

### MISSIS I DEPARTMENT OF NATURAL RES **Bureau of Pollution Control** P. O. Box 10385

Jackson, Mississippi 39209 (601) 961-5171



#### **MEMORANDUM**

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT: HERCULES, INC. - FORREST COUNTY - 0800-00001

DATE:

JANUARY 12, 1984

The referenced facility was inspected on the above date. Mr. Larry Polk was contacted at the time.

As may be seen from the enclosed V.E.E. records, there were a number of excursions above 40% from the boilers on the north stack, while the south stack maintained compliance levels throughout the V.E.E. Overall averages were 35% and 19% respectively.

An examination of the boiler operator's log revealed that only load changes were recorded as the cause of the excessive emissions, although Jimmy Vandevender stated that the north stack boilers were being cleaned between 10:00 and 11:00 A.M. None of the times recorded on the log seemed to correspond with the evidence of the V.E.E. record. The following was the information recorded on the log:

<u>#1</u>	<u>#2</u>	<u>#3</u>	<u>#4</u>
7:00 A.M. 8:10 A.M.	7:00 A.M. 8:20 A.M. 8:40 A.M.	7:05 A.M. 7:35 A.M. 9:45 A.M. 10:00 A.M. 11:00 A.M.	10:15 A.M. 10:30 A.M. 11:15 A.M.

Please let me know if you need any further information.

HEIDI MOWERY

reidi mower





# MISSIS PI DEPARTMENT OF NATURAL RES **Bureau of Pollution Control**

P. O. Box 10385 Jackson, Mississippi 39209

(601) 961-5171



#### MEMORANDUM

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT:

HERCULES, INC. - FORREST COUNTY - 0800-00001

DATE:

DECEMBER 9, 1983

A monthly V.E. Inspection of the above-referenced facility was conducted on the above date. Enclosed are copies of the V.E.E. records, which demonstrate overall averages of 33.26% for the north stack and 29.65% for the south stack at the time of my inspection. Please note the occurrence of excursions above 40%.

A conference with B. B. Golden and Jim Vandevender revealed that the boilers were running at 20% beyond their maximum load capacity (170,000 lb/hr total fuel load). A review of the daily boiler operators logs was not possible due to a fire that broke out in boiler #2, disrupting our meeting before I had the opportunity. However, as has been the case before, I would presume that they would not have given any more significant information than what I had already been told. I was unable to obtain any information about the boiler fire at that time. You may wish to investigate that matter yourself and let me know what you discover.

Please let me know if I may be of further assistance.



#### MISSIS PI DEPARTMENT OF NATURAL RES **Bureau of Pollution Control** P. O. Box 10385 Jackson, Mississippi 39209

(601) 961-5171



#### **MEMORANDUM**

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT:

HERCULES, INC. - FORREST COUNTY - 0800-00001

DATE:

NOVEMBER 9, 1983

While in the vicinity for other inspections, I noticed a very dense discharge coming from the south stack of Hercules, Inc., in Hattiesburg. The north stack was emitting a much lower opacity, in comparison. (Overall average of 11.3% VS 30.8%) Enclosed you will find the V.E.E. records from my November 9th inspection.

Mr. Byron Golden and Mr. Jim Vandevander were contacted and we discussed the possible causes of the excessive emissions. Mr. Vandevander suggested there may be a tube leak, but he's been unable to locate such in any of the lines of boiler #1, which is the specific problem unit, according to him. He also suggested that wet sawdust could be the cause of the emissions.

An examination of the boiler operator log for unit #1 revealed that only 3 entries had been made:

- (1) 9:00 A.M., 20 sec., fuel adjustment
- (2) 11:10 A.M., 40 sec., fuel adjustment
- (3) 12:50 P.M., 20 sec., fuel adjustment

None of these entries covers the time period during which I conducted the V.E.E., nor the duration of excess emissions that I observed. Mr. Vandevander said that I should have been able to hear a loud air horn each time an emission above 40% occurred. I did not hear any such sound. From this incident, one might assume that the boiler operator logs are not being kept accurately enough for our purposes.

Please contact me if any further assistance from me may be required.





# MISSIS DEPARTMENT OF NATURAL REPRES **Bureau of Pollution Control** P. O. Box 10385

Jackson, Mississippi 39209 (601) 961-5171



### **MEMORANDUM**

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT:

HERCULES, INC. - FORREST COUNTY - 0800-00001

DATE:

NOVEMBER 7, 1983

A monthly V. E. Inspection of Hercules, Inc., of Hattiesburg was conducted on the above date. Mr. Byron Golden was contacted at the time.

