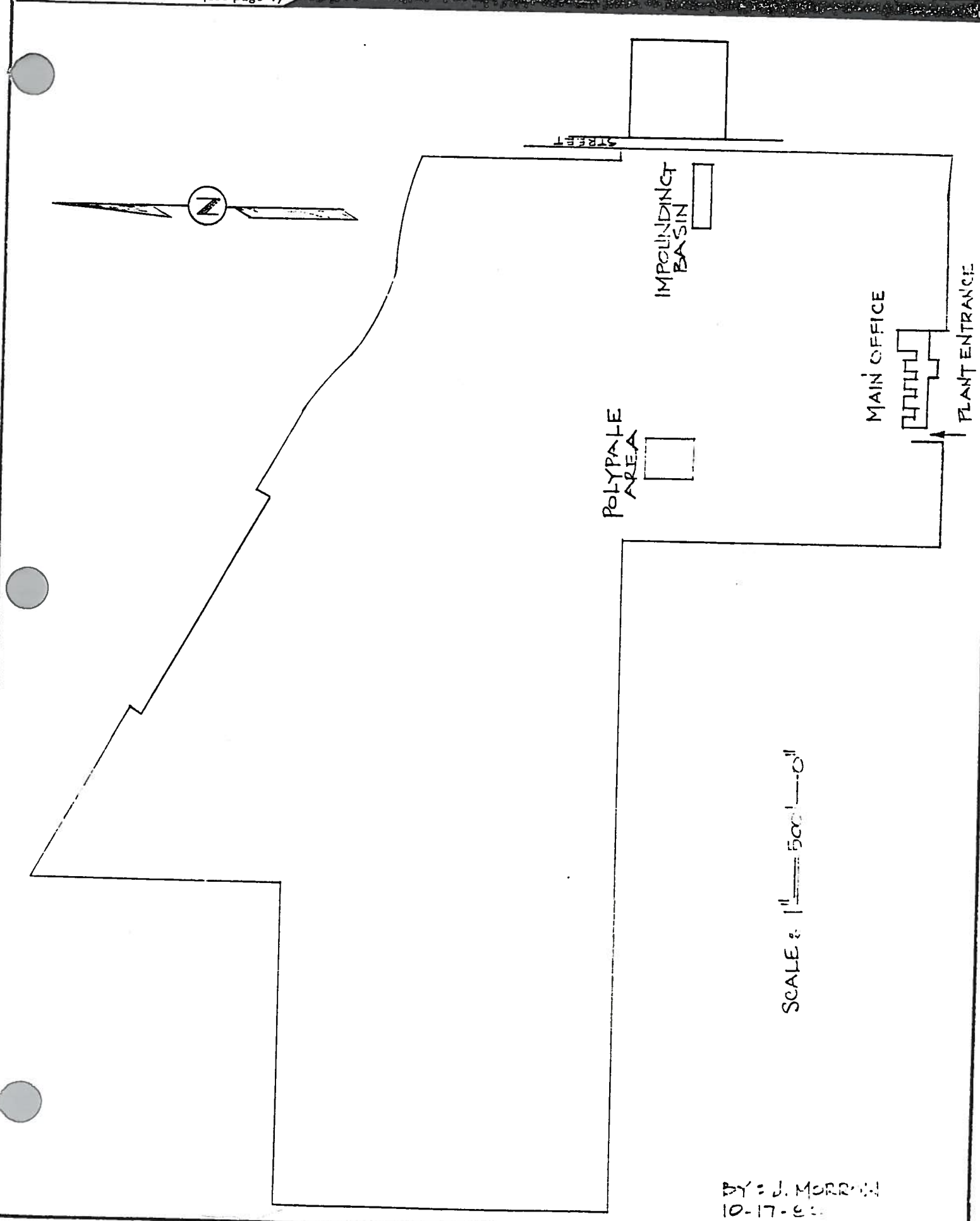
I.C. RAILROAD

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I.C. RAILROAD

V. FACILITY DRAWING (see page 4)



SCALE: 1" = 500' - 0"

BY: J. MORRIS
10-17-80

Data Sheet Report Summary
Mississippi State Department of Health
Division of Water Supply

PWS ID	Name of System	Wells	Connections	Consecutive
0160008	SOUTHSIDE WATER ASSOCIATION	0	40	Y
0160009	SOUTHWEST COVINGTON W/A	2	785	N
0160010	WILLOW GROVE WATER ASSN	2	550	N
0160011	NORTH COVINGTON W/A-SOUTH	1	629	N
** County Code: 17				
0170001	BELMONT WATER ASSOCIATION	2	381	N
0170002	BRIGHT'S WATER ASSOCIATION	2	483	N
0170005	DAYS WATER ASSOCIATION	2	478	N
0170006	EUDORA WATER ASSOCIATION	2	238	N
0170007	CITY OF OLIVE BRANCH-FAIRHAVEN	2	30	N
0170009	TOWN OF HERNANDO	3	1035	N
0170010	HORN LAKE WATER ASSOCIATION	3	769	N
0170011	LEWISBURG WATER ASSOCIATION	2	625	N
0170012	NORTH MS UTILITIES-MAYWOOD	1	200	N
0170013	MINERAL WELLS	3	45	N
0170014	NESBIT WATER ASSOCIATION	2	423	N
0170015	CITY OF OLIVE BRANCH	6	724	N
0170016	PLEASANT HILL WATER ASSN	3	768	N
0170017	PLUM POINT WATER ASSOCIATION	2	468	N
0170018	SOUTHAVEN W/A	5	5723	N
0170019	WALLS WATER ASSOCIATION	1	216	N
0170020	NORTH MS UTILITIES-BUENA VISTA	2	170	N
0170021	COUNTRY MANOR MOBILE HOME PARK	1	55	N
0170022	CITY OF HORN LAKE UTILITY	3	2026	N
0170023	METRO DESOTO UTILITY COMPANY	2	32	N
0170024	DESOTO UTILITY-N HOLLY HILLS	2	213	N
0170025	DESOTO UTILITY-S TWIN LAKES	2	714	N
0170026	SKYLANE MOBILE HOME PARK	2	90	N
0170027	COUNTRY HAVEN MOBILE HOME PARK	1	103	N
0170028	NORTH MS UTILITIES-CHICK BLUFF	2	175	N
0170029	N. MS UTILITIES-LAKE O'HILLS	2	206	N
0170031	MAGNOLIA HILLS MHP	2	80	N
0170032	N MS UTILITIES-BRIDGETOWN	1	161	N
0170033	KOKO REEF WATER CO	2	50	N
0170034	HILLTOP MOBILE HOME PARK	2	38	N
0170035	SMOKEY HOLLOW WATER ASSN	2	40	N
0170043	WALLS WATER ASSN- LAKE FOREST	2	982	N
0170048	CITY OF OLIVE BRANCH-FAIRHAVEN	1	240	N
** County Code: 18				
0180001	BARRONTOWN W/A	3	1016	N
0180003	CARNES WATER ASSOCIATION	2	170	N
0180004	CENTRAL WATER ASSOCIATION	2	325	N
0180005	DIXIE COMMUNITY UTILITY ASSN.	3	882	N
0180006	EASTABUCHIE WATER ASSOCIATION	2	315	N
0180007	GLENDALE UTILITY DISTRICT	2	1090	N
0180008	CITY OF HATTIESBURG	10	14500	N
0180009	MCLAURIN WATER ASSOCIATION	2	165	N

THE MAGIC OF CHEMISTRY

works at Hattiesburg

to pull useful products

out of pine stumps

TRUCKS AND TANK CARS
readily liquid raw
products are ready for
in dozens of inches
fields or widely
from the syn.



The stumps of the long-leaf pine, left in the ground after the trees have been cut down for lumber, contain valuable resins. At its Hattiesburg, Mississippi plant, Hercules extracts turpentine, pine oil, and rosin from these stumps.

The process is complicated, and the manufacturing equipment necessary costs millions of dollars. The chemical knowhow needed to do the job was acquired through Hercules' nearly forty years of experience in the naval stores business.

The operation begins when tractors with big, forklift-like fingers snake through the fields and forests of the South to find these stumps and tear them from the soil. The stumps and their roots, hauled to the plant in trucks and railroad cars, are stacked in huge piles or taken directly to the mill. From a storage pit an overhead crane lifts them on to a conveyor where they are washed and carried to the "hog."

The hog is a big grinder with knives sharp as razors, which slash and cut the stumps and roots — with a noise like thunder — into pieces of wood five to ten inches long. From there the wood goes to the shredder.

Sharp-edged hammers on the rims of wheels, rotating a mile a minute, sliver and chip the wood until it is almost as fine as shredded wheat.

The purpose of this cutting and slashing is to make it easier to remove the resin from the wood. In giant tractor tanks, solvents extract the resin from the chips in much the same way that coffee is brewed. The resulting oily mixture and the chemicals made from it are the lifeblood of the naval stores industry.

The naval stores industry produces chemicals for many of the things we use in our daily lives . . . insecticide; rosin for varnishes and paints, turpentine in the familiar Hercules orange and-black cans, pine oils and chemicals that go into textiles, rubber, paper, adhesives, plastics, and a hundred other uses.

Thousands of Hercules men and women work in this industry, obtaining the chemicals from these resinous stumps. At Hattiesburg and its sister plant at Brunswick, Georgia, 1,800 people are employed, and 500 more work in woods camps around the two plants to supply the hungry hogs and shredders with stumps. A steady stream of stumps comes into Hattiesburg from millions of pine-covered acres in the states of Mississippi, Louisiana, and Alabama.

Hattiesburg operations consist of wood gathering and plant operations. The plant operations can be grouped into three classifications:



MATTESBURG naval stores plant where nearly a thousand Hercules work with millions of dollars worth of equipment. Using the magic of chemistry and the know-how acquired by thirty-five years in the business, they turn Southern pine stumps into valuable products for industry.

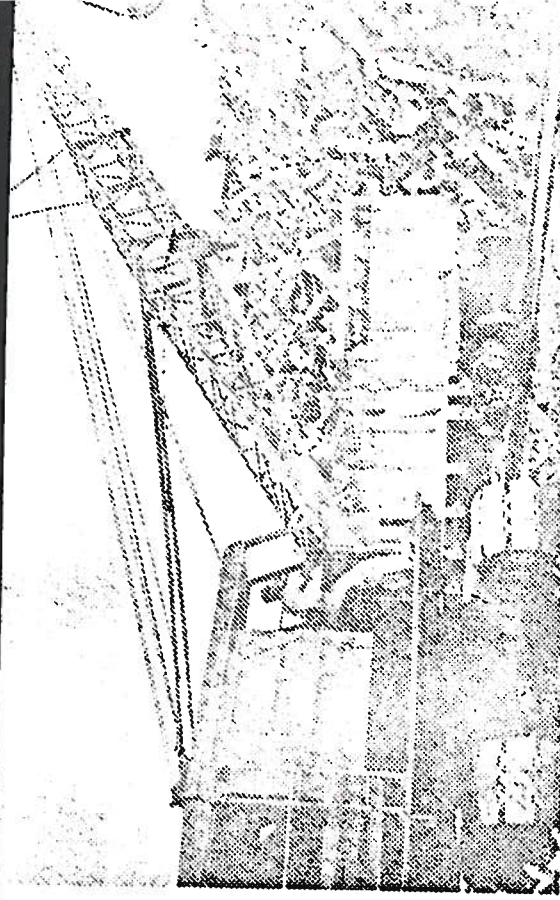
Primary — all operating units required to produce rosin, pine oil, and turpentine. This covers wood grinding, shredding, extraction, refining, and distillation of the crude resin.

Secondary — those units that produce specially products, in most cases using as the main raw material one of the materials produced by the primary operations.

Common facilities — include the office, laboratory, shops, powerhouse, and synthetic pine oil. Dipentene

central loading and packaging facilities, and the railroad.

In secondary operations, rosin is processed into special grades; or it is limed, polymerized, hydrogenated, ammoniated, or esterified into chemicals having special properties for industrial uses. Pine oil is the source of anethole and other chemical materials which must meet rigid quality specifications. Turpentine is processed to yield pinene and synthetic pine oil. Dipentene

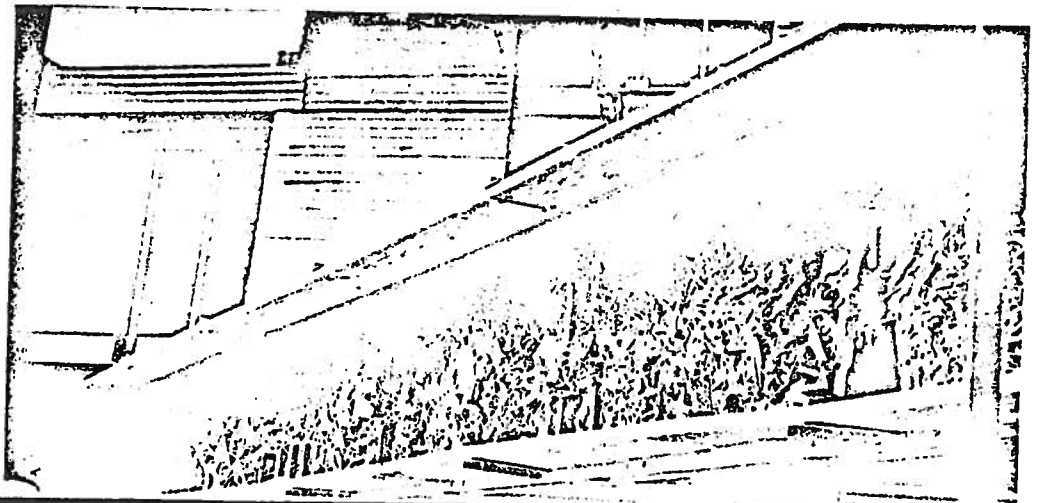


UNLOADING STUMPS from a gondola car to the wood storage pile is the job of this huge crane operated by Barney Sullivan. In addition to the stumps brought in by rail, some 300 tons are trucked in daily. Five days a week, for the plant which operates 24 hours a day and to stock this over-size wood pile, covering about 80 acres and holding three to four months' supply.



THE STUMP PIT contains food for the heaps which are huge revolving Y-shaped spools covered with rows of heavy knives which tear the stumps apart. The pit, about a quarter full in this picture, holds 600 tons of wood. Here an operator, in the little house sitting under the bridge of the crane, picks up a lead to be dropped into the conveyor hopper on its way to the heaps above.

THE HOG has ground up the stumps into pieces about five to ten inches long. Here they are carried on the conveyor to the shredder house to be ground still finer. The shredder, a series of wheels with square-cornered hammers, pound and chip the wood.



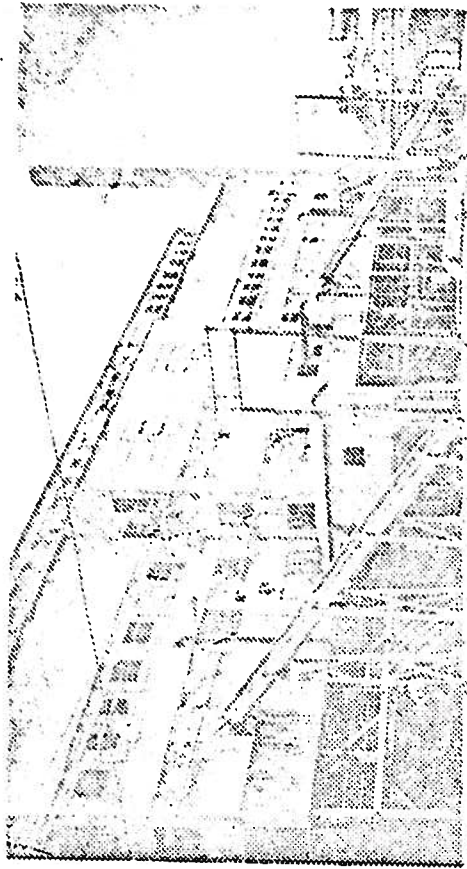
and Solvenol® are processed into para-cymene, para-menthane-hydroperoxide, para-cresol, acetone, and other high-quality products.

The plant operates twenty-four hours a day, with the exception of the railroad, millroom, and Truline® plant, which work sixteen hours a day; the mechanical department and shipping crews work eight hours a day, five days a week.

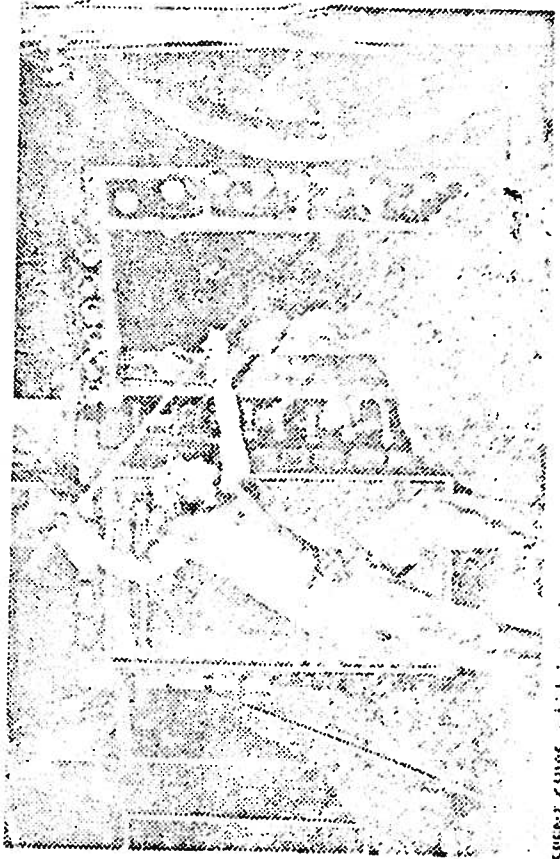
The cutting and slashing of the giant knives of the hogs and the shredders bring forth a stream of chips for the extractors and stills which remove the resins, separate the resins into many different products, and process them for the industries of the world.

The fine chips go from the chip bin to the extractor house by conveyor. Inside this huge building sixteen steel tanks, each about the size of a farm silo, stand in a row. Into the extractors the conveyor belt dumps about half a carload of chips.