Both the north and south stacks were operating at an opacity level between 5% and 10% during several minutes' observation. All operations appeared normal during my inspection.

If anything further is needed, please contact me.





# MISSIS DEPARTMENT OF NATURAL RESPRES **Bureau of Pollution Control** P. O. Box 10385

Jackson, Mississippi 39209 (601) 961-5171



#### **MEMORANDUM**

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT:

HERCULES, INC. - FORREST COUNTY - 0800-00001

DATE:

OCTOBER 5, 1983

On the above date, a monthly V.E. Inspection was conducted at Hercules, Inc., of Hattiesburg. The resultant V.E.E. records are herein enclosed. Overall averages were as follows: 5.4% for the north stack and 55.2% for the south stack.

Discussion with Mr. Byron Golden revealed that boilers #1and #2 probably have a residual buildup inside them causing combustion problems. He suggested they may shut down to clean them. In addition, he informed me that oil other than their distillate waste oils, their usual boiler fuel, was being burned. It was not clear whether this was contributing to the opacity problem or not. Otherwise, all operations were normal during my inspection.

Please let me know if there is any further information needed.





FILE COPY

September 22, 1983

Tr. H. R. Buckley Tercules P.O. Box 1937 Hattiesburg, Mississippi 39401

Pear Mr. Buckley:

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

Enclosed please find Operating Permit No. 0800-00001 issued for the operation of the air emissions equipment at the above referenced facility. This permit emissions equipment at the facility. Operation of the air emissions equipment at the facility shall be in accordance with the conditions of the permit.

Any significant modification to this process or facility which will alter the rate or composition of air pollutant emissions will cause this permit to become invalid. Should you wish to make such a modification, it will be necessary to submit a new application for a construction permit.

This permit expires on Reptember 1, 1986. A new permit application must be submitted one hundred and eighty (180) days prior to this date in order to renew this permit.

If you desire that a Permit Board hearing be held regarding this permit, you should make written application to the Permit Board within thirty (50) days after receipt of this notice; otherwise, the terms, conditions and limitations in the permit shall become final.

If you have any questions or if we can be of service, please let me know.

Very truly yours,

Pon Vatts Pouth Air Pmissions Section

Thelesure





#### MISSIS I DEPARTMENT OF NATURAL RESERCES **Bureau of Pollution Control** P. O. Box 10385

Jackson, Mississippi 39209 (601) 961-5171



#### MEMORANDUM

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT: HERCULES, INC. - FORREST COUNTY - 0800-00001

DATE:

**SEPTEMBER 15, 1983** 

A monthly V. E. Inspection was conducted at Hercules, Inc., of Hattiesburg on the above date. Two separate sets of V.E.E.'s were necessary, all of which you will find enclosed.

A close inspection of these records will show a number of excursions above the 40% allowable emission level. The overall averages for the north stack were 19.61% and 46.51%, while the overall averages for the south stack were 35.42% and 54.24%. All operations appeared normal during my inspection.

Should you desire any more information, please contact me.





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

Hattiesburg, Mississippi August 29, 1983

Dwight K. Wylie P.E. Chief Air Division Bureau of Pollution Control P. O. Box 10385 Jackson, Mississippi 39209

Reference:

Permit Renewal

Facility No. 0800-0001

Hattiesburg, MS.

Gentlemen:

Please find our comments addressing the August 23, 1983, phone conversation with Mr. Dwight K. Wylie, P.E. Chief, Air Division, Bureau of Pollution Control and Mr. Harold Buckley, Plant Manager, Mr. Dave Smith, Production Manager, and Mr. Charles Jordan, Environmental Supervisor at the Hercules Hattiesburg, MS. facility.

After discussing in further detail the other requirements for our woodwaste boilers addressed in Mr. Wylie's, June 24, 1983, letter, to Mr. Buckley for increasing the amount of data available on boiler performance so that allegations by complainants of excessive emissions can be more rapidly and positively confirmed or refuted, we agree to the following:

We agree to having all of the visible emissions data, stack testing, and data reporting of these referenced methods incorporated into our new permit.

Since the opacity data is not a reference method we respectfully request that this requirement not be incorporated into our new permit. However, after discussing this requirement with Mr. Wylie, Hercules will commit itself to furnishing this opacity data to the state as described in the June 24, 1983, letter for our current woodwaste boilers.

If I can answer any questions please call me.

Very truly yours.

Charles Jordan

CSJ:ml



# MISSIS I DEPARTMENT OF NATURAL RESPRCES Bureau of Pollution Control P. O. Box 10385

Jackson, Mississippi 39209 (601) 961-5171



#### **MEMORANDUM**

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT:

HERCULES, INC. - FORREST COUNTY - 0800-00001

DATE:

AUGUST 15, 1983

A monthly V.E.E. Inspection was conducted on the above date at Hercules, Inc. in Hattiesburg. The opacity of the north and south stacks was observed for several minutes and was found to be 5-10%. All operations appeared normal during my inspection.

Please call if you need anything further.



Yovest FILE COPY

#### WINDSICK IN

m: Loyd Sharp

TROM: Twicht K. Tylie

TRIFCT: Mercules, Inc.
Mattiesburg, Mississippi

TATE: July 19, 1993

Attached is a memo to me concerning our efforts to locate another ambient air monitoring site around Hercules. Rased upon this, it is my feeling that we do not have much to cain by conducting any further ambient monitoring at this location. Our increased efforts at documenting opacity problems at Hercules will be much more beneficial.

If you or your people have any questions or wish to discuss this further, please give me a call.

new:er attachment



# MISSIS I DEPARTMENT OF NATURAL RESERVES **Bureau of Pollution Control** P. O. Box 10385

Jackson, Mississippi 39209 (601) 961-5171



#### **MEMORANDUM**

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT:

HERCULES, INC. - FORREST COUNTY - 0800-00001

DATE:

JULY 18, 1983

On the above date, I conducted a monthly inspection at Hercules, Inc., of Hattiesburg. The opacity of the two stacks was 15-20%, so a V.E.E. was conducted. (See attached records)

The overall averages were 12.2% for the north stack and 15.6% for the south stack.

Please let me know if you need anything further.



Hercules Incorporated West 7th Street

HERCULES

Dwight K. Wylie PE Chief Air Division Bureau Pollution Control P. O. Box 10385 Jackson, MS 39209

Reference: Permit Renewal

Facility No. 0800-00001

Hattiesburg, MS

Gentlemen:

Our comments on the proposed additional permit conditions you are presenting to the permit board for their consideration are as follows:

- 1-A After receiving the June 30, 1983 letter from Mr. Wayne Anderson, Coordinator, South Air Emissions Section, we have reevaluated our position on visible emission evaluations. Since he clearly states that the only accurate visible emissions data being recorded by Hercules is the data from the Method 9 observations, we will accept requirement 1-A in its entirety. However, since VE's are considered the only accurate data, we disagree with parts of requirements 1-B and 1-C because we feel that generating additional non-VE data is both costly and ineffective.
- 1-B We agree to maintain boiler operating logs in the control room to include the operational status of each boiler including start-ups, shut-downs, and/or grate cleanings, and other malfunctions for the period. The logs will be available for review by Bureau personnel. We do not agree with parts 2, 3, and 4 of requirement 1-B because VE's are considered the only accurate data.
- 1-C We agree to submit a monthly report detailing the compliance status of the boilers, including copies of all visible emissions evaluations in which any set of readings exceeds 40% opacity, each instance that VE's exceed 40% opacity for 2 minutes or longer during normal operations, and a copy of the operating log for each instance. We disagree with reporting all visible emission evaluations in which any reading exceeds 40% opacity because according to Federal Regulations "the use of sets (the average of 24 observations, each taken at 15 second intervals) of opacity data will preclude a single high reading from being cited as a violation".

. 9. Page 2 July 8, 1983 We agree in their entirety to requirements 1-D, 2, 3, 4, 5, and 6. We would be happy to discuss this in further detail. Very truly yours, Churchlery (mb) H. R. Buckley Plant Manager HRB:nb

#### MEMORANDUM

FILE COPY

TO:

Dwight K. Wylie

FRCM:

Don Watts

SUBJECT: Hercules, Inc.

110-0800-00001

Forrest County

DATE: July 7, 1983

On July 7, 1983, George Parker and I visited Hattiesburg to attempt to locate a suitable site for locating ambient air monitors. The site for the monitors must both meet the ambient air monitoring guidelines and be located in the area of maximum impact as predicted by the modelling previously performed by Connie Simmons. A copy of a map locating the maximum impact area is attached.

The South Office had previously identified possible site locations. reviewed those locations, but none met the ambient air monitoring guidelines. No other location which met the guidelines could be found in the area of maximum impact.

Since we already have more than a year's monitoring data for an area that is outside the area of maximum impact, I recommend that we not monitor.