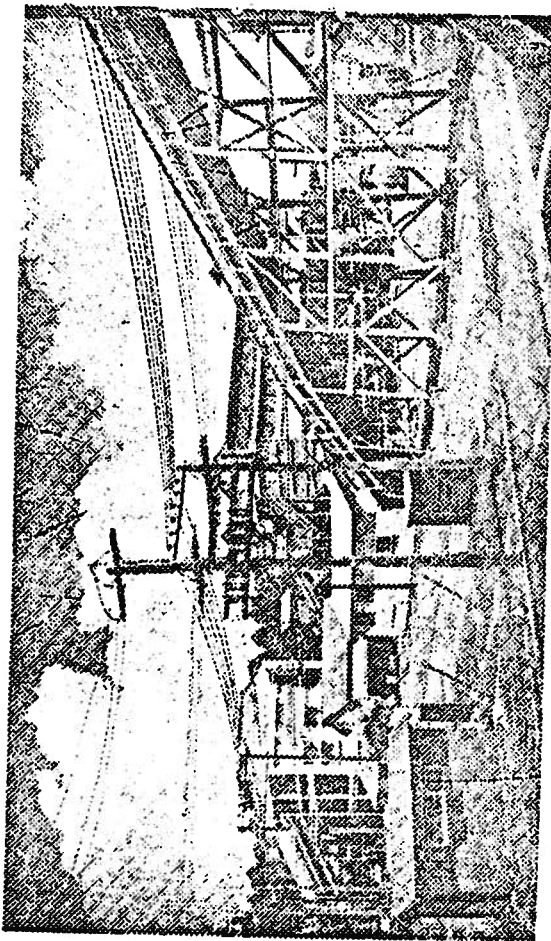
To dissolve the resins, the solvent enters the bottom of the tank and is pumped through the chips — to come off at the top and go on to the bottom of the next tank to repeat the process through ten extractors. The rest of the extractors are needed for solvent recovery, emptying, and refilling. Heat and pressure are used to extract the resin from the chips more thoroughly. The oily mixture of solvent and dissolved resin is drained off to be processed in the refinery. The solvent which remains in the chips is recovered for reuse in the process. Then the spent chips are removed from the extractor



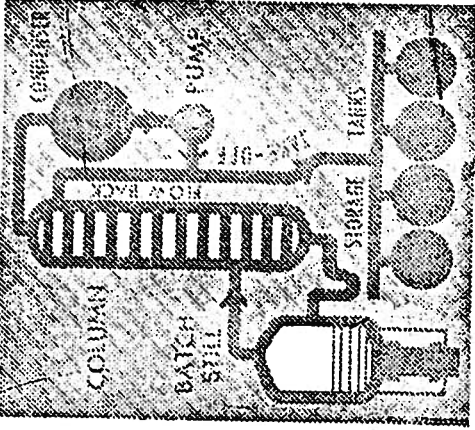
THE EXTRACTOR HOUSE contains a row of sixteen huge steel tanks, called extractors, each about as big as a good size farm silo.



SPENT CHIPS, which have given up their resins in the extracting process, are taken out of the bottom of the extractor to go on their way by conveyor belt to a dustfall and on foot to the plant's boilers. Hugh Moore, on the job here, and his fellow extractor pullers work at top speed like this for about an hour in order to empty the extractor. Then the puller has a well-earned rest period before unbolting the huge door of the next extractor.



LIQUID PRODUCTS



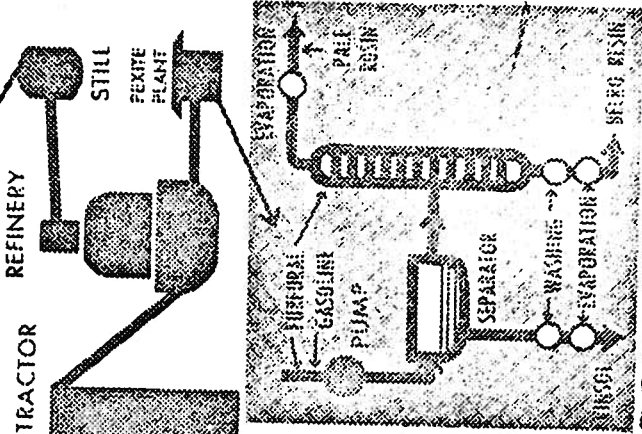
in order to make it ready to repeat the cycle.

In the refinery the solvent content and the turpentine and pine oil are removed by distillation in several evaporators, thus separating them from the crude rosin. This rosin goes to the Pexite plant, where it is refined. The turpentine and pine oil are sent into the stills for further separating ("fractionating" is the term chemists use).

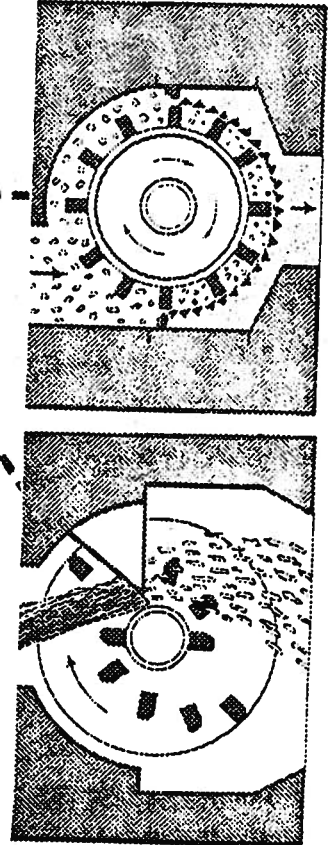
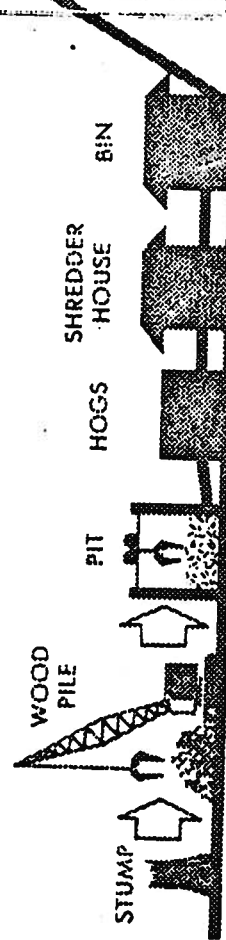
A still is a piece of equipment widely used in chemical operations in which material is placed in a closed tank and heated to boiling. Then the hot vapors that rise are fractionated in a column to obtain a pure vapor, which is condensed into a liquid.

At the Hattiesburg plant and its sister plant at Brunswick, Georgia, are elaborate stills, which are tall towers with an inverted bottle-like tank at the base. The stills fractionate the liquid naval stores products into many different chemical materials, each having properties that fit them to do specific jobs as basic raw materials for industry. The refined liquid naval stores produced in these stills include: turpentine, alpha- and beta-pinene, monocyclic terpenes, pine oil, anethole, and other liquids.

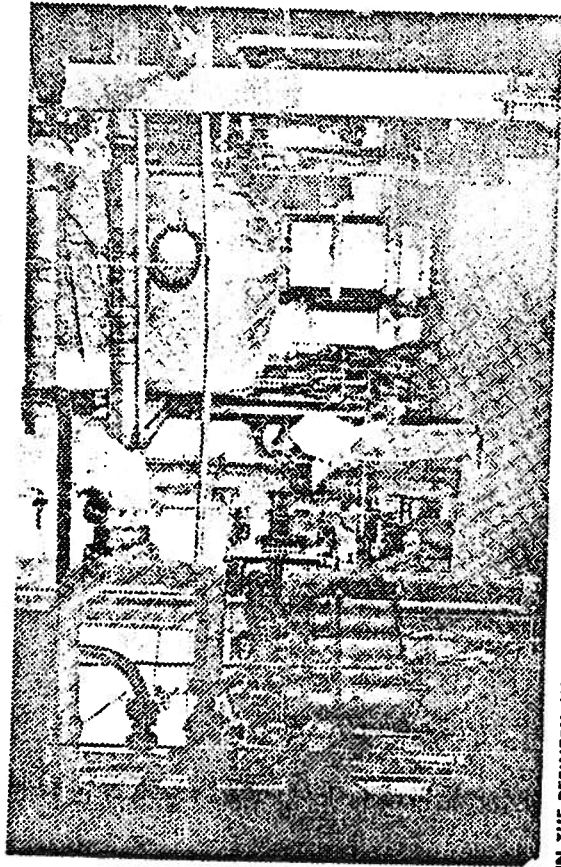
The rosin from the evaporators is refined in the Pexite plant with furfural, a heavy liquid that smells like almonds and is obtained from oat-hulls. The rosin, dissolved in gasoline, is washed with the furfural to remove the dark-colored portions, leaving a pale amber-colored rosin in the gasoline. After recovery of the gasoline,



ROSIN PRODUCTS



HOG SHREDDER



IN THE REFINERY, W. S. Chambliss takes a reading at a distillation unit. Here the solvent and liquid naval stores products, which have been separated from the resin, are fractionated to remove the solvent from the oils. Millions of dollars worth of equipment, know-how acquired by thirty-five years in the business, highly skilled workers, and constant laboratory check on quality and yield have gained Hercules a leading position in the naval stores industry.

the pale rosin is sold in drums and tank cars. Some of it is used in the plant to make other products like Poly-pale,® Stybelite,® and Resin 731.® The dark rosin is used to make Vinsol® and Truline® binder.

Today Hercules' naval stores products are many and varied, tailored to do specific jobs in hundreds of industries. These myriad products have been developed through the years by the ingenuity of chemists from three primary naval stores products — rosin, turpentine, and pine oil, which back in the early twenties were the only products of the industry.

Many skills and many tasks are needed to operate the Hercules naval stores plant.

stores plant at Hattiesburg. Yet this process could not stand by itself, and the operators alone could not make the plant run for long without the help of a large company of men and women who perform the plant services.

The service facilities, such as transportation by railroad and truck, the laboratory, and the office staff are all vital to the efficient operation of the Hattiesburg naval stores plant.

The office performs a variety of services for the plant. All payroll, accounting, purchasing, engineering, stenographic, and personnel work is carried on by eighty-four men and women in this group. They get the orders from our salesmen and pass them on

to the plant so that the right products will be produced in the right quantities to fill our customers' demands.

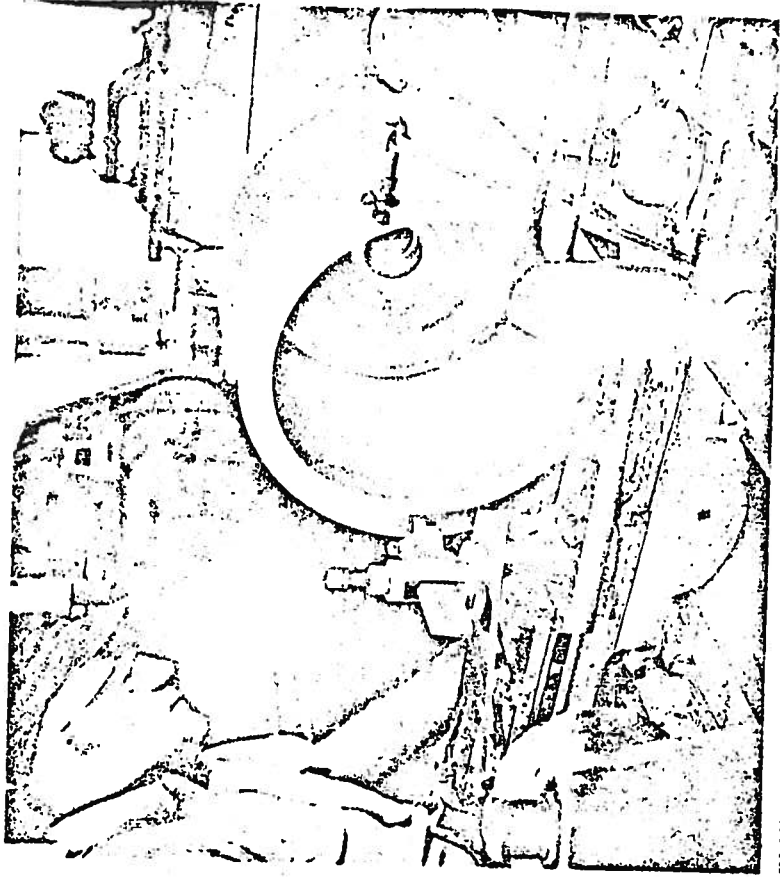
Safety is an important part of this staff's work. A safety committee which meets once a month, a roving safety committee which spots hazardous conditions in the plant and corrects them, and plant foremen who insist on safe methods for their crews all work with the Personnel and Safety Departments located in the plant office.

The machine shop and maintenance

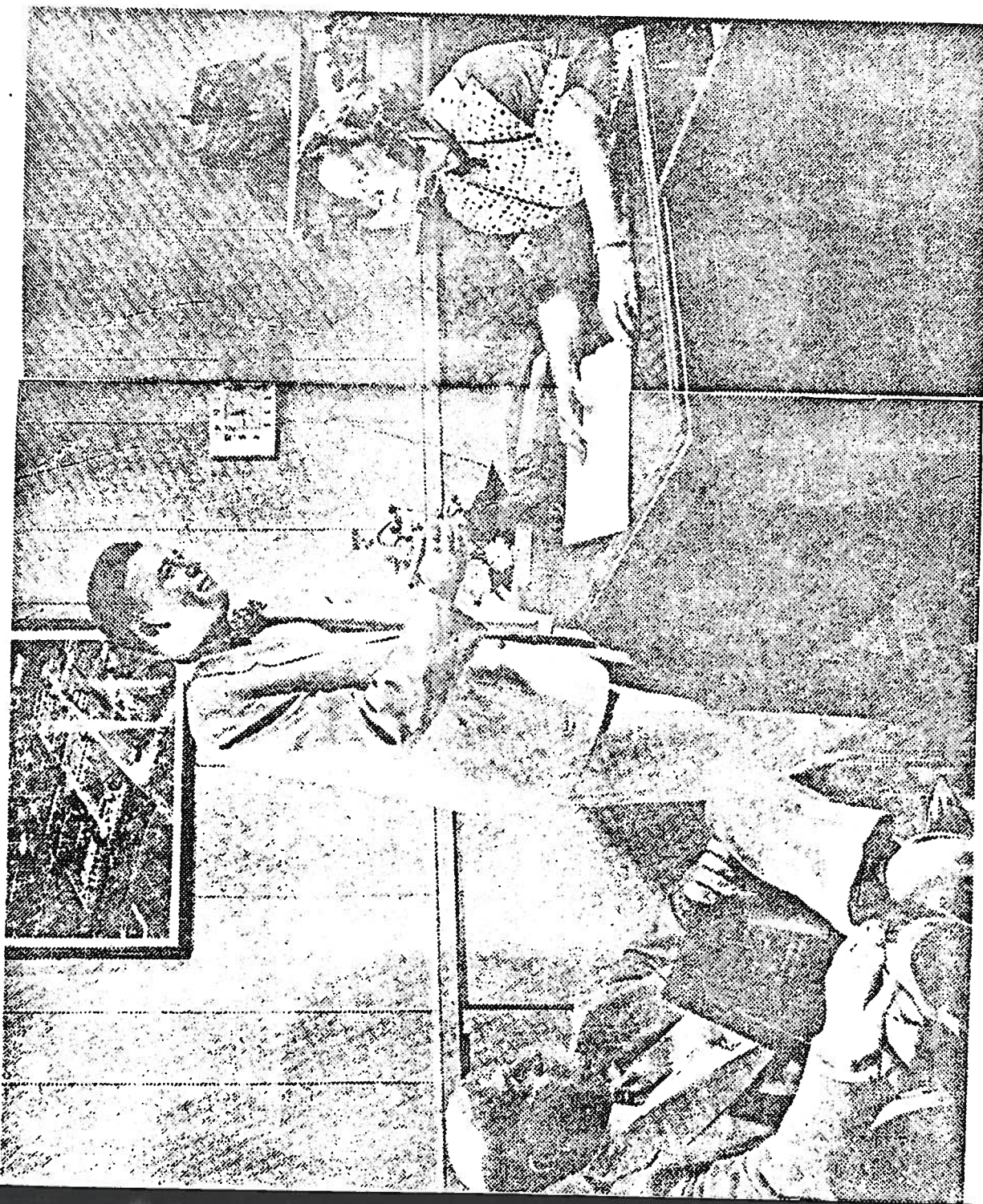
crew are the builders and trouble-shooters of the plant. These 237 men — carpenters, pipefitters, pipe insulators, electricians, painters, welders, foundrymen, and other skilled workers — build and equip new buildings. They either make the equipment that goes inside or install tanks and reactors that we buy to equip the plant.

When something springs a leak or a pump won't work, it is a maintenance man who puts it back in shape again.

Another specialized group that helps



IN THE MACHINE SHOP, Don Blocker faces off the end of a casting for the overhead crane, which lifts the stump wood onto the conveyor to the hog.



to run the plant is the laboratory. These eighty-nine men and women are the "checkers for the operators; they tell the plant men how they are doing. They analyze chemical materials we buy to make sure that they are what we want, and they analyze all finished products to make certain that the quality is up to the standards we guarantee our customers.

Chemical research is carried on to see if better ways of making our products can be found, or if new products can be made from the resins or oils. The three pilot plants at Hattiesburg are run by the laboratory. One is a hydrogenation high pressure plant; another is a pilot plant for Dresinate, operated for the Paper Makers Chemical Department; and a third is kept busy on various sorts of research work.

A small railroad with a diesel locomotive and two smaller engines is used to shift nearly a thousand cars from place to place within the plant every month. Almost as many high-way trucks enter and leave the plant. Cars and trucks haul stump wood into the plant; and finished drums of rosin, turpentine, and other products start out on their way to the customers.