DAW: cm Attachment

Hattimaburg, Mississippi 39401 Bear Mr. Jordan: Ret June 17, 1983, Letter Regarding Visible Emission Evaluation Performance This is in response to your comments in the subject letter. With regard to the problem of your observers recording only 20 of the 24 readings necessary to constitute a V.S. set, we understand that you will begin recording the full 24 readings. With regard to the number of sets of V.S.'s performed, it is correct that Sethod 3 does not mandate that three nets, or any other specific number of sets, be performed; however, as in any analytical procedure from which accurate date are needed, at least three repetitions are required to assure adequate depresentation of conditions. With regard to the monitoring of opacity by instrument, we do not feel that wither the opacity monitors or the TV monitors are, or can be, utilized to make accurate opacity determinations. The opacity monitors, as we understand, are used to datect excursions above the 40% opacity level and, while strip chart recordings of opacity are made, the accuracy and precision of the monitors have not been determined. The TV monitors, of course, cannot do more than give a general comparative judgement of opacity, and, while they can be, and probably are, of use to the operators in controlling the boilers, they cannot be considered to be providing opacity data. Therefore, we consider the only accurate visible emissions data being recorded to be the data from the lethod I observations. Ill instructions, requirements, and comments to date, including those we have proposed for inclusion in the new Permit to Operate, have been designed to accomplish the following: Inable Tercules personnel to be more coutinely aware of the compliance status of the hoilers and thereby improve operations and prevent excursions. live Hercules personnel the capability of monitoring opacity in the same manner as is done by the Bureau so that more "comparing of notes" could be done on events when epacities were high.

June 10. 1983

ir. Charles Jordan

lercules, Inc.

Box 1937

Invironmental Coordinator

FILE COPY

400-0001

Mr. Charles Jordan June 30, 1983 Page -2-

Increase the amount of data available on boiler performance so that allegations by complainants of excessive emissions can be more rapidly and positively confirmed or refuted.

We would be happy to discuss this in further detail if you wish. If you have any questions, please advise.

Yery truly yours,

Wayne B. Anderson, P. E., Coordinator South Air Emissions Section

/BA:els

cer Er. H. R. Buckley

Mr. L. G. Lund, Marcules, Inc., Lakes Charles, Louisians

June 24, 1983

Mr. H. R. Buckley
Aercules, Inc.
P. D. Box 1937
latticsburg, Mississippi 19401

Dear Mr. Buckley:

2e: Permit Benewal

Re: Permit Renewal Racility No. 0300-00001 Rattlesburg, Mississippi

As you are aware, we are in the process of preparing the new Permit to Operate for your facility. We have developed certain additional permit conditions that we feel are necessary and appropriate for inclusion in your permit. Before we present this permit to the Permit Board for their consideration, we are allowing you the opportunity to comment on the proposed conditions, a copy of which is anclosed. Please furnish your comments prior to July 10, 1983.

Please note that the first condition addresses the performance of visible emissions evaluations by your personnel. As these conditions were being drafted we received a latter from Mr. Charles Jordan, Invironment Coordinator, responding to our letter citing improper visible emissions evaluations by Hercules personnel. Mr. Jordan's comments were considered in the drafting of the conditions. Cur response to his comments will be forwarded by separate letter.

If you have any questions, please contact us.

Very truly yours,

Swight K. Wylie, P. S., Shier Air Division

DKW:DAW:hdb Inclosures co: Mr. L. 1. Lund, Rercules, Inc., Lake Charles, Louisians

# PART III OTHER REQUIREMENTS

- 1. For Emission Points 009 and 010, the following conditions shall apply:
  - A. The permittee shall perform a daily visible emissions evaluation on each stack, Monday through Friday. Each evaluation shall consist of three sets of six-minute readings with readings being made at 15-second intervals over the six-minute period for a total reading time of 18 minutes. These data shall be maintained on hand for review by Bureau personnel upon request.
  - B. The permittee shall maintain a boiler operation log book in the boiler control room. The log book shall include (1) the operational status of each boiler, including start-ups and grate cleanings, for the period; (2) the length of any opacity exceedance; (3) the reason for the exceedance; and (4) for monitor problems, a description of the problem, the steps taken to correct the problem, the length of time the monitor was out of service, and the time the monitor was placed back in service. The log book shall be maintained on hand for review by Eureau personnel upon request.
  - C. The permittee shall submit a monthly report detailing the compliance status of the boilers. The report shall include copies of all visible emissions evaluations in which any reading exceeds 40% opacity, and a copy of the log pages for each instance that opacity exceeds 40% for two minutes or longer.
  - D. The permittee shall demonstrate compliance of each boiler by stack sampling once per year during the months of March May. The boilers shall be fired with woodwaste representative of that listed in the application for permit renewal. The Bureau shall be notified at least 15 days prior to the test to ensure the availability of a test observer. A report of the stack test results shall be submitted within 30 days of completion of the testing.
- 2. For Emission Points 009, 010, and 011, 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 expiration of this Permit to Operate.

Operation of this facility at higher sulfur dioxide emission levels than in 1970 after expiration of this permit 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 occurs 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.

3. For Emission Point 012, the following additional condition will also apply:

Records of the operation of this 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.

4. For Emission Point 021, the following condition shall apply:

Since this unit is used for experimental purposes and emissions may change depending on the conditions of the experiments, reports shall be made to the Mississippi Bureau of Pollution Control semi-annually beginning July 1, 1983, 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.

5. For Emission Point 036, 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 off, estimated repair time, and action taken to preclude a recurrence.

6. 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 Eureau inspection or by complaints, additional control measures may be required.



110-0800-00001

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

June 17 1983

Dwight K. Wylie, P.E. Chief Air Quality Division P. O. Box 10385 39209 Jackson, Mississippi

Dear Dwight:

This reply is in response to the June 3, 1983 letter from your Mr. Don Watts to our Mr. Harold Buckley.

Our employees who attended the smoke reading school say they were instructed not to fill in the first line of the Time Form when reading Emissions Evaluations (VE's). They were told this by your people who conducted the school, however, we can certainly start reading a total of 24 readings as the method calls for instead of 20.

In reference to your request for two additional sets of VE readings, the literature our employees were given, "Method 9-Visual Determination of the Opacity of Emissions from Stationary Sources," refers to recording observations in Section 2.4 page 4. The literature does not refer to three sets of readings. If our VE's are therefore not valid, it is because we have been reading them according to the instructions we received. Also, please remember that in addition to the VE readings, we have continuous opacity monitors and closed circuit TV monitors on our stacks.

At the recommendation of south office personnel, the boiler room operator is now entering the cause of each excursion on the logs when it occurs. We started doing this a couple of weeks ago.

We believe that the added readings would be redundant and would constitute inefficient use of an analyst's time. Please reconsider your request in light of the above comments and let us know your wishes. As usual, we intend to cooperate in every way possible. At the same time we must do so in an efficient and cost effective manner.

If I can answer any questions please call me.

Very truly yours,

Charles Jordan

Environmental Coordinator

June 3, 1983



Mr. Harold-Buckley Hercules, Inc. P. O. Box 1937 Hattiesburg, Mississippi 39401

Dear Mr. Buckley:

Re: Monthly Emissions Reports Facility No. 0800-00001 Hattiesburg, Mississippi

In reviewing the monthly emissions report and in the course of an inspection by our South Regional Office personnel, several items have come to our attention that need your immediate response.

First, the visible emissions evaluations (VE's) that your personnel have been doing are not being done according to EPA Method 9 and are, therefore, not valid. To obtain a single V.E. value, the observer should make observations at intervals of 15 seconds for a total six (6) minute period giving a total of 24 readings. These readings are averaged to obtain an average V.E. The readings should be repeated for a total of 3 sets (18 minutes total time). Please see that this is done beginning immediately.

Second, our South Office personnel were told that the information in the opacity logs for the boilers is not entered at the time the non-compliance occurs, but is entered later by someone other than the boiler operator. If that is the case, please explain how you can assure proper completion of this form, what records you use, etc. It was our understanding that the boiler log was being kept by the boiler operator as situations occurred.

If you have any questions, please contact us.

Very truly yours,

Don Watts
South Air Emissions Section

DW: cm



# MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES **Bureau of Pollution Control**

P. O. Box 10385 Jackson, Mississippi 39209 (601) 961-5171



# MEMORANDUM

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT:

HERCULES, INC./FORREST COUNTY/0800-00001

DATE:

MAY 25, 1983

On the above date, I inspected Hercules, Inc., in Hattiesburg. Both stacks showed minimal opacity while I observed them, about 5-10%.

Mr. Byron Golden met with me and confirmed that operations were normal.

If any further information is needed, please contact me.



FORREST

#### TEMORANDUM

FILE COPY

TO:

South Regional Office

FROM:

Don Watts

SUBJECT: Hercules, Inc.

110-0800-00001 Forrest County

Location of Ambient Air Monitor

DATE:

May 20, 1983

Attached is a map showing the location of the predicted maximum impact from Hercules.

Please locate several potential sites in the area of impact. For each site, please include directional photographs and a detailed drawing of the area within 150 feet. After this information has been gathered, return it to us for review.

If you have any questions, please contact us.