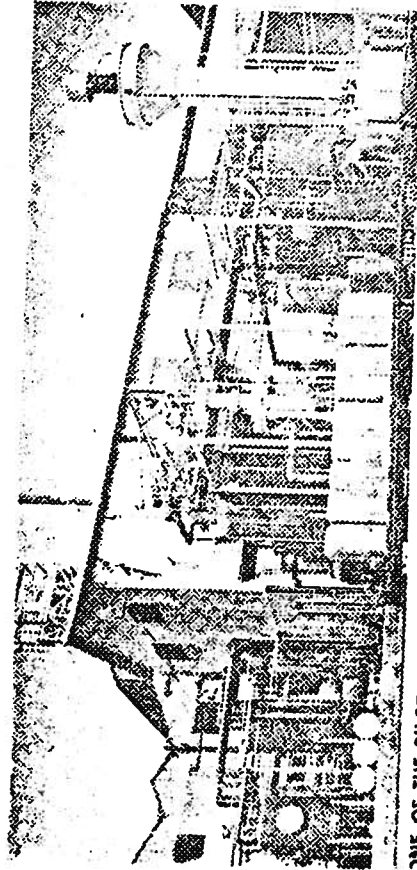
Four of the yard trucks are equipped with two-way radio, so that they can be dispatched to any point and directed about the plant.

The Hercules-Hattiesburg plant is

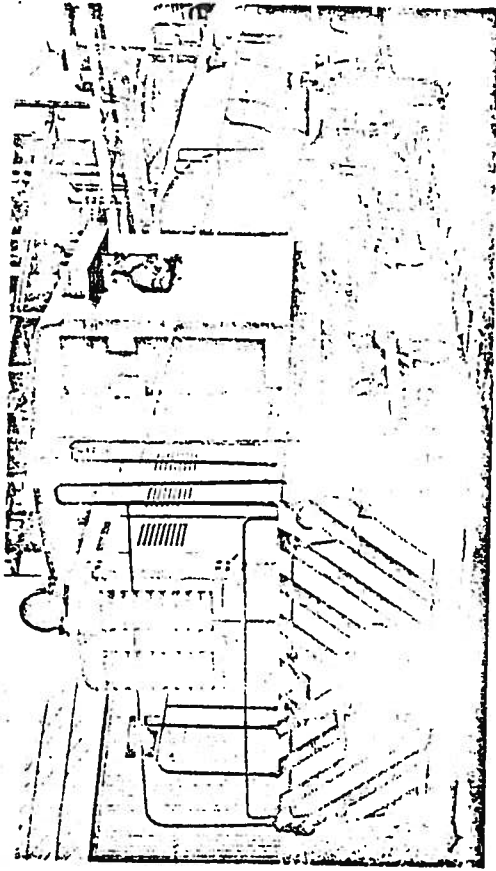
RECEPTIONIST AND TELEPHONE OPERATOR
Mattie J. Odom welcomes plant visitors W. R. Shannon and A. H. Gallagher of the General Electric Company.



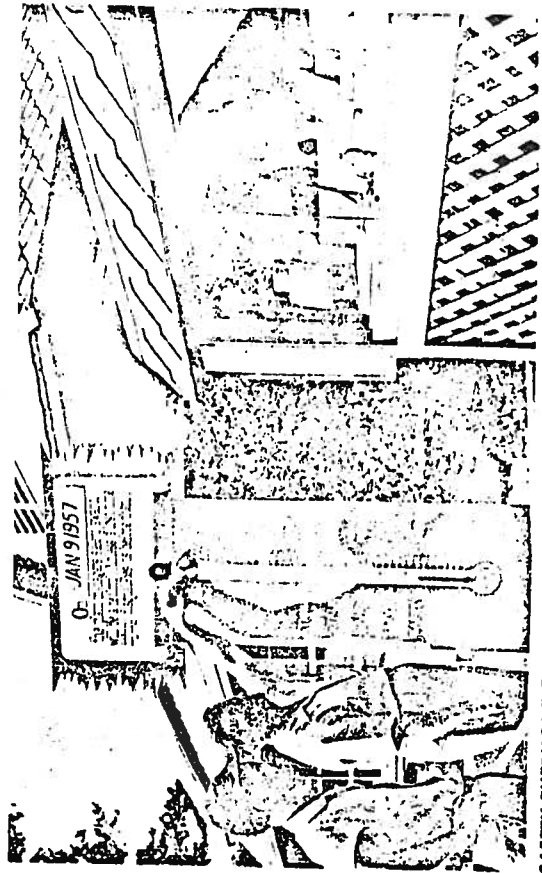
FINISHED PRODUCTS are analyzed in the laboratory. Here Katheryn N. McNease, analyst, uses the thermometer drop method to determine the softening point of rosin. The temperature at which rosin begins to soften is important to users of our products.



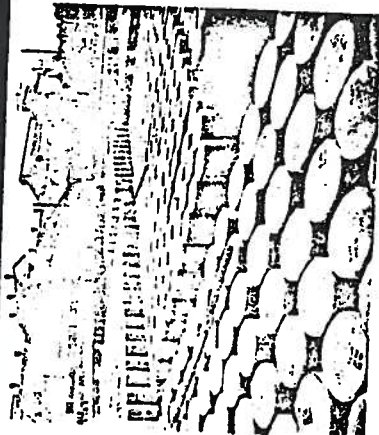
ONE OF THE PILOT PLANTS operated by the Lab to produce PMC rubber chemicals. Charles Walters is shown drawing off a sample of Di-inole.



THE BIGGEST LOCOMOTIVE on the plant's railroad is this diesel. Here, D. H. Widdon, engineer, as he takes out a string of tank cars pauses to talk with Earlie Hudnall, signalman. Two other locomotives are "fireless cookers" — they get a charge of steam from the powerhouse which keeps them running for about a half day.



SAFETY THERMOMETER shows how long the plant has gone without a lost-time accident. Each employe has a choice of plant manager's prizes, shown in the window, after 270 accident-free days. E. L. Summers, safety supervisor, puts some red ink in the thermometer to mark another week without an accident. Lawrence O'Flynn, concrete finisher, looks at the prizes.



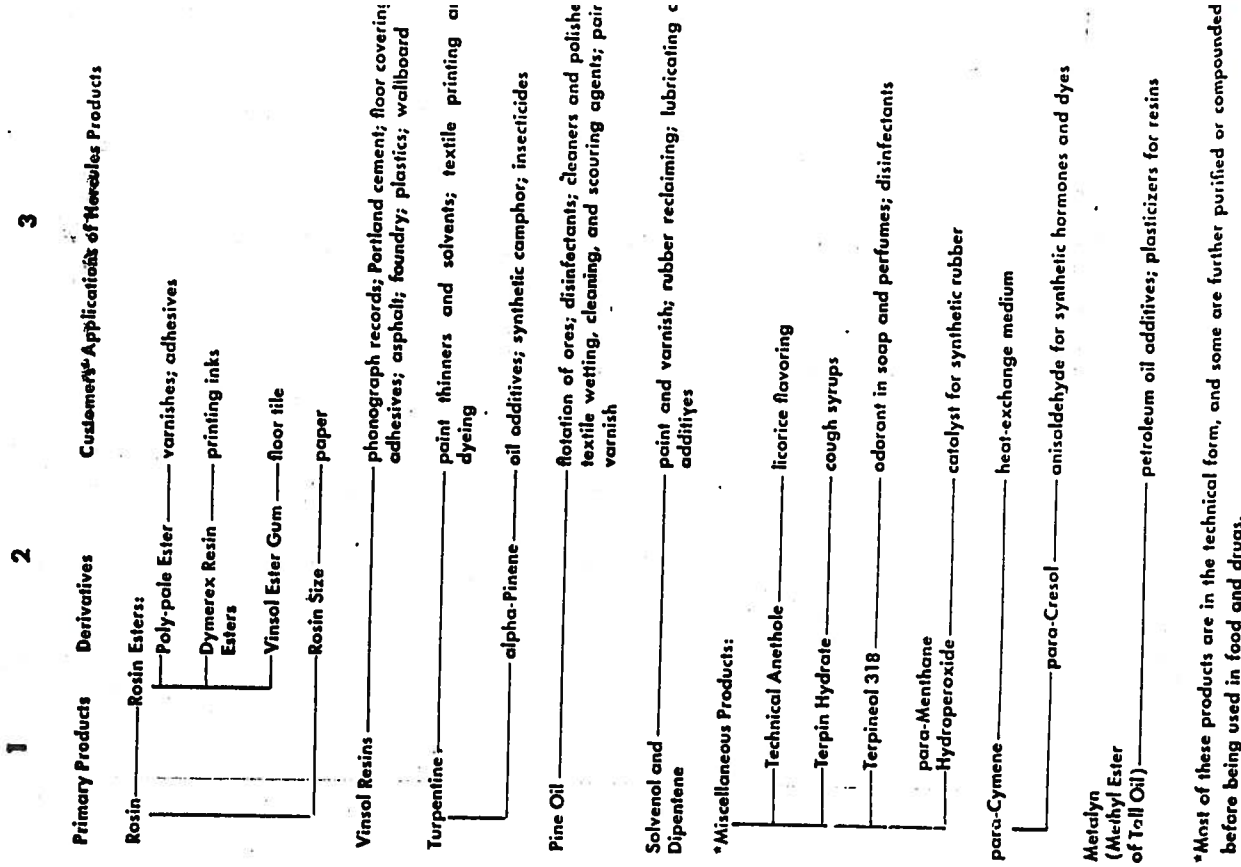
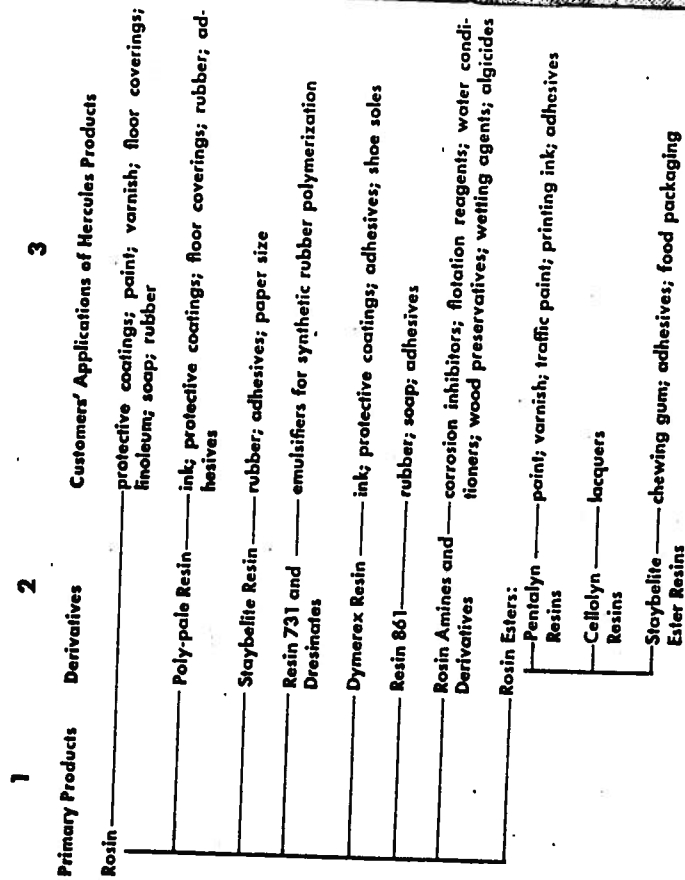
DRUMS OF ROSIN, made by the magic of chemistry from the resins in stump wood, are ready for shipment to naval stores customers in many industries all over the world.

one of the company's two naval stores plants in southeastern United States; its sister plant is located at Brunswick, Georgia. A Paper Makers Chemical Department plant at Savannah, Georgia, produces paper size and other paper chemicals, tall oil rosin, and tall oil fatty acids. At Bessemer, Alabama, Hercules makes dynamite and acid. Sales offices are located in the South at Atlanta, Georgia; Beaumont, Texas; Birmingham, Alabama; Brownsville, Dallas, and Houston, Texas; Greenville, Mississippi; New Orleans, Louisiana; and Raleigh, North Carolina. A map on the back cover shows the location of all Hercules plants and offices in the United States.

STUMPING OPERATIONS carried on throughout the South yield land values as well as naval stores chemicals. This typical field of stumps is of little value for forestry or agriculture. Stump-gathering operations will clear the land, churn the soil, and leave it suitable for crops, cattle grazing, or much more productive second-growth timber.

The products derived from the crude extract obtained from the pine stump flow out into a diverse tree of chemicals almost as wondrous as the pine which once grew where the stump was found. The oily crude extract is separated into the three primary products: rosin, turpentine, and pine oil, plus several miscellaneous chemicals. From these, an array of esters, resins, and other specialized chemicals are produced by the plant to meet more precisely the needs of Hercules customers, most of whom are manufacturers of a wealth of consumer products.

The chart below shows: (1) the primary products coming from the crude extract, (2) the products derived from them by Hercules, and (3) the end uses for which the customer buys our products.



*Most of these products are in the technical form, and some are further purified or compounded before being used in food and drugs.



Fill-in areas are spaced for elite type, i.e., 12 characters/inch.

FORM 1
GENERAL
EPA
U.S. ENVIRONMENTAL PROTECTION AGENCY
GENERAL INFORMATION
Consolidated Permits Program
(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER

1	2	3	4	5	6	7	8	9	10	11	12	13	14
F	M	S	D	0	0	8	1	8	2	0	8	1	

LABEL ITEMS

I. EPA I.D. NUMBER

III. FACILITY NAME

V. FACILITY MAILING ADDRESS

VI. FACILITY LOCATION

MSD008182081

HERCULES INCORPORATED
 PO BOX 1937 1937
 HATTIESBURG, MS 39401

W SEVENTH ST
 HATTIESBURG, MS 39401

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK 'X'			SPECIFIC QUESTIONS	MARK 'X'		
	YES	NO	FORM ATTACHED		YES	NO	FORM ATTACH
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	X			D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		X	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 **SKIP** HERCULES INCORPORATED

IV. FACILITY CONTACT

A. NAME & TITLE (last, first, & title) THOMAS T.E. DEVELOPMENT SUPV.

B. PHONE (area code & no.) 601 545 3450

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX PO BOX 1937

B. CITY OR TOWN HATTIESBURG

C. STATE MS

D. ZIP CODE 39401

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER WEST 7TH STREET

B. COUNTY NAME ORREST

C. CITY OR TOWN HATTIESBURG

D. STATE MS

E. ZIP CODE 39401

F. COUNTY CODE (if known)

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST 2, 8, 6, 1 (specify) Gum and wood chemicals		B. SECOND 7, 2, 8, 2, 1 (specify) Synthetic resins	
C. THIRD 7, 2, 8, 2, 2 (specify) Synthetic rubber		D. FOURTH 7, 2, 8, 7, 9 (specify) Pesticides & Agricultural Chemics	

VIII. OPERATOR INFORMATION

A. NAME HERCULES INCORPORATED		B. Is the name listed item VIII-A also owner? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.) F = FEDERAL M = PUBLIC (other than federal or state) S = STATE O = OTHER (specify) P = PRIVATE P Private		D. PHONE (area code & no.) A 601 545 3450
E. STREET OR P.O. BOX P.O. BOX 1937		

F. CITY OR TOWN HATTIESBURG	G. STATE MS	H. ZIP CODE 39401	IX. INDIAN LAND Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
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X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water) 9 N MS0001830	D. PSD (Air Emissions from Proposed Sources) 9 P N A
B. UIC (Underground Injection of Fluids) 9 U N A	E. OTHER (specify) 9 0800-00001 (specify) Air Permit
C. RCRA (Hazardous Wastes) 9 R N A	E. OTHER (specify) 9 N A (specify) NA

XI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements. (See attached)

XII. NATURE OF BUSINESS (provide a brief description)

Manufacture of wood naval stores products; rosin, turpentine and pine oil. Manufacture modified resins, polyamides, Ketene dimer, wax emulsions, synthetic rubber, and an agricultural pesticide. Also, crude tall oil and pulp mill liquid refining, rosin, fatty acids, and terpene derivatives.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print) D. H. Little Vice President - Production	B. SIGNATURE <i>D. H. Little</i>	C. DATE SIGNED Nov. 18. 1980
---	-------------------------------------	---------------------------------

COMMENTS FOR OFFICIAL USE ONLY

C	
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Please print or type in the unshaded areas only
 (fill-in areas are spaced for elite type, i.e., 12 chara (inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA



U.S. ENVIRONMENTAL PROTECTION AGENCY
HAZARDOUS WASTE PERMIT APPLICATION
 Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

F M S D 0 0 8 1 8 2 0 8 1

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)
23	24 - 29

COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION (place an "X" below and provide the appropriate date)

1. EXISTING FACILITY (See instructions for definition of "existing" facility. Complete item below.)

2. NEW FACILITY (Complete item below.)

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED (use the boxes to the left)

FOR NEW FACILITIES PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

B. REVISED APPLICATION (place an "X" below and complete Item I above)

1. FACILITY HAS INTERIM STATUS

2. FACILITY HAS A RCRA PERMIT

III. PROCESSES - CODES AND DESIGN CAPACITIES

A. PROCESS CODE - Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process (including its design capacity) in the space provided on the form (Item III-C).

B. PROCESS DESIGN CAPACITY - For each code entered in column A enter the capacity of the process.

1. AMOUNT - Enter the amount.

2. UNIT OF MEASURE - For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PRO-CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS	PRO-CESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:			Treatment:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS	TANK	T01	GALLONS PER DAY OR LITERS PER DAY
TANK	S02	GALLONS OR LITERS	SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS	INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS	OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY
Disposal:					
INJECTION WELL	D79	GALLONS OR LITERS			
LANDFILL	D80	ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER			
LAND APPLICATION	D81	ACRES OR HECTARES			
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY			
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS			
		UNIT OF MEASURE CODE			UNIT OF MEASURE CODE
GALLONS	G	LITERS PER DAY	ACRE-FEET	A	
LITERS	L	TONS PER HOUR	HECTARE-METER	F	
CUBIC YARDS	Y	METRIC TONS PER HOUR	ACRES	B	
CUBIC METERS	C	GALLONS PER HOUR	HECTARES	Q	
GALLONS PER DAY	U	LITERS PER HOUR			

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY	LINE NUMBER	A. PRO-CESS CODE (from list above)	B. PROCESS DESIGN CAPACITY		FOR OFFICIAL USE ONLY
		1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)				1. AMOUNT	2. UNIT OF MEASURE (enter code)	
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	T 0 2	5,900	U		7				
2	S 0 2	28,000	G		8				
3					9				
4					10				

continued from the front.