DW:hdb Attachment

FILE COPY

MEMORANDUM

TO: Loyd Sharp

South Regional Office

FROM: Dwight K. Wylie

SUBJECT: PROPOSED SCHEDULE FOR HERCULES VE'S

DATE: May 12, 1983

As we have discussed, we need to have an intensive day-long survey of opacities at Hercules. We would like to have this survey performed according to the steps given below:

- 1. Two South Regional Office people to arrive about sunrise. VE's to begin as soon as conditions allow. VE's to continue until dark.
- 2. Each person will do one stack during the entire day.
- 3. One 18-minute VE to be done each half-hour. If high opacities are noted during non-reading period, at least one six-minute reading should be done (additional).
- 4. The next day, SRO to check boiler room records for periods when grates being cleaned, new fire in boiler being built, or change in steam demand (load change). Also, SRO should check the excess emissions report for the day. Steam flow charts should be checked for steam production from each boiler during the day.

Vithin 3-4 weeks of performing this survey, we need to have another survey performed in the same manner as the one above.

If you have any questions, please let me know.

DKW: DW: cm

Forrest Cow

#### TEMORANDUM

FILE COPY

TO: South Regional Office

TROM: Dwight K. Wylie

SUBJECT: PROPOSED SCHEDULE FOR HERCULES VE'S

DATE: May 3, 1983

1. Two South Regional Office people to arrive about sunrise. VE's to begin as soon as conditions allow. VE's to continue until dark.

- 2. Each person will do one stack during the entire day.
- One 18-minute VE to be done each half-hour. If high opacities are noted during non-reading period, at least one six-minute reading should be done (additional).
- 4. The next day, SRO to check boiler room records for periods when grates being cleaned, new fire in boiler being built, or change in steam demand (load change). Also, SRO should check the excess emissions report for the day. Steam flow charts should be checked for steam production from each boiler during the day.

DKW:DW:cm





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

April 29, 1983

RECUIED

MAY 2 REC'D

DEPT OF NATURAL RESCURCE BUREAU OF POLLUTION CONTROL

Bureau of Pollution Control P. O. Box 10385 Jackson, Mississippi 39209

Attention: Don Watts

Dear Mr. Watts:

RE: OPERATING PERMIT NO. 0800-00001 HATTIESBURG, MISSISSIPPI

Please find the enclosed application for permit renewal.

If you have any questions please call me.

Very truly yours,

Charles Jordan

Environmental Coordinator

CJ:bs

**Enclosures** 





# MISSIS PI DEPARTMENT OF NATURAL RESURCES Bureau of Pollution Control

P. O. Box 10385

Jackson, Mississippi 39209

(601) 961-5171



#### MEMORANDUM

TO:

Dwight Wylie

FROM:

Don Watts

SUBJECT: PROPOSED SCHEDULE FOR HERCULES VE'S

DATE: April 29, 1983

 Two South Regional Office people to arrive about sunrise. VE's to begin as soon as conditions allow. VE's to continue until dark.

2. Each person will do one stack during the entire day.

3. One 18-minute VE to be done each half-hour. If high opacities are noted during non-reading period, at least one six-minute reading should be done (additional).

4. The next day, SRO to check boiler room records for periods when grates being cleaned, new fire in boiler being built, or change in steam demand (load change). Also, SRO should check the excess emissions report for the day. Steam flow charts should be checked for steam production from each boiler during the day.

DW:cl



#### MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES **Bureau of Pollution Control** P. O. Box 10385 Jackson, Mississippi 39209

(601) 961-5171



#### **MEMORANDUM**

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT:

HERCULES, INC.-Forrest County/ 0800-00001

DATE:

APRIL 26, 1983

On the above date, a full V. E. was conducted at Hercules, Inc., of Hattiesburg. Margaret Hase evaluated the north stack while I evaluated the south stack. Copies of each are attached.

While the south stack was emitting little smoke (overall average=8.75%) the north stack was found to be noncomplaint at times during the V.E. although the overall average was 29.5%.

Afterwards, we met with Charles Jordan briefly and were then referred to Byron Golden and Jim Vandevander, boiler room foreman. We were informed that boiler #1 was operative while boiler #2 was down (south stack) and that boilers #3 and #4 were running but with some difficulty. The reason given for the excessive opacity out of the north stack was insufficient oxygen levels when the waste oil was added to the boiler.

After our visit we noticed that the smoke out of the north stack had turned dark. Should you need any further information, please call.

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



# MEMORANDUM

TO:

DWIGHT WYLIE

FROM:

MARGARET HASE

SUBJECT: HERCULES, INC.-Forrest County-0800-00001

DATE:

MARCH 25, 1983

It is the carefully considered opinion of Loyd Sharp, Gray Carlisle, Dee Brown and myself that the above referenced facility should be examinded more thoroughly to determine if frequent episodes of noncompliance are occurring. We noted a definite improvement in stack emissions since we began using a High Volume Sampler near the facility. However, we are still being contacted by friends and relatives, who do not want to make a formal complaint, but live in Hattiesburg and tell us of dense emissions at night and in the early morning.