I. PROCESSES (continued)

SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

T02 - The plant neutralizes ~~5,000~~ gals./day of waste H₂SO₄ from the rosin polymerization operation.

5900

should be design capacity

DESCRIPTION OF HAZARDOUS WASTES

EPA HAZARDOUS WASTE NUMBER - Enter the four-digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four-digit number(s) from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

ESTIMATED ANNUAL QUANTITY - For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.

UNIT OF MEASURE - For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

<u>ENGLISH UNIT OF MEASURE</u>	<u>CODE</u>	<u>METRIC UNIT OF MEASURE</u>	<u>CODE</u>
POUNDS.....	P	KILOGRAMS.....	K
TONS.....	T	METRIC TONS.....	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non-listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
- Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

SAMPLE FOR COMPLETING ITEM IV (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES	
				1. PROCESS CODES (enter)	2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	K054	900	P	T03D80	
2	D002	400	P	T03D80	
3	D001	100	P	T03D80	
4	D002				included with above

EPA I.D. NUMBER (enter from page 1)													FOR OFFICIAL USE ONLY											
M	S	D	0	0	8	1	8	2	0	8	1	1	1	2	3	4	5	6	7	8	9	10	11	12
													W	DUP					13	14	15	16	17	18
													1	2	3	4	5	6	7	8	9	10	11	12

DESCRIPTION OF HAZARDOUS WASTES (continued)

NO.	EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES																							
				1. PROCESS CODES (enter)				2. PROCESS DESCRIPTION (if a code is not entered in D(1))																			
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	D	0	0	2	3,500	T	S	0	2	T	0	2															
				</																							

IV. DESCRIPTION OF HAZARDOUS WASTE. *continued*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. (enter from page 1)															
5	F	M	S	D	0	0	8	1	8	2	0	8	1	T/A	C
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail).

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)						LONGITUDE (degrees, minutes, & seconds)							
45	46	47	48	49	50	72	73	74	75	76	77	78	79
8	9	1	8	3	0	3	1	2	0	3	0		

VIII. FACILITY OWNER

A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER						2. PHONE NO. (area code & no.)					
3. STREET OR P.O. BOX						4. CITY OR TOWN					
5. ST.						6. ZIP CODE					

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

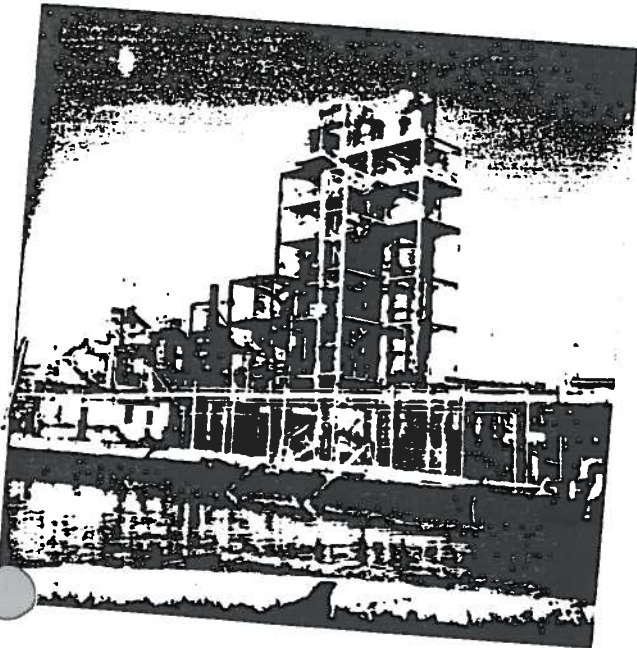
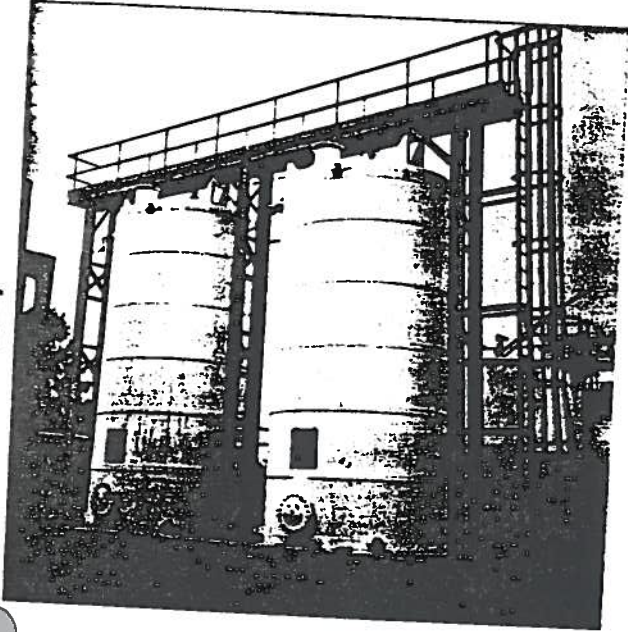
A. NAME (print or type) D. H. Little Vice President - Production	B. SIGNATURE <i>D. H. Little</i>	C. DATE SIGNED Nov. 18, 1980
--	-------------------------------------	---------------------------------

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type) D. H. Little Vice President - Production	B. SIGNATURE <i>D. H. Little</i>	C. DATE SIGNED Nov. 18, 1980
--	-------------------------------------	---------------------------------

MSD008182081





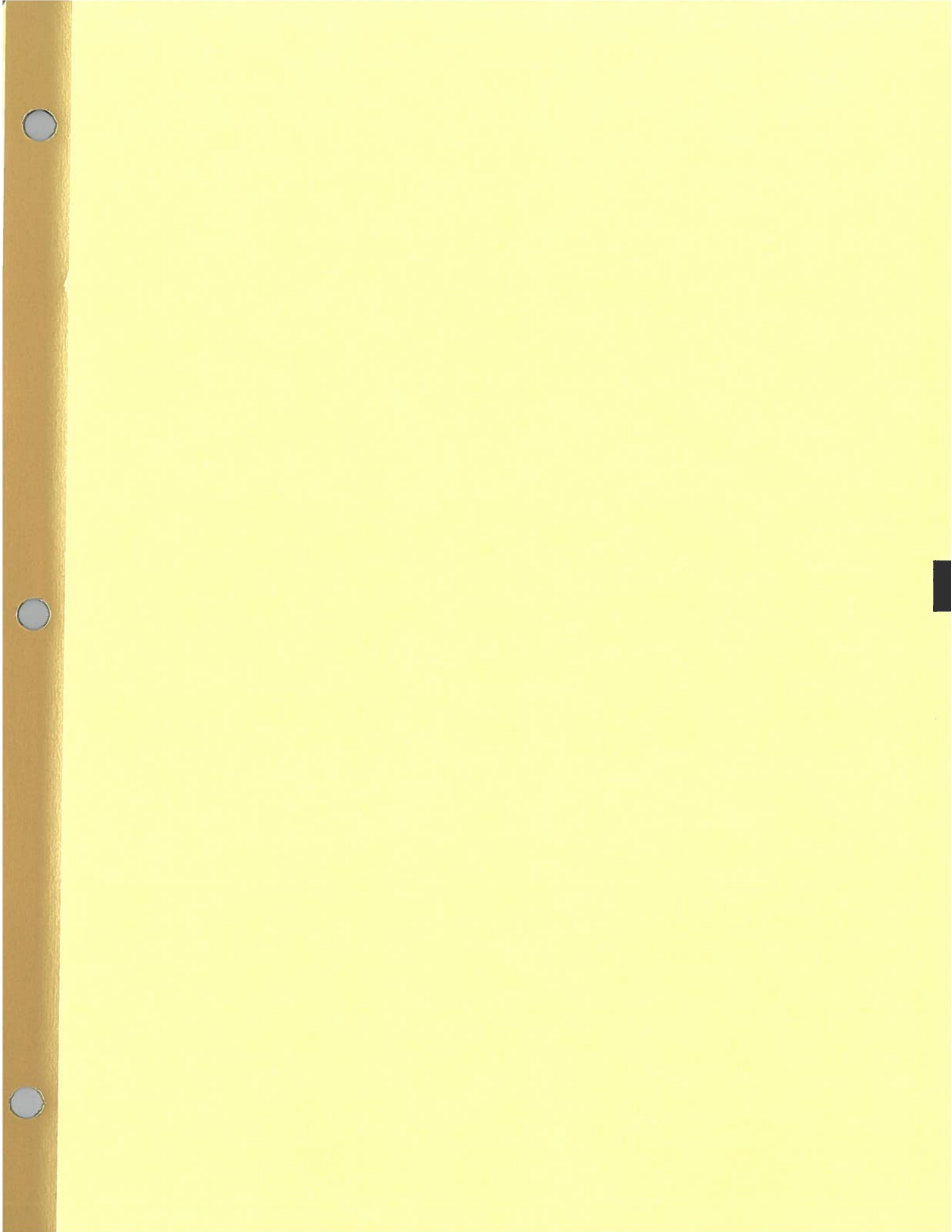
HAZARD RANKING SYSTEM

DATA COLLECTION
AND DOCUMENTATION
TECHNIQUES FOR HRS SCORING C
HAZARDOUS WASTE SITES

DECEMBER, 1988

Prepared by
Cooperation
Superfund Division

In Cooperation With
U.S. Environmental Protection Agency
Investigations and Compliance
Region IV



~~Charles D. Stone~~

John H. ...

U.S. Fish and Wildlife Service
Vicksburg Office

SPECIES LIST BY COUNTY

- E - Endangered Species
- T - Threatened Species
- P - Proposed Species
- C - Candidate Species
- CA - Conservation Agreement
- CH - Critical Habitat

RECEIVED
APR 28 1989
Dept. of Natural Resources
Bureau of Pollution Control

MISSISSIPPI

Amite E - Red-cockaded woodpecker (Picoides borealis)

Bolivar E - Pondberry

Claiborne T - Bayou darter (Etheostoma rubrum)

Clark C - Yellowblotched sawback - Graptemys flavimaculata

Copiah T - Bayou darter (Etheostoma rubrum)
T - Ringed sawback turtle (Graptemys oculifera)

Covington T - Gopher tortoise (Gopherus polyphemus)

Forrest E - Red-cockaded woodpecker (Picoides borealis)
T - Gopher tortoise (Gopherus polyphemus)
C - Yellowblotched sawback - Graptemys flavimaculata

Franklin E - Red-cockaded woodpecker (Picoides borealis)

George E - Red-cockaded woodpecker (Picoides borealis)
T - Gopher tortoise (Gopherus polyphemus)
C - Maureen's symnocthebius minute moss beetle
C - Yellowblotched sawback - Graptemys flavimaculata

Greene E - Red-cockaded woodpecker (Picoides borealis)
T - Gopher tortoise (Gopherus polyphemus)
C - Yellowblotched sawback - Graptemys flavimaculata

Hancock E - Brown pelican (Pelecanus occidentalis)
T - Gopher tortoise (Gopherus polyphemus)

Harrison E - Red-cockaded woodpecker (Picoides borealis)
E - Bald eagle (Haliaeetus leucocephalus)
E - Eastern indigo snake (Drymarchon corais couperi)
E - Brown pelican (Pelecanus occidentalis)
T - Gopher tortoise (Gopherus polyphemus)

Hinds T - Bayou darter (Etheostoma rubrum)
T - Ringed sawback turtle (Graptemys oculifera)

Itawamba E - Curtus' mussel (Pleurobema curtum)
E - Penitent shell mussel (Epioblasma penita)
E - Judge Tait's mussel (Pleurobema taitianum)
C - Southern clubshell Pleurobema decisum

Jackson E - Brown pelican (Pelecanus occidentalis)
E - Red-cockaded woodpecker (Picoides borealis)
E - Mississippi sandhill crane (CH) (Grus canadensis pulla)
T - Gopher tortoise (Gopherus polyphemus)
C - Yellowblotched sawback - Graptemys flavimaculata

Jasper E - Red-cockaded woodpecker (Picoides borealis)

Jones E - Red-cockaded woodpecker (Picoides borealis)
T - Gopher tortoise (Gopherus polyphemus)
C - Yellowblotched sawback - Graptemys flavimaculata

Lawrence T - Ringed sawback turtle (Graptemys oculifera)

Lamar T - Gopher tortoise (Gopherus polyphemus)

Leake T - Ringed sawback turtle (Graptemys oculifera)

Lowndes E - Judge Tait's mussel (Pleurobema taitianum)
E - Penitent shell mussel (Pleurobema penita)

Madison T - Ringed sawback turtle (Graptemys oculifera)

Marion T - Ringed sawback turtle (Graptemys oculifera)
T - Gopher tortoise (Gopherus polyphemus)

Monroe E - Curtus' mussel (Pleurobema curtum)
E - Penitent shell mussel (Epioblasma penita)
E - Judge Tait's mussel (Pleurobema taitianum)
C - Southern clubshell Pleurobema decisum

Neshoba T - Ringed sawback turtle (Graptemys oculifera)

Noxubee E - Red-cockaded woodpecker (Picoides borealis)

Oktibbeha E - Red-cockaded woodpecker (Picoides borealis)

Pearl River T - Ringed sawback turtle (Graptemys oculifera)
T - Gopher tortoise (Gopherus polyphemus)

Perry E - Red-cockaded woodpecker (Picoides borealis)
T - Gopher tortoise (Gopherus polyphemus)
C - Yellowblotched sawback - Graptemys flavimaculata

Rankin T - Ringed sawback turtle (Graptemys oculifera)

Scott E - Red-cockaded woodpecker (Picoides borealis)
T - Ringed sawback turtle (Graptemys oculifera)

Simpson T - Ringed sawback turtle (Graptemys oculifera)

Smith E - Red-cockaded woodpecker (Picoides borealis)

Stone E - Red-cockaded woodpecker (Picoides borealis)
E - Eastern indigo snake (Drymarchon corais couperi)
T - Gopher tortoise (Gopherus polyphemus)

Sharkey E - Pondberry (Lindera melissifolia)

Sunflower E - Pondberry (Lindera melissifolia)

Wayne

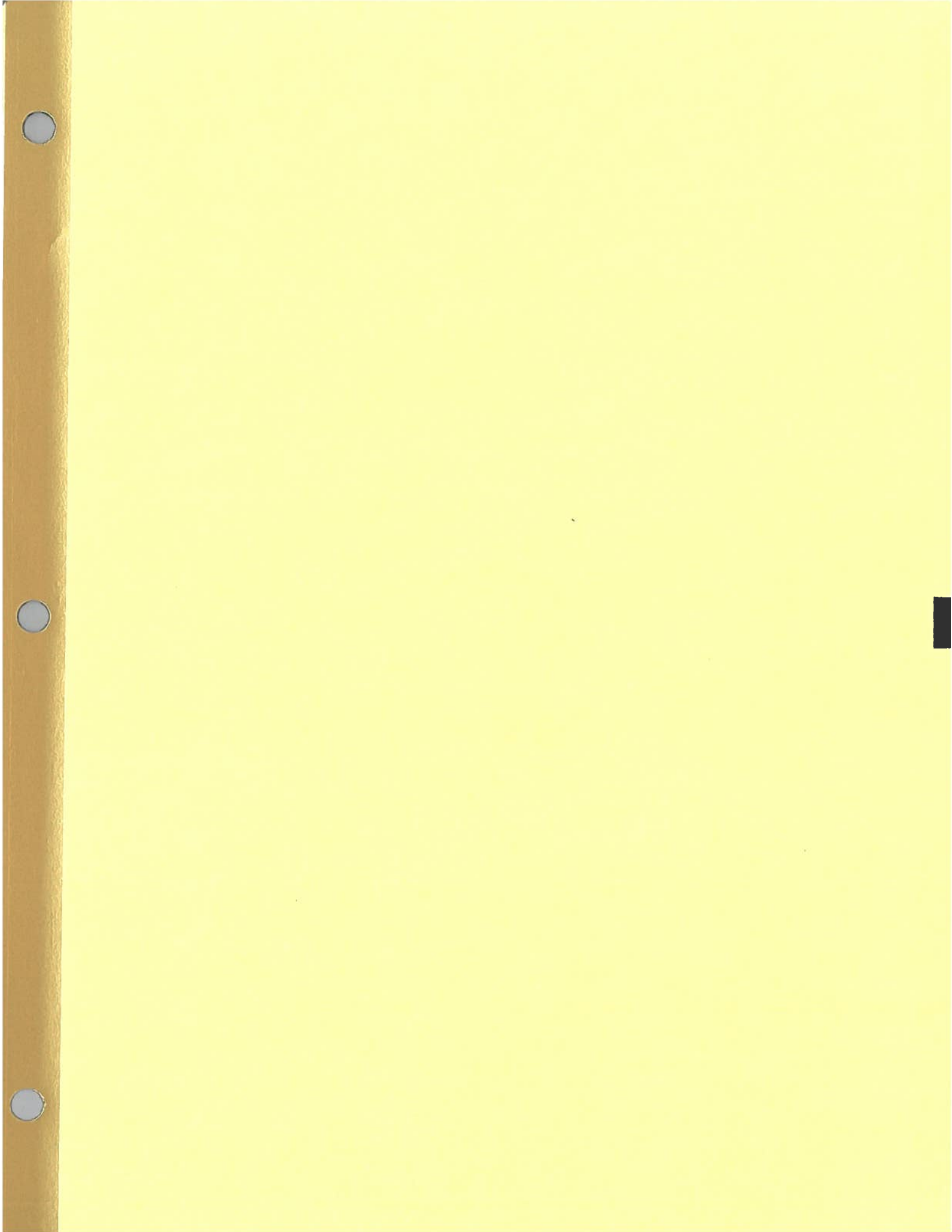
E - Red-cockaded woodpecker (Picoides borealis)
T - Gopher tortoise (Gopherus polyphemus)
C - Yellowblotched sawback - Graptemys flavimaculata

Wilkinson

E - Red-cockaded woodpecker (Picoides borealis)

Winston

E - Red-cockaded woodpecker (Picoides borealis)



Forrest
D100
11-10-79
Flyg #194

MISSISSIPPI
BOARD OF WATER COMMISSIONERS
416 North State Street
Jackson, Mississippi 39201

CODED

WATER WELL DRILLERS LOG

11-10-79 date well completed
Roy West Water Wells Firm firm name
Forrest county well located

LANDOWNER: Misspauer
Co Hattisburg, Miss
(mailing address)

WELL LOCATION:
sec 10 T 40 N R 13 E
0 miles 0 of Hattisburg
(distance) (direction) (nearest town)

WELL PURPOSE:
(home, irrigation, municipal, industrial)

WELL COMPLETION DATA:
(1) diameter (inches) 6
(2) total depth (feet) 650
(3) static water level (feet) 80 below top of ground
(4) casing Bell pipe 620 (material) (depth)
(size) If telescope see back.
(5) screen 30 620 (length) (depth to top)
(size) (material) 4" St steel
(6) pump 5 70 (HP) (yield gpm)
Misspauer (type power)

(7) electric log (yes or no) Miss Geo Survey (organization running log)
(8) how well bottom plugged Wash water

description of formations encountered	from	to
Clay	0	4
sand gravel	4	14
Blue clay	14	60
sand gravel	60	120
Clay	120	275
sand	275	300
Clay	300	340
sand	340	540
Clay	540	560
sand	560	585
Clay	585	605
sand	605	670
Clay	670	675
sand	675	710

CODED

DEPT OF NATURAL RESOURCES
BUREAU OF LAND & WATER RESOURCES

NOV 24 1980

RECEIVED

DRILLERS REMARKS: This log is for two wells. The formation is same. Well about 20ft apart.

Forest
D 73
7-68
Miss Geo Soc.
7/11

MISSISSIPPI
BOARD OF WATER COMMISSIONERS
416 North State Street
Jackson, Mississippi 39201

CODED

WATER WELL DRILLERS LOG

Date well completed 1968 firm name STR county well located Forest.

LANDOWNER Murray Co
Hutchins, Minn.
(mailing address)

WELL LOCATION:
sec 4 T 4 N 13 R 13 E
S W
miles of (nearest town)

WELL PURPOSE:
(home, irrigation, municipal, Industrial)

- WELL COMPLETION DATA:
- (1) diameter (inches) 6"
 - (2) total depth (feet) 22
 - (3) static water level (feet) 21 below above top of ground.
 - (4) casing Steel 402
(material) (depth)
6x4 if telescope see back.
(size)
 - (5) screen 20 402
(length) (depth to top)
4" S/S
(size) (material)
 - (6) pump 10 158
(HP) (yield gpm)
Sub
(type power)
 - (7) electric log YES
(yes or no)
M A S
(organization running log)
 - (8) how well bottom plugged Value

description of formations encountered	from	to
Blue Clay	0	8
Sand	8	10
White Clay	10	15
Rock Hard	15	17
Blue Clay	17	21
Blue Sand	21	22
Shale	22	23
Sand	23	24
Sand & Clay	24	25
CW B Sand	25	26

DRILLERS REMARKS:

AUG 19 1968

MISS. BD. OF
WATER COMM.

FORREST MISSISSIPPI BOARD OF WATER COMMISSIONERS

D 38
9-21-65

③

VSGS File

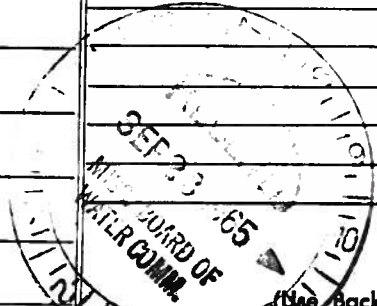
WATER WELL DRILLERS LOG

D 38

Date: 9-21-, 19 65, Driller: Layne-Central Co. County Forrest

(Name)

(1) Owner of Land: Hercules Powder Co. (Name) Hattiesburg, Miss. (Address)	Description & Color of Materials Sand, Clay, Red Clay, Shell, etc.	Thickness Feet	Depth Feet
(2) Location: NW 1/4, SW 1/4, Sec. 4, T. 4N, R. 13W miles of (distance) (direction) (Nearest Town)	top soil	3	0-3
	pipe clay	187	3-190
	shale	50	190-240
	fine sand-stks		
	shale	29	240-269
	sand	22	269-291
	shale, stks sand	71	291-362
	sand	138	362-500
	hard shale	28	500-528
	sand-shale	57	528-585
(3) Topography: (Hilly) (Flat) (Level)	sand	105	585-690
	shale	15	690-705
(4) Purpose of Well: Industrial (Domestic Irrigation, Municipal, Industrial, Other)			
Information upon completion of well:			
(1) Diameter 18 inches.			
(2) Total Depth 687 feet.			
(3) Water Level 24 feet below top of ground.			
(4) Cased to 591', Size 18"			
(5) Screen: Size 10", Length 70'			
(6) Were any formations sealed against pollution? X yes, no.			
If YES depth of formation 591'			
Why required			
Drillers Remarks:			



(Use Back Side)

Well No

FORREST MISSISSIPPI BOARD OF WATER COMMISSIONERS

D 39 ③

USGS FILE

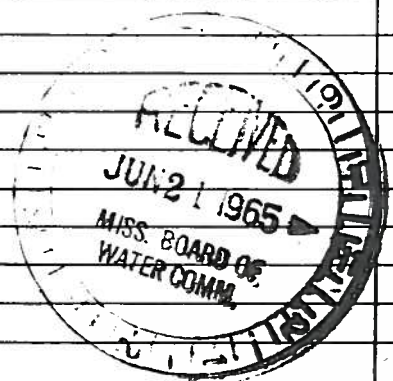
6-18-65

WATER WELL DRILLERS LOG

Date: June 18, 1965, Driller: Layne-Central Co., County: Forrest

(Name)

(1) Owner of Land: Coastal Chem. Co. (Name)	Description & Color of Materials Sand, Clay, Red Clay, Shell, etc.	Thick- ness Feet	Depth Feet
Hattiesburg, Miss. (Address)	top soil 0-5	5	
	sand & gravel 5-10	5	
(2) Location: NW 1/4, SW 1/4, Sec. 2, T. 1 N, R. 1 E	blue clay 10-75	65	
_____ miles _____ of _____ (distance) (direction) (Nearest Town)	shale stks sand 75-100	25	
(3) Topography: _____ (Hilly) (Flat) (Level)	blue clay 100-120	20	
(4) Purpose of Well: Industrial (Domestic Irrigation, Municipal, Industrial, Other)	sandy shale 120-148	28	
	sand rock 148-158	10	
	shale 158-200	42	
	fine sand- shale 200-224	24	
	sand 224-352	128	
Information upon completion of well:			
(1) Diameter 12" inches.			
(2) Total Depth 353' feet.			
(3) Water Level 5' feet below top of ground.			
(4) Cased to 310', Size 8"			
(5) Screen: Size 6", Length 40'			
(6) Were any formations sealed against pollution?			
_____ X yes, _____ no.			
If YES depth of formation 353'			
Why _____ required			
Drillers Remarks: _____			



(Use Back Side)

Well No

Forrest
D 109
1-15-88

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
 Bureau of Land and Water Resources
 Southport Mall
 P.O. Box 10631
 Jackson, Mississippi 39209
WATER WELL DRILLERS LOG

Coded

Jan. 15 1988 LAUNE-CENTRAL Co Forrest
 date well completed firm name county well located

LANDOWNER: B. E. Goodrich
Chemical Group
clo Hercules, Inc / Hercules Unit
West 7th St., PO Box 1897
Hattiesburg, MS 39403
 (mailing address)

WELL LOCATION: SW 1/4 of SW 1/4 of NW 1/4
 sec. 4 T. 4 N R. 13 E
8 W
 (distance) miles (direction) of (nearest town)

WELL PURPOSE: Industrial
 (home, irrigation, municipal, industrial)

- WELL COMPLETION DATA:
- diameter (inches) 8"
 - total depth (feet) 1650'
 - static water level (feet) 59' below above top of ground.
 - casing Steel, 1610'10",
 (material) (depth)
8" if telescope see back.
 (size)
 - screen 30'4", 1610'10"
 (length) (depth to top)
4", Stainless Steel
 (size) (material)
 - pump 15 150 gpm
 (HP) (yield gpm)
Electrical
 (type power)
 - electric log Yes
 (yes or no)
Laune-Central Co.
 (organization running log)
 - how well bottom plugged Cement

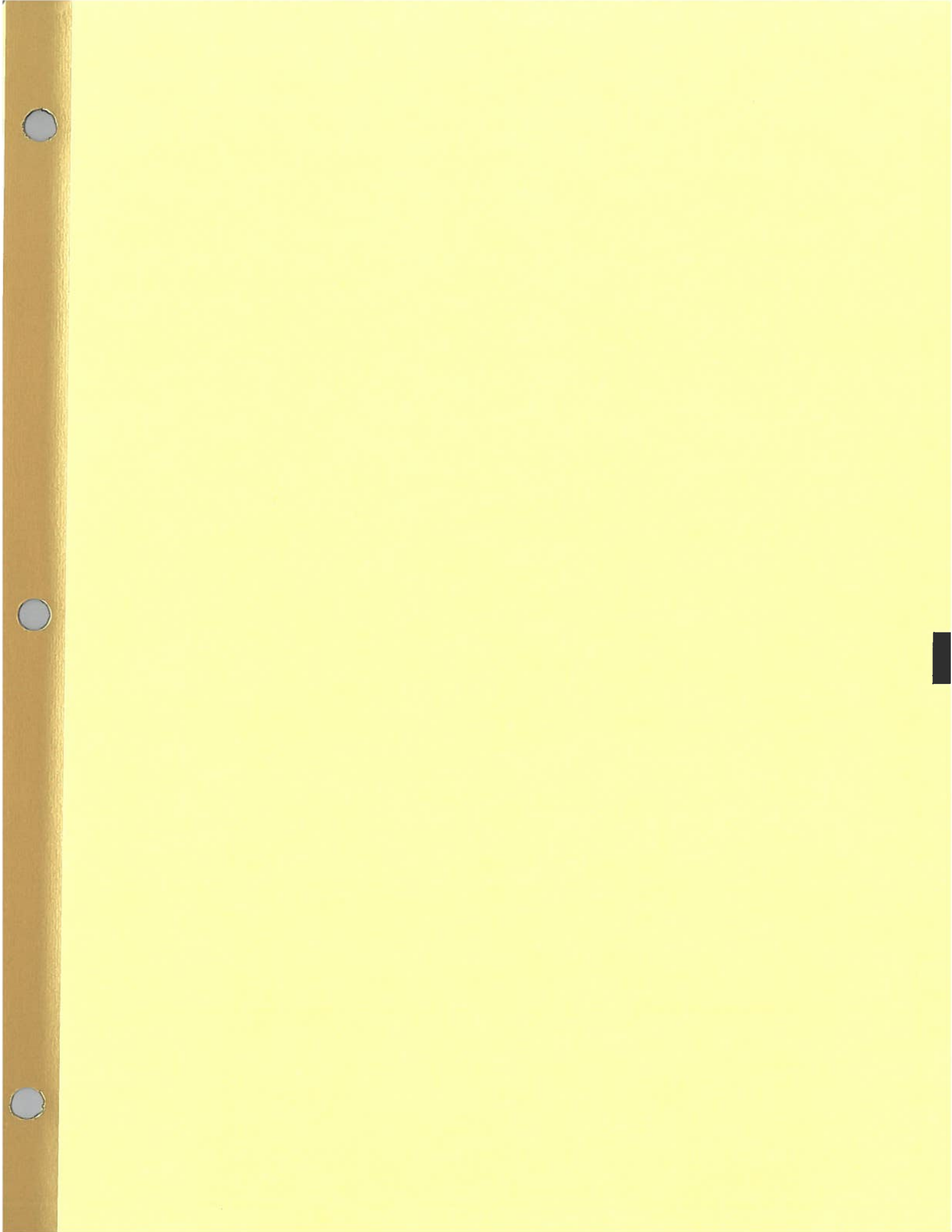
description of formations encountered	from	to
Fill Dirt	0	3'
Clay	3'	45'
Sand	45'	50'
Clay	50'	225'
Sandy Clay	225'	275'
Sand	275'	295'
Sand & Clay	295'	335'
Hard Clay	335'	367'
Sand	367'	410'
Shale	410'	575'
Sand	575'	591'
Shale	591'	611'
Sand	611'	680'
Sandy Shale	680'	702'

RECEIVED

APR 18 1988

Department of Natural Resources
 Bureau of Land & Water Resources

DRILLERS REMARKS:
Permit No. MS-GW-07463



FORM A: GENERAL FACILITY INFORMATION

Company Name: Hercules Incorporated

Division/Subsidiary _____

Facility Name: Hattiesburg Plant

Address: West 7th Street
No. Street

Hattiesburg, Mississippi 39401
City State Zip Code

Name of Person Completing Form: R. H. Heller *R. H. Heller*

Position: Plant Manager

Phone Number: (601) 545-3450

1. Year Facility Opened 19 83 (10-11)
2. Primary SIC Code : 2861 (12-15)
3. Estimate the total amounts of process wastes (excluding wastes sold for use) generated by this facility during 1978:
USE ONLY TONS IF POSSIBLE - right justify response
thousand gallons (16-24)
hundred tons 3510 (25-32)
thousand cubic yards (33-41)
4. Estimate (in whole percents) how these process wastes generated in 1978 were disposed of:
 - in landfill 98 (42-44)
 - in pit/pond/lagoon 2 (45-47)
 - in deep well (48-50)
 - incinerated (51-53)
 - reprocessed/recycled (54-56)
 - evaporated (57-59)
 - unknown (60-62)
 - other (Specify _____) (63-65)
5. What is the total number of known sites (including disposal on the property where this facility is located as one site) that have been used for the disposal of process wastes from this facility since 1950? 14 (66-68)

COMPLETE ONE FORM "B" FOR EACH OF THE SITES

6. Have any of the process wastes generated at this facility been hauled (removed) from this facility for disposal? (Yes=1; no=2) 1 (69)

IF YES, COMPLETE FORM "C"

7. Do you know the disposal site locations of all of the process waste hauled from your facility since 1950? (Yes=1; no=2) 2 (70)

IF NO, COMPLETE ONE FORM "D" FOR EACH FIRM OR CONTRACTOR WHO TOOK WASTE TO AN UNKNOWN LOCATION

8. Specify the earliest year represented by information from company or facility records supplied on this and other forms 1971 (71-72)
9. Specify the earliest year represented by information from employee knowledge supplied on this and other forms 1967 (73-74)

COMPLETE THIS FORM FOR EVERY SITE (INCLUDING THE LOCATION OF THIS FACILITY AS ONE SITE) USED FOR THE DISPOSAL OF PROCESS WASTES GENERATED BY THIS FACILITY SINCE 1950.

Company Name: Hercules Incorporated Division/Subsidiary _____
 Facility Name: Hattiesburg Plant

Name of Site: Back 40
 Address of Site: West 7th St.

no. street
Hattiesburg Mississippi 39401
 city state zip code

Name of Owner (while used by facility): Hercules Incorporated
 Address: West 7th St.

no. street
Hattiesburg Mississippi 39401
 city state zip code

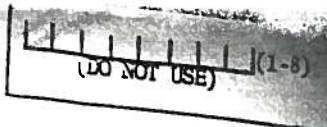
Current Owner (if different from above): Same
 Address: _____

no. street

 city state zip code

1. Location (1= the property on which facility is located; 2= off-site)..... (10)
2. Ownership at time of use (1= company ownership; 2=private but not company ownership) 3=public ownership) (11)
3. Current status (1= closed; 2= still in use; 9=don't know) (12)
 IF CLOSED, specify year closed 19 (13-14)
4. Year first used for process waste from this facility 19 (15-16)
5. Year last used for process waste from this facility (enter "79" if still in use) 19 (17-18)
6. Total amount of process waste from this facility disposed at site:
 USE TONS ONLY IF POSSIBLE
 Right justify response
 thousand gallons (19-26)
 hundred tons (27-33)
 thousand cubic yards (34-41)
7. Specify type(s) of disposal method(s) used at site and whether method is still in use (1=currently in use; 2=no longer in use; 3=never used; 9=don't know)
 landfill, mono industrial waste (42)
 landfill, mixed industrial waste (43)
 landfill, drummed waste (44)
 landfill, municipal refuse co-disposed ... (45)
 pits/ponds/lagoons (46)
 deep well injection (47)
 land farming (48)
 incineration (49)
 treatment (eg. neutralizing)..... (50)
 reprocessing/recycling (51)
 other (specify) (52)
8. Users of this site (1=this facility; 2=this facility and other company facilities only; 3=this company and others; 9=don't know) (53)

LIST NAMES AND ADDRESSES OF OTHER KNOWN USERS BELOW



Company Name: Hercules Incorporated
 Division/Subsidiary _____
 Facility Name: Hattiesburg Plant
 Site Name: Back 40

9. Components (or characteristics) of process waste from this facility disposed at site: (1=present in waste; 2=not present in waste; 9=don't know)

FILL IN EVERY BLOCK SPACE

Acid solutions, with pH < 3.....		
pickling liquor	2	(10)
metal plating waste	2	(11)
circuit etchings	2	(12)
inorganic acid manufacture	2	(13)
organic acid manufacture	2	(14)
Base solutions, with pH > 12	2	(15)
caustic soda manufacture	2	(16)
nylon and similar polymer generation	2	(17)
scrubber residual	2	(18)
Heavy metals & trace metals (bonded organically & inorganically)	2	(19)
arsenic, selenium, antimony	2	(20)
mercury	2	(21)
iron, manganese, magnesium	2	(22)
zinc, cadmium, copper, chromium (trivalent)	1	(23)Trace
chromium (hexavalent)	1	(24)Trace
lead	2	(25)
Radioactive residues, >50pico curies/liter	2	(26)
uranium residuals & residuals for UF ₆ recycling	2	(27)
lathanide series elements and rare earth salts	2	(28)
phosphate slag	2	(29)
thorium	2	(30)
radium	2	(31)
other alpha, beta & gamma emitters	2	(32)
Organics.....	2	(33)
pesticides & intermediates	1	(34)
herbicides & intermediates	1	(35)Trace
fungicides & intermediates	2	(36)
rodenticides & intermediates	2	(37)
halogenated aliphatics	2	(38)
halogenated aromatics	1	(39)Trace
acrylates & latex emulsions	2	(40)
PCB/PBB's	2	(41)
amides, amines, imides	2	(42)
plastizers	1	(43)Trace
resins	2	(44)
elastomers	1	(45)
solvents polar (except water)	1	(46)
carbontetrachloride	1	(47)Trace
trichloroethylene	2	(48)
other solvents nonpolar	2	(49)
solvents halogenated aliphatic	1	(50)Trace
solvents halogenated aromatic	1	(51)Trace
oils and oil sludges	2	(52)
esters and ethers	1	(53)
alcohols	1	(54)
ketones & aldehydes	1	(55)Trace
dioxins	1	(56)Trace
Inorganics	2	(57)
salts	1	(58)
mercaptans	1	(59)
Misc.....	1	(60)
pharmaceutical wastes	2	(61)
paints & pigments	2	(62)
catalysts (eg. vanadium, platinum, palladium)	2	(63)
asbestos	2	(64)
shock sensitive wastes (eg. nitrated toluenes)	2	(65)
air water reactive wastes (eg. P ₄ , aluminum chloride)	2	(66)
wastes with flash point below 100° F.....	2	(67)
	2	(68)

FORM C: HAULER INFORMATION

(1-5)
(DO NOT USE)

PROVIDE A COMPLETE LIST OF ALL FIRMS AND INDEPENDENT CONTRACTORS, INCLUDING THE COMPANY AND ITS AFFILIATES AND SUBSIDIARIES, USED TO REMOVE PROCESS WASTES FROM THIS FACILITY SINCE 1950.