We agree that recent stack tests show that the boilers can be operated within established limits however, this does not show that they always do operate in compliance. Perhaps the presence of the sampler encouraged the company to be more conscientious of the operating condition of their boilers.

We would like to see more samplers located near the facility in positions more in-line with the prevailing winds than the previous sampler, which was located near one complainants residence. We already have the necessary equipment at our disposal and we are willing to set it up and maintain it

with your approval.

We would appreciate your attention in this matter and look forward Margaret Hase to discussing it with you.



# MISSISSI PI DEPARTMENT OF NATURAL RESCORCES Bureau of Pollution Control

P. O. Box 10385 Jackson, Mississippi 39209 (601) 961-5171



#### MEMORAN DUM

TO:

File

FROM:

Jesse Thompson, Jr.

SUBJECT: Stack Test at Hercules of Hattiesburg, Mississippi

DATE:

March 24, 1983

Facility No.: 110-0800-00001

On March 15 and 16, stack sampling was performed on Boilers Number 3 and 4. The sampling was conducted by Danny Russell of EML. The tests were conducted in accordance with the methods outlined in the Federal Register for Particulate Sampling. However, the location of the sampling ports did not meet the criteria set forth in Method 1. Pre-test discussions between the tester and the Bureau of Pollution Control concluded that the test be performed in the ductwork. I recommend that the test be accepted.

JTjr:cm





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



# MEMORANDUM

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT: HERCULES, INC.-FORREST COUNTY

DATE:

MAY 2, 1983

With regards to the April 26th, V. E. Examination conducted by Margaret Hase and myself.

We were informed by both Mr. Golden and Mr. Vandevander, that the opacity log submitted by Hercules to your office is not completed by the boiler operator at the time that noncompliance with opacity standards occur. Rather, Mr. Vandevander himself completes it at the end of the month. This is done, we were told, because the boiler operator is too busy and "can not express himself well in writing." Mr. Vandevander said that he relies on this operator's memory as well as his own experience to read the spikes on the graph and interpret them correctly.

In addition, the smoke out of the north stack had turned to black smoke after we had visited in the plant, the opacity of which was approximately 80%.

Should you need any further information, please contact me.

Forus

March 21, 1983

Mr. Joe Goldsmith 210 Mest 7th Street Mattiesburg, Mississippi 39401

Dear Mr. Goldsmith:

Re: Hercules, Inc. Hattiesburg, Hississippi

This letter is in response to comments you made during an investigation by our South Regional Office personnel of your complaint against Hercules.

As you are no doubt awars, high volume samplers (monitors) were operated from lovember 26, 1981 to January 24, 1983. The monitors were located in accordance with air monitoring guidelines established by the U. S. Environmental with air monitoring guidelines established by the U. S. Environmental Protection Agency. During this time, none of the samples exceeded the 24-hour Protection Agency. During this time, none of the samples exceeded the 24-hour Protection Agency. During this time, none of the samples exceeded the 24-hour Protection Agency. During this time, none of the samples exceeded the 24-hour Protection Agency. Additionally, Pational Ambient Air Quality Standard for particulate exceed the annual National Ambient Air Quality Standard for particulate exceeded the annual National Ambient Air Quality Standard for particulate exceeded the annual National Ambient Air Quality Standard for particulate exceeded the annual National Ambient Air Quality Standard for particulate exceeded the annual National Ambient Air Quality Standard for particulate exceeded the 24-hour protection of the samples were performed by our matter. Microscopic analyses of many of the samples were performed by our lab. These analyses showed no appreciable amount of flyash. The monitors were lab. These analyses showed no appreciable amount of flyash. He monitors were removed from the days the monitors were operating or when the monitors were removed from the days the monitors were operating or when the monitors were removed from the days the monitors were operating or when the monitors were removed from the days the monitors were operating or when the monitors were removed from the days the monitors were operating or when the monitors were removed from the days the monitors were operating or when the monitors were removed from the days the monitors were operating or when the monitors were removed from the days the monitors were operating or when the monitors were removed from the days the monitors were operating the days the monitors were

Hercules has completed emissions tests of their woodwaste boilers. The test results have been submitted for two of the boilers, and they show the boilers to be in compliance with our regulations. The emissions tests on the other two boilers were performed on March 15-16, 1983, and the test report is expected within three to four weeks.

Pursuant to our direction, Hercules has implemented a self-monitoring program involving both visible emissions evaluations and stack opacity monitors. The self-monitoring reports indicate that Hercules is in compliance.