Company Name: Hercules Incorporated
 Division/Subsidiary _____
 Facility Name: Hattiesburg Plant

<u>Name of Firm or Contractor</u>	<u>Address</u>	<u>ICC # (If Known)</u>	<u>Years Used</u>
Hercules Incorporated	Hattiesburg, Mississippi		9
Rollings Environmental Services Inc.	Baton Rouge, LA.		9
City of Hattiesburg	Hattiesburg, Mississippi		7
Hover Gravel Co.	Hattiesburg, Mississippi		3
Chem Dyne Corp.	Hamilton, Ohio		1



FILE COPY

April 21, 1983

Mr. Charles Jordan, Environmental Coordinator
Hercules, Inc.
P. O. Box 1937
Hattiesburg, MS 39401

Dear Mr. Jordan:

RE: MSD008183081

This letter acknowledges your telephone request of April 21, 1983. The Bureau has reviewed your letter of February 18, 1983 and has forwarded this letter and amended notification form to EPA in order to update the automated data processing system. The spent acid tank is not subject to the permitting requirements of Mississippi Resource Water Rule 264, as it has been exempted under the terms of Rule 264(d).

If you have any further questions, please don't hesitate to contact me at 707-337-1000.

Sincerely,

John J. Bergman
Division of Solid Waste Management

jjb:ll

FILE COPY

April 21, 1983

Mr. James Seabroough, Chief
Residuals Management Branch
U. S. Environmental Protection Agency
Region IV
345 Courland Street, N.E.
Atlanta, GA 30365

Dear Mr. Seabroough:

Attached is a letter which we received from Hercules, Inc. which requested that their storage facility be delisted. We agree with the company that the spent acid is being beneficially reused in their wastewater treatment system, and is thereby exempted under Mississippi Hazardous Waste Rule 261.6(a). Consequently, please update the ADP system to reflect the change in status.

If you have any questions, please contact me.

Sincerely,

Jack H. McMillan, Director
Division of Solid Waste Management

JMI:JPH:abl
Enclosure



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

February 18, 1983

RECEIVED
1983 FEB 22 PM 9:38
AIR & WATER POLLUTION
CONTROL COMMISSION
STATE OF MISSISSIPPI

Mississippi Department of Natural Resources
Bureau of Pollution Control
Division of Solid Waste Management
P. O. Box 10385
Jackson, MS 39209
Attn: Mr. John Herrmann

Dear Mr. Herrmann:

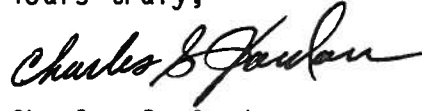
On January 27, 1983, we met with you to review our initial notification of hazardous waste activity and subsequent hazardous waste permit application. The meeting was very beneficial with your clarification of several aspects of hazardous waste activity.

In summary, we agreed that our initial notification and subsequent hazardous waste permit application as a storer and treater of hazardous waste (spent sulfuric acid) was misleading. All of the acid is beneficially used for pH control during primary wastewater treatment and supplemented with the purchase of additional fresh acid. In fact, the spent acid does not meet any of the criteria in part 261.2 (definition of a solid waste) and therefore we conclude if it is not a solid waste it is not a hazardous waste. The "storage" tanks are only used to control optimum discharge of the spent acid. As you requested, we also looked at heavy metals, using the EP toxicity procedure, in our impounding basin sludge (the continuous flowthrough basin is for wastewater equalization and pH control) and also in the wastewater from the process generating the spent acid. No levels were found anywhere near the levels listed as maximum concentration of contaminants characteristic of EP toxicity. Also, the only reason underground injection was marked on our original notification was because of sanitary septic tanks and after talking to David Lee on February 17, 1983, we concur that underground injection should also be removed. Therefore, we are submitting the enclosed amended notification of hazardous waste activity.

With your concurrence that the spent sulfuric acid is not a hazardous waste, we respectfully request that we be removed as a storer and treater of hazardous waste and be listed only as a generator of hazardous waste. Although we are not generating any hazardous waste on a regular basis we do feel that in the future we may generate non-specific hazardous waste from non-specific sources on occasions as the result of process malfunctions, contamination, etc., and therefore we wish to retain our EPA ID number. Please advise us on the procedure to accomplish being removed as a storer and treater of hazardous waste (eliminating the hazardous waste permit application) while retaining our EPA ID number.

If I can answer any questions or be of any help, please call me.

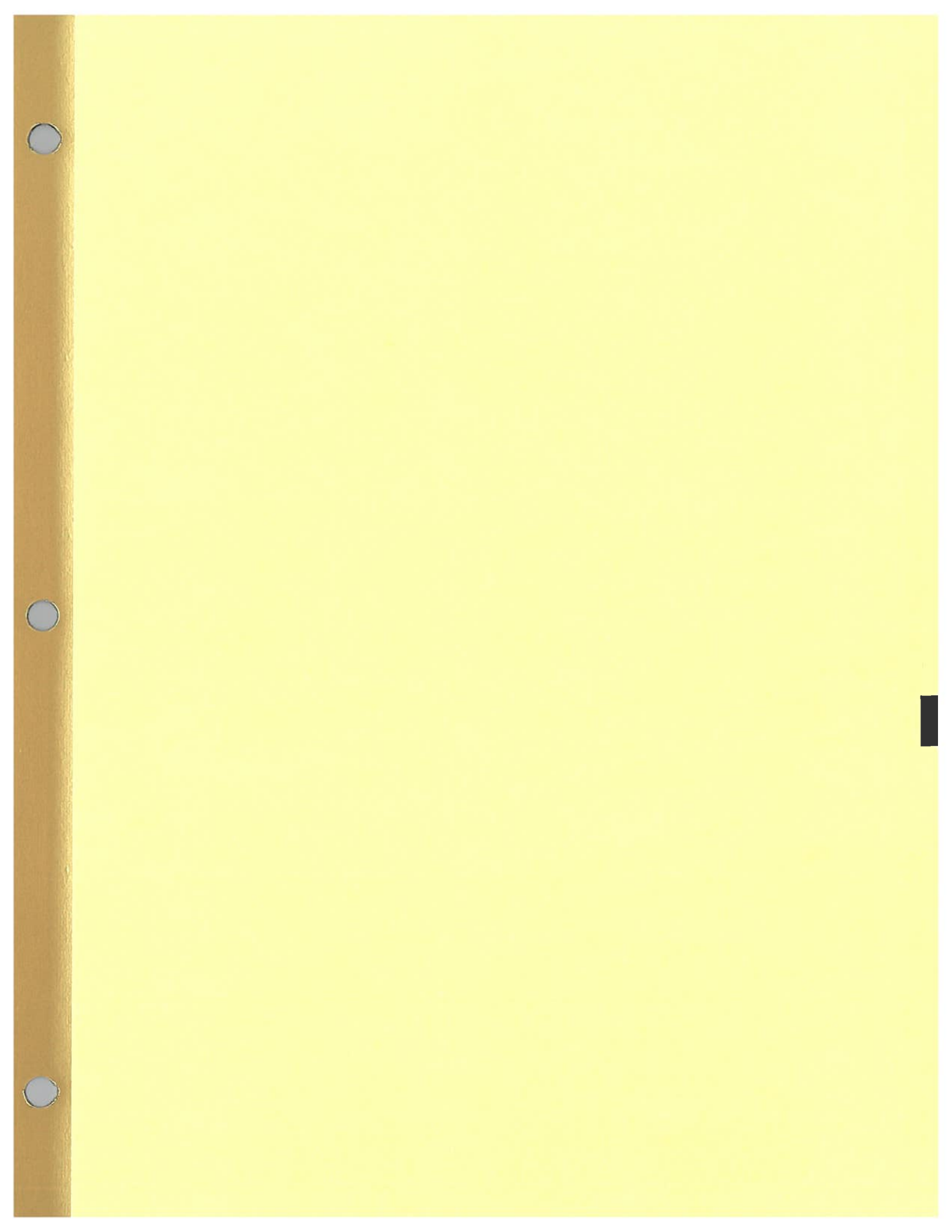
Yours truly,



Charles S. Jordan
Environmental Coordinator

CSJ:ps

Enclosure



FILE COPY

**State of Mississippi
Water Pollution Control
PERMIT**

**TO DISCHARGE WASTEWATER IN ACCORDANCE WITH THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

THIS CERTIFIES THAT

HERCULES, INC.

Hattiesburg, Mississippi

**has been granted permission to discharge wastewater into
Bowie River**

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof. This permit is issued in accordance with the provisions of the Mississippi Water Pollution Control Law (Section 49-17-1 et seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder, and under authority granted pursuant to Section 402 (b) of the Federal Water Pollution Control Act.

MISSISSIPPI NATURAL RESOURCES PERMIT BOARD

**Original Signed By
CHARLES H. CHISOLM**

**DIRECTOR, BUREAU OF POLLUTION CONTROL
MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES**

Issued: September 29, 1986

Permit No. MS0001830

Expires: September 28, 1991



**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
PERMIT
TO OPERATE AIR EMISSIONS EQUIPMENT**

THIS CERTIFIES THAT

Hercules, Incorporated
West 7th Street
Hattiesburg, Mississippi

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Issued this 24th, day of March, 1987

MISSISSIPPI NATURAL RESOURCES PERMIT BOARD

**DIRECTOR, BUREAU OF POLLUTION CONTROL
MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES**

Expires 1st day of April, 1990

Permit No. 0800-00001

Permit Modified: October 27, 1987, February 9, 1988,
March 8, 1988, & May 9, 1989

PART I

Page 2 of 30
Permit No. 0800-00001

PART I
GENERAL CONDITIONS

1. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any air pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions or modifications which will result in new, different, or increased emission of air pollutants must be reported by submission of a new application.
2. The permittee shall at all times maintain in good working order and operate as efficiently as possible all air pollution control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit.
3. Solids removed in the course of control of air emissions shall be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering state waters.
4. Any diversion from or bypass of collection and control facilities is prohibited except (i) where unavoidable to prevent loss of life or severe property damage or (ii) when approved by the Mississippi Department of Natural Resources Permit Board.
5. Whenever any emergency, accidental or excessive discharge of air contaminants occurs, the office of the Mississippi Department of Natural Resources Bureau of Pollution Control shall be notified immediately of all information concerning cause of the discharge, point of discharge, volume and characteristics, and whether discharge is continuing or stopped.
6. Should the Executive Director of the Mississippi Department of Natural Resources declare an Air Pollution Control Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule.
7. The permittee shall allow the Mississippi Department of Natural Resources Bureau of Pollution Control and the Mississippi Natural Resources Permit Board and/or their authorized representatives, upon the presentation of credentials:
 - a. To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit, and

PART I

Page 3 of 30
Permit No. 0800-00001

- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emission.
8. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to:
 - a. Violation of any terms or conditions of this permit.
 - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - c. A change in any condition that required either a temporary or permanent reduction or elimination of authorized air emissions.
9. For renewal of this permit the applicant shall make application not less than one-hundred eighty (180) days prior to the expiration date of the permit substantiated with current emissions data, test results or reports or other data as deemed necessary by the Mississippi Department of Natural Resources Permit Board.
10. Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Natural Resources Bureau of Pollution Control.
11. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
12. Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance, or operation of the air cleaning facility, or from compliance with the applicable statutes of the State, or with local laws, regulations, or ordinances.
13. This permit is non-transferable.
14. This permit is for air pollution control purposes only.

PART II

Page 4 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Rosin Processing Area, Emission Point 010, consisting of the following:

- a) Emission Point 011, the Mill Room.
- b) Emission Point 012, the Oil Scrubber preceded by water scrubber serving the extractor, the refinery, and the still house.
- c) Emission Point 013, the Oil Scrubber preceded by a water scrubber serving the Pexite Plant.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 5 of 30
Permit No. 0800-00001

**PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Delnav Plant, Emission Point 020, consisting of the following:

- a) Emission Point 021, the Flare.
- b) Emission Point 022, the Limestone Tank No. 1.
- c) Emission Point 023, the Limestone Tank No. 2.
- d) Emission Point 024, the Digestion Sump Vent.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 6 of 30

Permit No. 0800-00001

**PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Poly-Pale Plant, Emission Point 030, consisting of the following:

- a) Emission Point 031, a 1.6 MM BTU/hr McKee Boiler (Dowtherm)
- b) Emission Point 032, a 1.6 MM BTU/hr McKee Boiler (Dowtherm)
- c) Emission Point 033, the Water Scrubber Vent
- d) Emission Point 034, the Heat Treatment Vent

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 7 of 30

Permit No. 0800-00001

**PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning May 9, 1989, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Neuphor production process, including a carbon adsorption scrubber, Emission Point 038.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 8 of 30
Permit No. 0800-00001

**PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Rosin Shed, Emission Point 040, consisting of the following:

- a) Emission Point 041, the Drumming Operation (no controls)
- b) Emission Point 042, the Vapor Hood Water Scrubber serving the flaking operation
- c) Emission Point 043, the Dust Wood Water Scrubber serving the flaking operation.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 9 of 30
Permit No. 0800-00001

**PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from Package Boiler No. 5, Emission Point 050.

Such emissions shall be limited and monitored by the permittee as specified below:

EMISSION LIMITATIONS

SO ₂	4.8 lb/10 ⁶ BTU
Particulate Matter	59.2 lbs/hr
Opacity	40% or except as provided in APC-S-1.

MONITORING REQUIREMENTS

SO ₂	See Part III, No. (1).
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PART II

Page 10 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning February 9, 1988, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Vinsol Resins Process, Emission Point 060, consisting of the following:

- a) Emission Point 061, the Sealas Furnace No. 1 (process heater)
- b) Emission Point 062, the Sealas Furnace No. 2 (process heater)
- c) Emission Point 063, the Water Scrubber serving Vinsol Kettle No. 1
- d) Emission Point 064, the Water Scrubber serving Vinsol Kettle No. 2

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

Beginning February 9, 1988, the permittee is authorized to also manufacture hard resins in this process area.

PART II

Page 11 of 30
Permit No. 0800-00001

**PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning February 9, 1988, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Truline Flaking & Packaging Area, Emission Point 070, consisting of the following:

- a) Emission Point 071, the Flaking Belt Vapor Hood Vent
- b) Emission Point 072, the Dracco Baghouse Model 20-S
- c) Emission Point 073, the Pangborn Baghouse Model 600

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

Beginning February 9, 1988, the permittee is authorized to also handle hard resins in this process area.