Additionally, our South Office has been (and will continue) performing visible emissions evaluations on a monthly basis. Hercules has been in compliance on each inspection. With regard to visible emissions from the stacks at Hercules, each inspection 5.1.(b) of APC-S-1, a copy of which is enclosed. This please note Section 5.1.(b) of APC-S-1, a copy of which is enclosed. This allows Hercules to exceed 40% opacity for short periods of time several times a day.

Mr. Joe Goldsmith March 21, 1983

In conclusion, all the information we have indicates that Hercules is in compliance. We will continue our monthly inspections by the South Office, inspections by the main office on a regular basis, and the self-monitoring program by Hercules. If you have any questions, please contact us.

Yery truly yours,

Con Tatts Couth Air Cmissions Section

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# MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES **Bureau of Pollution Control**

P. O. Box 10385 Jackson, Mississippi 39209 (601) 961-5171



#### **MEMORANDUM**

TO:

DON WATTS

FROM:

MARGARET HASE

**SUBJECT: HERCULES, INC.-FORREST COUNTY** 

DATE:

MARCH 8, 1983

On the above date, Heidi Mowery and I went to Hercules, Inc,, in Hattiesburg for a monthly V. E. Evaluation, a copy of which is attached. No problems were noted during our inspection.

If you have any questions, please contact me.

MARGARET HAS





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



#### **MEMORANDUM**

TO:

DON WATTS

FROM:

HEIDI MOWERY

SUBJECT:

HERCULES, INC./FORREST COUNTY-0800-00001

DATE:

FEBRUARY 17, 1983

Hercules, Inc., of Hattiesburg was inspected by Margaret Hase and I on the above date. Charles Jordan was contacted at the facility, after we determined the opacity of both boiler stacks to be between 5 and 10%.

Should the need arise, please contact me.



FILE COPY February 11, 1983

Mr. Charles Jordan Hercules, Inc. P. O. Box 1937 Mattiesburg, Mississippi 59401

Dear Mr. Jordan:

Re: Facility No. 0800-00001 Hattiesburg, Mississippi

We have received the emissions reports for the woodwaste boilers for the month of December 1982, and have the following comments:

- Copies of each day's visible emission evaluations should be attached. Also, opacity for two different stacks can not be averaged to obtain an overall opacity.
- The Opacity Evaluation Table should indicate for each boiler the hours during the day that that boiler is operating. 2.
- Non-compliance periods of 10 minutes or more are indicated in the report on the following days: December 1, 3, 3, 11, 13, 14, 30, and 51, 1932. Please note that the only exception to the 40% opacity 1 limit is as provided in APC-S-1, Section 7.1.(b), i.e., start-up operations may produce darker emissions for up to fifteen (15) minutes per start-up in any one hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour day. Therefore, the report indicates that Hercules was out of compliance on each of these occasions, as well as other occasions of shorter duration during the month of December.
  - Then a problem develops with the opacity monitor, a description of the problem, the steps taken to correct the problem, the time the monitor was out of service, and the time the monitor was placed back 4. in service should be clearly given.

Please incorporate these comments into all future reports.

With regard to actual stack testing of the boilers, please submit the results of the stack test performed on October 25-26, 1982 by February 28, 1983. Also, a test date for the other two boilers needs to be set by that date.

If you have any questions or comments, please contact us.

Yery truly yours,

Jon Watts Couth Air Emissions Section



# MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES **Bureau of Pollution Control** P. O. Box 10385

Jackson, Mississippi 39209 (601) 961-5171



# **MEMORANDUM**

TO:

DON WATTS

FROM:

MARGARET HASE

SUBJECT:

HERCULES, INC.-FORREST COUNTY-0800-00001

DATE:

JANUARY 25, 1983

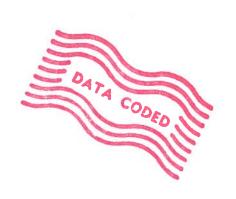
On the above date, Heidi Mowery and I went to Hercules, Inc.,

in Hattiesburg. We contacted Charles Jordan at the facility.

The opacities of both stacks were less than 5%.

If you have any questions, please contact me.

largaret Hase MARGARET HASE



# FILE COPY

# MEMO RANDUM

TO:

Phil Bass

TROM:

Don Watts

SUBJECT: Microscopic Analysis of Hi-Vol Cample

DATE:

December 14, 1982

Please have a microscopic analysis performed on the Hi-Vol sample taken October 26, 1982, from the Jefferson Davis Elementary School in Nattiesburg. The filter number is 2335838, the site number is 1040-732B, and the concentration was 104 mg/m<sup>3</sup>.

If you have any questions, please contact me.

DW: cl