PART II

Page 12 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Hard Resins Area, Emission Point 080, consisting of the following:

- a) Emission Point 081, the 8.3 MM BTU/hr Struthers-Wells Dowtherm Boiler
- b) Emission Point 082, the Water Scrubber preceded by an oil scrubber

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 13 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Continuous Esterification Process Area, Emission Point 090, consisting of the following:

- a) Emission Point 091, the 5 MM BTU/hr Foster Wheeler Dowtherm Boiler
- b) Emission Point 092, the Continuous Esterification Unit (no controls)

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 14 of 30
Permit No. 0800-00001

**PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Hard Resins Flaking House, Emission Point 100, consisting of the following:

- a) Emission Point 101, the Bvell Norblo Dust Collector Model No. 396-14-20.
- b) Emission Point 102, the Vapor Hood Vent Scrubber.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 15 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Foral and Staybelite Hydrogenation Plant, Emission Point 110, consisting of the following:

- a) Emission Point 111, the 3.3 MM BTU/hr Struthers Wells Dowtherm Boiler
- b) Emission Point 112, the Hydrogenation Process (no controls)

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 16 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1989, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Hydrogen Furnace, Emission Point 120.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 17 of 30
Permit No. 0800-00001

**PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Pilot Plant Area, Emission Point 130, consisting of the following:

- a) Emission Point 131, the 3.3 MM BTU/hr Struthers Wells Dowtherm Boiler
- b) Emission Point 132, Vent No. 1
- c) Emission Point 133, Vent No. 2

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 18 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Resin 731 Area, Emission Point 140, with no controls.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 19 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Stills & Dresinate Area, Emission Point 150, consisting of the following:

- a) Emission Point 151, the 5 MM BTU/hr Foster Wheeler Boiler (Dowtherm)

There are to be no emissions to the atmosphere from the process.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 20 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Kymene Plant, Emission Point 160, consisting of the following:

- a) Emission Point 161, the Kettle Vent Water Aspirator.
- b) Emission Point 162, the Dust Collector

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 21 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Defoamer Plant, Emission Point 170, consisting of the following:

- a) Emission Point 171, the Silica Drier Furnace
- b) Emission Point 172, the Dust Bag

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 22 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Rosin Amine D Plant, Emission Point 180, consisting of the following:

- a) Emission Point 181, the 8.3 MM BTU/hr Struthers Wells Dowtherm Boiler
- b) Emission Point 182, the Ammoniation Vent Scrubber
- c) Emission Point 183, the Amine Reactor Vent (no controls)

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 23 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Polyrad and Polyol Process Area with water scrubber, Emission Point 190.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 24 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Para-Menthane Unit with no controls, Emission Point 200.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 25 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Para-Menthane Hydroperoxide Unit Oxidizer Vent, Emission Point 210.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 26 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the Sulfate Turpentine Refining Unit with a water scrubber, Emission Point 220.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 27 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from Carbon Regeneration Furnace with Scrubber, Emission Point 230.

Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

PART II

Page 28 of 30
Permit No. 0800-00001

PART II
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning March 24, 1987, and lasting until April 1, 1990, the permittee is authorized to operate air emissions equipment and emit air contaminants from the 65 MM BTU/hr Murray MCF 3 Series 59 boiler (Package Boiler No. 6), Emission Point 240.

Such emissions shall be limited and monitored by the permittee as specified below:

EMISSION LIMITATIONS

Particulate Matter	0.44 lb/MM BTU
SO ₂	59.3 TPY and 4.8 lb/MM BTU
Opacity	40%

MONITORING REQUIREMENTS

SO ₂	See Part III, Part 5
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PART III

Page 29 of 30

Permit No. 0800-00001

**PART III
OTHER REQUIREMENTS**

- (1) For Emission Point 050, the following condition shall apply:

By this condition the stated facility is allowed sulfur dioxide emissions exceeding those emitted by the facility in 1970. This condition is authorized by the Bureau until August 1, 1987

Operation of this facility at higher sulfur dioxide emission levels than in 1970 after August 1, 1987, is not allowed unless and until subsequent and additional Bureau authorization is given.

Attendant to the authorization stated above, this facility shall make written quarterly reports to the Bureau with the first report to be made ninety (90) days after the natural gas curtailment begins or at the time of reapplication for Permit to Operate, whichever comes first. The reports shall state density, heating value, daily usage (pounds/day), date of use and sulfur content of any and all fuels which exceed 2.2 percent sulfur by weight.

- (2) For Emission Point 060, the following additional condition will also apply:

Records of the operation of the facility must be kept and must show the duration of operation (time and dates) and amount of material processed. These records shall be made available to the Mississippi Bureau of Pollution Control upon request.

- (3) For Emission Point 130, the following condition shall apply.

Since this unit is used for experimental purposes and emissions may change depending on the conditions of the experiments, semi-annual reports shall be made to the Mississippi Bureau of Pollution Control explaining all work done including, as a minimum, the duration of tests, types of raw materials used and products produced, and an assessment of emissions caused.

- (4) For Emission Point 230, the following condition shall apply:

If the scrubber should fail or its effectiveness be reduced, the permittee shall notify the Bureau immediately by phone and follow-up with a letter. The information reported shall include the nature of the failure, time of, estimated repair time, and action taken to preclude a recurrence.

PART III

Page 30 of 30
Permit No. 0800-00001

PART III
OTHER REQUIREMENTS

- (5) For Emission Point 240, the following condition shall apply:

The permittee is limited to a usage of 260,925 gallons/calendar year of No. 6 fuel oil with sulfur content not to exceed 2.9%. A quarterly report shall be submitted detailing the amount of fuel oil used and the fuel oil characteristics. The report shall be postmarked by the 30th day of the month following the end of the calendar quarter.

- (6) The following process areas are assigned Emission Point designations for record keeping purposes. However, all of the following are closed processes, and there should be no emissions from any of them.

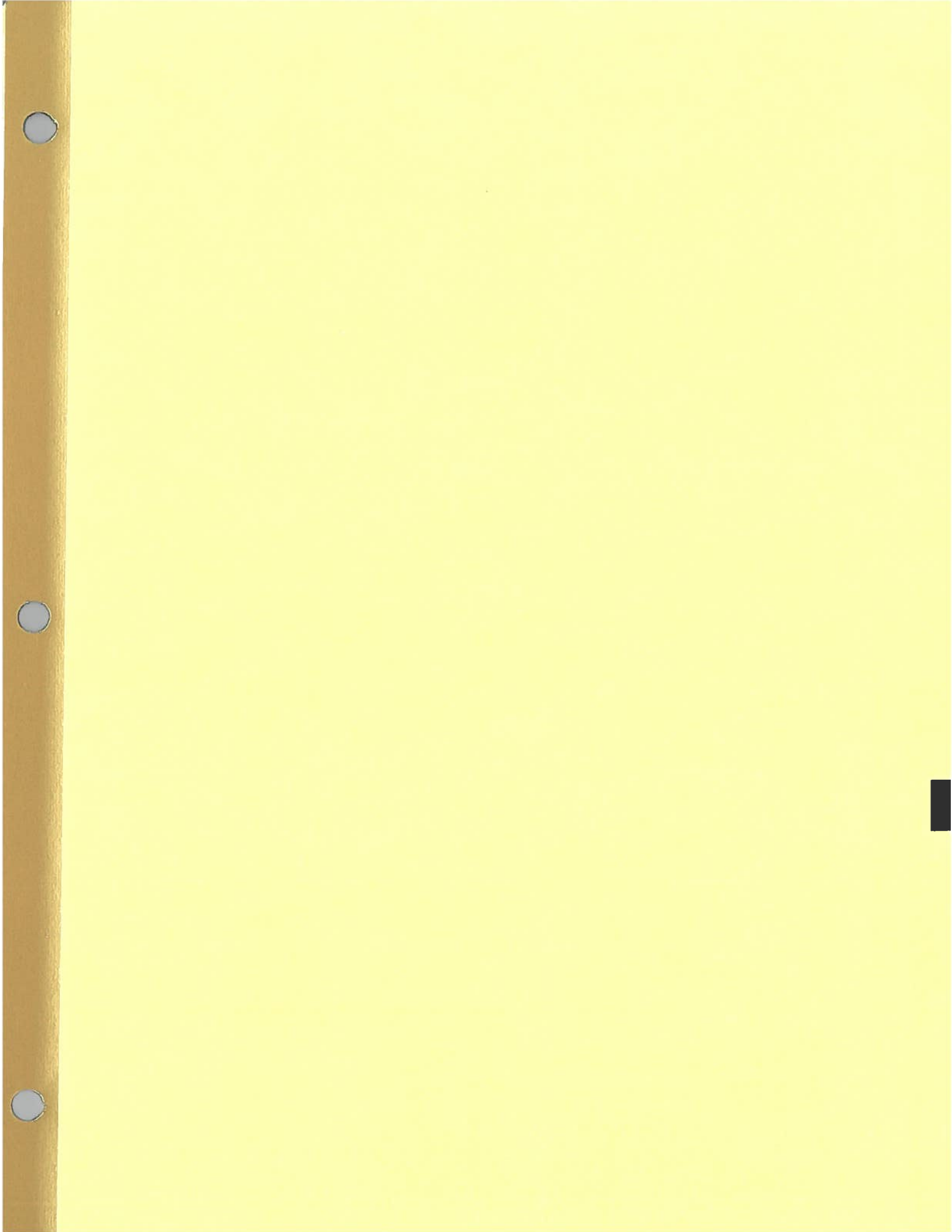
<u>Emission Point No.</u>	<u>Description</u>
152	Stillls & Dresinate Area
250	Para-Cymene Unit
260	Synthetic Pine Oil Facility
270	Paracol Plant

- (7) For all Emission Points, the following additional condition shall apply:

Good housekeeping shall be maintained to prevent fugitive emissions. Should fugitive emissions become excessive as determined by Bureau inspection or by complaints, additional control measures may be required.

- (8) By June 1, 1988, the permittee shall submit current emissions data for each emission point using the Bureau-approved plan and current storage tank data forms for each storage tank.

SR: 358



**BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM**

Lab Bench No. 374

I. GENERAL INFORMATION: Facility Name Hercules
 County Code Forrest NPDES Permit No. _____
 Discharge No. _____ Date Requested _____
 Sample Point Identification South gw monitoring well
 Requested By John Herrmann Data To Sam Mabry
 Type of Sample: Grab () Composite (Flow) (Time) Other () _____

II. SAMPLE IDENTIFICATION:
 Environment Condition Overcast and cool Collected By John Herrmann
 Where Taken South well located near neutral impoundment

Type	Parameters	Preservative	Date	Time
1. <u>Grab</u>	<u>EPT-Hex. Cr.</u>	<u>Cool 4°C</u>	<u>3-23-83</u>	<u>100</u>
2. <u>Grab</u>	<u>EPT-All Other EPT Metals</u>	<u>5 ml HNO₃</u>	<u>3-23-83</u>	<u>100</u>
3. <u>Grab</u>	<u>Phenol</u>	<u>5 ml H₂SO₄</u>	<u>3-23-83</u>	<u>100</u>
4. _____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	()	_____	_____	_____
D.O.	(000300)	()	_____	_____	_____
Temperature	(000010)	()	_____	_____	_____
Residual Chlorine	(050060)	()	_____	_____	_____
Flow	(074060)	()	_____	_____	_____

IV. TRANSPORTATION OF SAMPLE: Bus () RO Vehicle () Other () _____
V. LABORATORY: Received By DeJonnette King Date 3-23-83 Time 1545
 Recorded By Dorothy Lewis Date Sent to State Office 5-31-83

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD ₅	(000310)	()	_____ mg/l	_____	*
DD ₅	(000340)	()	_____ mg/l	_____	_____
TOC	(000680)	()	_____ mg/l	_____	_____
Suspended Solids	(099000)	()	_____ mg/l	_____	_____
TKN	(000625)	()	_____ mg/l	_____	_____
Ammonia-N	(000610)	()	_____ mg/l	_____	_____
Fecal Coliform(1)	(074055)	()	_____ colonies/100 ml	_____	*
Fecal Coliform(2)	(074055)	()	_____ colonies/100 ml	_____	*
Total Phosphorus	(000665)	()	_____ mg/l	_____	_____
Oil and Grease(1)	(000550)	()	_____ mg/l	_____	_____
Oil and Grease(2)	(000550)	()	_____ mg/l	_____	_____
Chlorides	(099016)	()	_____ mg/l	_____	_____
Phenol	(032730)	(X)	< .10 mg/l	DK	3-24-83
Total Chromium	(001034)	(X)	< 0.01 mg/l	MDP	4-18-83
Hex. Chromium	(001032)	(X)	< .05 mg/l	DK	3-24-83
Zinc	(001092)	()	_____ mg/l	_____	_____
Copper	(001042)	()	_____ mg/l	_____	_____
Lead	(017501)	(X)	< 0.10 mg/l	MDP	4-27-83
Cyanide	(000722)	()	_____ mg/l	_____	_____
Cadmium	_____	(X)	< .01 mg/l	MDP	4-15-83
Arsenic	_____	(X)	< 10 ug/l	MDP	4-18-83
Barium	_____	(X)	< 1.0 mg/l	MDP	4-27-83
Mercury	_____	(X)	< 0.50 ug/l	MDP	5-4-83
Silver	_____	(X)	< 0.01 mg/l	MDP	4-28-83
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____

Remarks These are groundwater samples; low concentrations results should be reported in parts per billion Selenium results will follow when completed.
 *Date of Test Initiation _____

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No. 373

I. GENERAL INFORMATION: Facility Name Hercules
 County Code Forrest NPDES Permit No. _____
 Discharge No. _____ Date Requested _____
 Sample Point Identification North g.w. monitoring well
 Requested By John Herrmann Data To Sam Mabry
 Type of Sample: Grab () Composite (Flow) (Time) Other () _____

II. SAMPLE IDENTIFICATION:
 Environment Condition Clear and cool Collected By John Herrmann
 Where Taken North well near sludge pits

Type	Parameters	Preservative	Date	Time
1. <u>Grab</u>	<u>EPT-Hex. Cr.</u>	<u>Cool 4°C</u>	<u>3-22-83</u>	<u>1100</u>
2. <u>Grab</u>	<u>EPT-All other EPT Metals</u>	<u>5 ml HNO₃</u>	<u>3-22-83</u>	<u>1100</u>
3. <u>Grab</u>	<u>Phenol</u>	<u>5 ml H₂SO₄</u>	<u>3-22-83</u>	<u>1100</u>
4. _____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	()	_____	_____	_____
D.O.	(000300)	()	_____	_____	_____
Temperature	(000010)	()	_____	_____	_____
Residual Chlorine	(050060)	()	_____	_____	_____
Flow	(074060)	()	_____	_____	_____

IV. TRANSPORTATION OF SAMPLE: Bus () RO Vehicle () Other () _____
 V. LABORATORY: Received By DeJonnette King Date 3-23-83 Time 1545
 Recorded By Dorothy Lewis Date Sent to State Office 5-31-83

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD ₅	(000310)	()	_____ mg/l	_____	*
_____	(000340)	()	_____ mg/l	_____	_____
_____	(000680)	()	_____ mg/l	_____	_____
Suspended Solids	(099000)	()	_____ mg/l	_____	_____
TKN	(000625)	()	_____ mg/l	_____	_____
Ammonia-N	(000610)	()	_____ mg/l	_____	_____
Fecal Coliform(1)	(074055)	()	_____ colonies/100 ml	_____	*
Fecal Coliform(2)	(074055)	()	_____ colonies/100 ml	_____	*
Total Phosphorus	(000665)	()	_____ mg/l	_____	_____
Oil and Grease(1)	(000550)	()	_____ mg/l	_____	_____
Oil and Grease(2)	(000550)	()	_____ mg/l	_____	_____
Chlorides	(099016)	()	_____ mg/l	_____	_____
Phenol	(032730)	(X) < .10	_____ mg/l	DK	3-24-83
Total Chromium	(001034)	(X) < 0.01	_____ mg/l	MDP	4-18-83
Hex. Chromium	(001032)	()	_____ mg/l	_____	_____
Zinc	(001092)	(X) < .05	_____ mg/l	DK	3-24-83
Copper	(001042)	()	_____ mg/l	_____	_____
Lead	(017501)	(X) < 0.10	_____ mg/l	MDP	4-27-83
Cyanide	(000722)	()	_____ mg/l	_____	_____
Cadmium	_____	(X) < .01	_____ mg/l	MDP	4-15-83
Arsenic	_____	(X) < 10	_____ ug/l	MDP	4-18-83
Barium	_____	(X) < 1.0	_____ mg/l	MDP	4-25-83
Mercury	_____	(X) < 0.50	_____ ug/l	MDP	5-4-83
Silver	_____	(X) < 0.01	_____ mg/l	MDP	4-28-83
Selenium	_____	(X)	_____ mg/l	_____	_____
_____	_____	()	_____ mg/l	_____	_____
_____	_____	()	_____ mg/l	_____	_____
_____	_____	()	_____ mg/l	_____	_____
_____	_____	()	_____ mg/l	_____	_____

Remarks These are groundwater samples; concentrations should be in the parts per billion range
Selenium results will follow when completed
 *Date of Test Initiation _____

BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM

Lab Bench No. _____

I. GENERAL INFORMATION: Facility Name HERCULES
 County Code FORREST NPDES Permit No. _____
 Discharge No. _____ Date Requested _____
 Sample Point Identification NORTH G.W. MONITORING WELL
 Requested By JOHN HERRMANN Data To SAM MABAY
 Type of Sample: Grab (X) Composite (Flow) (Time) Other ()

II. SAMPLE IDENTIFICATION:
 Environment Condition CLEAR & COOL Collected By JOHN HERRMANN
 Where Taken NORTH WELL - NEAR SLUDGE PITS

Type	Parameters	Preservative	Date	Time
1. GRAB	EPT - HEXAVALENT CR	- COOL - 4°C	3/22	11:00a
2. GRAB	EPT - ALL OTHER			
3.	EPT METALS	5 ml HNO ₃	3/22	11:00a
4. GRAB	PHENOL	5 ml H ₂ SO ₄	3/22	11:00a
5.				

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	()			
D.O.	(000300)	()			
Temperature	(000010)	()			
Residual Chlorine	(050060)	()			
Flow	(074060)	()			

IV. TRANSPORTATION OF SAMPLE: Bus () RA Vehicle () Other ()
 V. LABORATORY: Received By William King Date 3-23-83 Time 0545
 Recorded By [Signature] Date Sent to State Office 5-31-83

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD ₅	(000310)	()	mg/l		*
D.O.	(000340)	()	mg/l		
DOC	(000680)	()	mg/l		
Suspended Solids	(099000)	()	mg/l		
TKN	(000625)	()	mg/l		
Ammonia-N	(000610)	()	mg/l		
Fecal Coliform(1)	(074055)	()	colonies/100 ml		*
Fecal Coliform(2)	(074055)	()	colonies/100 ml		*
Total Phosphorus	(000665)	()	mg/l		
Oil and Grease(1)	(000550)	()	mg/l		
Oil and Grease(2)	(000550)	()	mg/l		
Chlorides	(099016)	()	mg/l		
Phenol	(032730)	(X)	2.10 mg/l	AK	3-24-83
Total Chromium	(001034)	(X)	< 0.01 mg/l	MDP	4-18-83
Hex. Chromium	(001032)	()	mg/l		
Zinc	(001092)	(X)	1.05 mg/l	AK	3-24-83
Copper	(001042)	()	mg/l		
Lead	(017501)	()	< 0.10 mg/l	MDP	4-29-83
Cyanide	(000722)	()	mg/l		
Cadmium		(X)	< .01 mg/l	MDP	4-15-83
Arsenic		()	< 10 mg/l	MDP	4-18-83
Barium		()	< 1.0 mg/l	MDP	4-25-83
Mercury		(X)	< 0.50 ug/l	MDP	5-4-83
Selenium		()			
Silver		()	< 0.01 mg/l	MDP	4-28-83
		()			
		()			
		()			
		()			
		()			

Remarks THESE ARE GROUNDWATER SAMPLES; CONCENTRATIONS SHOULD BE IN THE PARTS PER BILLION RANGE. Selenium results will follow when completed
 *Date of Test Initiation _____ 2/7/83

**BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM**

Lab Bench No. 372

I. GENERAL INFORMATION: Facility Name Hercules
 County Code Forrest NPDES Permit No. _____
 Discharge No. _____ Date Requested _____
 Sample Point Identification Sludge pit
 Requested By John Herrmann Data To Sam Mabry
 Type of Sample: Grab () Composite (Flow) (Time) Other ()

II. SAMPLE IDENTIFICATION:
 Environment Condition Overcast and cool Collected By John Herrmann
 Where Taken Sludge pit adjacent to road

Type	Parameters	Preservative	Date	Time
1. <u>Grab/Composite</u>	<u>EPT (extraction)</u>	<u>NA</u>	<u>3-23-83</u>	<u>130</u>
2. _____	<u>All EPT Metals</u>	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	()	_____	_____	_____
D.O.	(000300)	()	_____	_____	_____
Temperature	(000010)	()	_____	_____	_____
Residual Chlorine	(050060)	()	_____	_____	_____
Flow	(074060)	()	_____	_____	_____

IV. TRANSPORTATION OF SAMPLE: Bus () RO Vehicle () Other ()
 V. LABORATORY: Received By DeJourette King Date 3-23-83 Time 1545
 Recorded By Dorothy Lewis Date Sent to State Office 5-31-83

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD ₅	(000310)	()	_____ mg/l	_____	*
OD ₅	(000340)	()	_____ mg/l	_____	_____
DOC	(000680)	()	_____ mg/l	_____	_____
Suspended Solids	(099000)	()	_____ mg/l	_____	_____
TKN	(000625)	()	_____ mg/l	_____	_____
Ammonia-N	(000610)	()	_____ mg/l	_____	_____
Fecal Coliform(1)	(074055)	()	_____ colonies/100 ml	_____	*
Fecal Coliform(2)	(074055)	()	_____ colonies/100 ml	_____	*
Total Phosphorus	(000665)	()	_____ mg/l	_____	_____
Oil and Grease(1)	(000550)	()	_____ mg/l	_____	_____
Oil and Grease(2)	(000550)	()	_____ mg/l	_____	_____
Chlorides	(099016)	()	_____ mg/l	_____	_____
Phenol	(032730)	()	_____ mg/l	_____	_____
Total Chromium	(001034)	(X)	<u>.02</u> mg/l	<u>MDP</u>	<u>4-27-83</u>
Hex. Chromium	(001032)	()	_____ mg/l	_____	_____
Zinc	(001092)	()	_____ mg/l	_____	_____
Copper	(001042)	()	_____ mg/l	_____	_____
Lead	(017501)	(X)	<u>< 0.10</u> mg/l	<u>MDP</u>	<u>4-27-83</u>
Cyanide	(000722)	()	_____ mg/l	_____	_____
Barium	_____	(X)	<u>< 1.0</u> mg/l	<u>MDP</u>	<u>4-25-83</u>
Arsenic	_____	(X)	<u>29.1</u> ug/l	<u>MDP</u>	<u>4-18-83</u>
Cadmium	_____	(X)	<u>< 0.01</u> mg/l	<u>MDP</u>	<u>4-27-83</u>
Mercury	_____	(X)	<u>< 0.50</u> ug/l	<u>MDP</u>	<u>4-29-83</u>
Selenium	_____	(X)	<u>< 0.01</u> mg/l	<u>MDP</u>	<u>4-28-83</u>
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____

Remarks Analysis for purpose of determining whether hazardous see 261.24 for limits.
Selenium results will follow when completed
 *Date of Test Initiation _____

**BUREAU OF POLLUTION CONTROL
SAMPLE REQUEST FORM**

Lab Bench No. 371

I. GENERAL INFORMATION: Facility Name Hercules
 County Code Forrest NPDES Permit No. _____
 Discharge No. _____ Date Requested _____
 Sample Point Identification Ash from boiler
 Requested By John Herrmann Data To Sam Mabry
 Type of Sample: Grab () Composite (Flow) (Time) Other ()

II. SAMPLE IDENTIFICATION:
 Environment Condition Overcast and cool Collected By John Herrmann
 Where Taken North end of ash pile

Type	Parameters	Preservative	Date	Time
1. <u>Grab/composite</u>	<u>EPT (extraction)</u>	<u>NA</u>	<u>3-23-83</u>	<u>130</u>
2. _____	<u>All EPT Metals</u>	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____

III. FIELD:

Analysis	Computer Code	Request	Results	Analyst	Date
pH	(000400)	()	_____	_____	_____
D.O.	(000300)	()	_____	_____	_____
Temperature	(000010)	()	_____	_____	_____
Residual Chlorine	(050060)	()	_____	_____	_____
Flow	(074060)	()	_____	_____	_____

IV. TRANSPORTATION OF SAMPLE: Bus () RO Vehicle () Other ()
V. LABORATORY: Received By DeJonnnette King Date 3-23-83 Time 1545
 Recorded By Dorothy Lewis Date Sent to State Office 5-31-83

Analysis	Computer Code	Request	Result	Analyst	Date Measured
BOD ₅	(000310)	()	_____ mg/l	_____	*
OD	(000340)	()	_____ mg/l	_____	_____
TOC	(000680)	()	_____ mg/l	_____	_____
Suspended Solids	(099000)	()	_____ mg/l	_____	_____
TKN	(000625)	()	_____ mg/l	_____	_____
Ammonia-N	(000610)	()	_____ mg/l	_____	_____
Fecal Coliform(1)	(074055)	()	_____ colonies/100 ml	_____	*
Fecal Coliform(2)	(074055)	()	_____ colonies/100 ml	_____	*
Total Phosphorus	(000665)	()	_____ mg/l	_____	_____
Oil and Grease(1)	(000550)	()	_____ mg/l	_____	_____
Oil and Grease(2)	(000550)	()	_____ mg/l	_____	_____
Chlorides	(099016)	()	_____ mg/l	_____	_____
Phenol	(032730)	()	_____ mg/l	_____	_____
Total Chromium	(001034)	(X)	<u>0.08</u> mg/l	<u>MDP</u>	<u>4-27-83</u>
Hex. Chromium	(001032)	()	_____ mg/l	_____	_____
Zinc	(001092)	()	_____ mg/l	_____	_____
Copper	(001042)	()	_____ mg/l	_____	_____
Lead	(017501)	(X)	<u>< 0.10</u> mg/l	<u>MDP</u>	<u>4-27-83</u>
Cyanide	(000722)	()	_____ mg/l	_____	_____
Barium	_____	(X)	<u>≤ 1.0</u> mg/l	<u>MDP</u>	<u>4-25-83</u>
Arsenic	_____	(X)	<u>≤ 10.9</u> mg/l	<u>MDP</u>	<u>4-18-83</u>
Cadmium	_____	(X)	<u>< 0.01</u> mg/l	<u>MDP</u>	<u>4-27-83</u>
Mercury	_____	(X)	<u>< 0.50</u> ug/l	<u>MDP</u>	<u>4-29-83</u>
Silver	_____	(X)	<u>< 0.01</u> mg/l	<u>MDP</u>	<u>4-28-83</u>
Selenium	_____	(X)	_____ mg/l	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____
_____	_____	()	_____	_____	_____

Remarks Analysis for determining whether hazardous see 261.24 for limits.
Selenium results will follow when completed
 *Date of Test Initiation _____



June 22, 1983

Mr. Charles Jordan, Environmental Coordinator
Hercules Inc.
P. O. Box 1927
Hattiesburg, MS 39401

Dear Mr. Jordan:

Re: MS0008182081

Enclosed are the results of analyses which were performed on March 22 and 23. Ground water quality is acceptable. In addition, analysis of the waste sampled (i.e., the sludge pit, ash pile) indicated that these wastes would not be considered hazardous under the Mississippi Hazardous Waste Rules.

I appreciated your cooperation in obtaining the samples.

Sincerely,

John P. Harrmann
Division of Solid Waste Management

JPH:abl
Enclosures



August 25, 1981

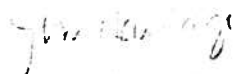
Mr. Charles Jordan
Hercules, Incorporated
P. O. Box 1937
Hattiesburg, MS 39401

Dear Mr. Jordan:

Enclosed is a copy of the laboratory report concerning the waste samples collected at your facility on July 9, 1981.

If you should have any questions regarding this matter, please contact me.

Sincerely yours,


Jim Hardage, Chemist
Division of Solid Waste Management

JH/dm

Enclosure



ENVIRONMENTAL PROTECTION SYSTEMS, INC.

P O Box 1519
2206 Old Mobile Hwy
Pascagoula Ms 39567
601-762-4842

P O Box 20382
106 Upton Dr
Jackson, Ms 39209
601-922-8242

LABORATORY REPORT

6/10

Client Mississippi State Board of Health

Location Jackson, Mississippi

Date 8/4/81

Invoice No. 5980

Date Collected _____ By Client _____

Date Received 7/10/81

Date Analyzed 7/10/81

LABORATORY SAMPLE IDENTIFICATION

81072350 - H-001

81072351 - H-001

81072352 - H-001

81072353 - H-002

ANALYSES

IDENTIFICATION NUMBER

	2350	2351	2352	2353
Arsenic, Total, ppm	<0.02	----	----	0.03
Barium, Total, ppm	0.10	----	----	0.07
Cadmium, Total, ppm	0.09	----	----	<0.01
Chromium, Total, ppm	<0.01	----	----	<0.01
Chromium, Hexavalent, ppm	<0.005	----	----	<0.005
Lead, Total, ppm	<0.001	----	----	0.087
Mercury, Total, ppm	<0.002	----	----	<0.002
Selenium, Total, ppm	<0.01	----	----	<0.01
Silver, Total, ppm	0.17	----	----	<0.01
Oil and Grease, Total Recoverable, ppm	----	103	----	----
Delnav, ppm ¹	----	----	<0.10	----

COMMENTS

Analyses conducted in accordance with 40 CFR, Part 261, May, 1980, Test Methods for Evaluating Solid Waste. Analyzed by GC/MS.

CERTIFICATION

Cindy Keeple
Manager of Laboratory Services



E. C. McGriff, Jr.
E. C. McGriff, Jr., Ph.D., P.E., Director

ENVIRONMENTAL PROTECTION SYSTEMS, INC.

P O Box 1519
2206 Old Mobile Hwy
Pascagoula, Ms 39567
601/782-4842

P O Box 20382
106 Upton Dr
Jackson, Ms 39209
601/922-8242

LABORATORY REPORT

7/10

Client Mississippi State Board of Health
 Location Jackson, Mississippi Date Collected 7/10/81 By Client
 Date 8/4/81 Date Received 7/10/81
 Invoice No. 5980 Date Analyzed 7/10/81

LABORATORY SAMPLE IDENTIFICATION

81072354 - H-002

ANALYSES

IDENTIFICATION NUMBER

ANALYSES	IDENTIFICATION NUMBER			
	2354			
Delnav, ppm ¹	<0.10			

COMMENTS

CERTIFICATION

Cindy People
Manager of Laboratory Services



E. C. McGriff, Jr.
E. C. McGriff, Jr., Ph.D., P.E., Director

U.S. ENVIRONMENTAL PROTECTION AGENCY SURVEILLANCE AND ANALYSIS DIVISION

REGION **IV**

ATHENS, GEORGIA

DISCHARGER _____ ADDRESS _____ CONTACT _____	SAMPLING STATION NO. _____ SAMPLING LOCATION _____
--	---

SAMPLE AND WASTE FLOW INFORMATION

SAMPLE MUN. IND. INF. EFF. _____ _____ HR. COMP. AT _____ MIN. INTERVALS FLOW PRO.
 SAMPLER EPA DISCHARGER MAN. AUTO. TYPE _____
 FLOW EPA DISCHARGER AVG. INST. EST. _____ EQUIP. _____
 COMPUTED FROM _____

SAMPLE COLLECTION

	COMPOSITE	GRAB SAMPLES				SAMPLE CODE ¹²
SAD NO.						BACTERIAL 0
DATE	/ /	7/12/81				BOD, COD, TOC 1
TIME	/	1330				CYANIDE 2
FLOW () ¹¹						METALS 3
TEMPERATURE °C						N, P 4
pH						ORG, O&G, PEST 5
TOT. Cl ₂ RES, mg/l						PHENOLS 6
						SOLIDS 7
						8
SAMPLE CODE		SEE TAG				9
SAMPLED BY (Sig)		[Signature]				A
SEALED BY (Sig)		[Signature]				B
DATE AND TIME		7/12/81				PRESERVED P

¹¹ Use Avg. Flow for Composites and Inst. Flow for Grabs ¹² Circle or Indicate Analysis and Enter Numerical Code

SAMPLE CUSTODY AND SHIPPING INFORMATION

SAMPLES RELEASED TO (SIG) OR SHIPPED VIA	DATE	TIME	NO. CONT.	NO. CART.	RECEIPT NO.
			4		

REMARKS AND SKETCHES

- CONTAINERS -
 1 qt GLASS OIL / GREASE
 1 qt GLASS DELNAV
 1 pt. GLASS phenol
 1 pt. GLASS METALS (primary drinking water)
 4

U.S. ENVIRONMENTAL PROTECTION AGENCY SURVEILLANCE AND ANALYSIS DIVISION

REGION IV

ATHENS, GEORGIA

CHARGER _____	SAMPLING STATION NO. _____
ADDRESS _____	SAMPLING LOCATION _____
CONTACT _____	

SAMPLE AND WASTE FLOW INFORMATION

SAMPLE MUN. IND. INF. EFF. _____ _____ HR. COMP. AT _____ MIN. INTERVALS FLOW PROC

SAMPLER EPA DISCHARGER MAN. AUTO. TYPE _____

FLOW EPA DISCHARGER AVG. INST. EST. _____ EQUIP _____

COMPUTED FROM _____

SAMPLE COLLECTION

	COMPOSITE	GRAB SAMPLES				SAMPLE CODE 12
SAD NO.						BACTERIAL 0
DATE	/					BOD, COD, TOC 1
TIME	/					CYANIDE 2
FLOW () L						METALS 3
TEMPERATURE °C						N, P 4
pH						ORG, O&G, PEST 5
TOT. Cl ₂ RES, mg/l						PHENOLS 6
						SOLIDS 7
						8
SAMPLE CODE		SEE TAG				9
SAMPLED BY (Sig)		[Signature]				A
SEALED BY (Sig)		[Signature]				B
DATE AND TIME		7/9/81 1405				PRESERVED P

1 Use Avg. Flow for Composites and Inst. Flow for Grabs 12 Circle or Indicate Analysis and Enter Numerical Code

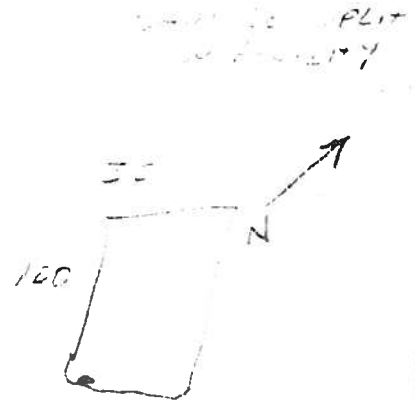
SAMPLE CUSTODY AND SHIPPING INFORMATION

SAMPLES RELEASED TO (SIG) OR SHIPPED VIA	DATE	TIME	NO. CONT.	NO. CART.	RECEIPT NO.
			2		

REMARKS AND SKETCHES

2 CONTAINERS TOTAL

1 QT GLASS DELNAV
 1 QT GLASS ~~Empty~~ ~~PL~~
 2 (primary drinking water metals)



SOLID WASTE MANAGEMENT BRANCH ACTIVITIES FORM

FACILITY NAME: Herowick Inc.
 FACILITY ADDRESS: West 7th Street
 FACILITY LOCATION: Hattiesburg, MS
 FACILITY CONTACT: MR Charles Jordan PHONE NO: 545-3480

Samples were collected from influent to primary treatment impoundment and from sludge impoundment pond. Samples were split with Mr. Charles Jordan who accompanied me during sample collection. Refer to lab report and photographs.

Jimi Hardage
 Signature of Inspector
Robert A. Lee

FACILITY ID NUMBER: M S D 0 0 8 1 8 2 0 8 1 1 DATE: 0 7 0 9 8 1 1

INSPECTOR (Single letter code): H K + MARK Koenig - EPA, Athens Lab

TYPE ACTIVITY (Enter code(s)): MO

- CI - compliance inspection
- FO - follow-up inspection
- CO - complaint investigation
- IS - interim status inspection
- SI - site investigation
- GB - geological boring
- TO - training operator
- MO - monitoring
- TA - technical assistance
- SR - special request
- OR - other (specify)

TYPE FACILITY (Enter code(s)): G W T R S L

- GN - generator
- TR - treater
- TP - transporter
- SS - storage (short-term)
- SL - storage (long-term)
- LF - landfill
- SF - sanitary landfill
- OD - open dump
- LM - landfarm
- LO - lagoon (impoundment)
- UI - UIC
- IN - incinerator
- PF - processing facility
- TS - transfer station
- OR - other (specify)

VIOLATIONS

Section No.	Subsection
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