



Hercules Incorporated 613 West 7th Street Hattiesburg, MS 39403 (601) 545-3450 Fax: (601) 584-3226 www.herc.com

July 3, 2003

Tony Russell, Chief Uncontrolled Sites Branch Bureau of Pollution Control P. O. Box 10385 Jackson, MS 39289-0385

Re:

Matter of Hercules Incorporated Hercules Plaza 1313 N. Market Street Wilmington, DE 19894-0001

Dear Mr. Russell:

Please find the following enclosures.

- 1) Mississippi Uncontrolled Site Voluntary Evaluation Program (VEP) Application Form.
- 2) DRAFT VEP, with minor changes, which we respectfully submit for your consideration.

If I can provide any additional information, please contact Charles Jordan at 601-545-3450, extension 360.

Very truly yours,

HERCULES INCORPORATED

Walter D. Langhans, Plant Manager

Enclosures

Phil Bass - MDEQ
Jerry Banks - MDEQ
Rick Sumrall - MDEQ
William McKercher - MDEQ
Gay Trovei - Hercules Incorporated
Tim Hassett - Hercules Incorporated
Charles Jordan - Hercules Incorporated

MISSISSIPPI UNCONTROLLED SITE VOLUNTARY EVALUATION PROGRAM (VEP) APPLICATION FORM

Application No.	

Applicant	Hercules Incorpor	ated				
Site Name:	Hercules Hattiesburg Plant					
Site Owner (If Different From Applicant)		3.5				
Address of Site (Street)	613 West 7th Stre	613 West 7th Street				
City of Site	Hattiesburg	County	Forrest		Z ip	39401
Contact Person:	Charles S. Jordan					
Mailing Address	613 West 7th Stre					
City	Hattiesburg	State	MS		Zip	39401
Email	cjordan@herc.com	Phone	601-584-3360	Fax	601-	584-3226
Brief Paragraph Describing Nature of Impacts (to Air, Soil, Groundwater, Surface Water), Chemicals of Concern, and Area Impacted	Site investigatio area and former o Dioxathion and VO	n-site l	active NPDES permi andfill. Chemica	t sludg ls of d	ge acci concer	mulation n are
Party Assuming Responsibility for M	DEQ Oversight Costs			•		·
Name	Hercules Incorpora	ated				
Address (Street and P.O. Box)	1313 North Market	Street			- 2	
City	Wilmington	State	DE		Zip	19894-0001
Contact Person	Tim Hassett					
Email	thassett@herc.com	Phone	302-995-3456	Fax	1 - TENEDO SE COMPOSITO	
Financial Contact (for Payment of M	DEQ Invoice)			,		
Firm	Hercules Incorpor	rated				
Address for Involce	1313 North Market	t Street				
City	Wilmington	State	DE		Zip	19894-0001
Contact Person	Tim Hassett	1942	2000 FL			
Email	thassett@herc.com	Phone	302-995-3456	Fax		
Environmental Consulting Firm						
Firm's Name	Eco-Systems, Inc					
Address	439 Katherine Dr		te 2A			
City	Jackson	State	MS		Zip	39232
Project Manager	Charles Coney					
Email	ecosys@earthlink	Prad ne	601-936-4440	Fax	601-	936-4463
Ciliali	1 acosystecur christin	.,,,,,,,,,				

FINANCIAL RESPONSIBILITIES
The Applicant agrees to pay to the Mississippi Department of Environmental Quality (MDEQ) all costs of the MDEQ associated with the administration and evaluation of the site under the Uncontrolled Site Voluntary Evaluation Program (VEP) at the rate of \$75.00 per hour. The hourly rate may be adjusted on an annual basis and the Applicant will be notified of any rate change prior to Implementation of the change.

The Applicant understands that it will be invoiced for all costs incurred by the MDEQ in the administration and evaluation of the Site on a thirty (30) day schedule. If any part of the costs is not paid within thirty (30) days after the due date, a penalty of up to twenty-five percent (25%) of the amount due may be imposed and be added to the amount due. In the event the MDEQ pursues legal action to collect costs incurred, the Applicant agrees to pay the reasonable attorney's fees and costs of the MDEQ associated with such an action. The Applicant further understands that the MDEQ will immediately cease the administration and evaluation of the Site, if the Applicant fails to pay any required costs or penalties imposed.

The information contained in this application is true and correct to the best of my knowledge and belie	The information contained	I in this application is	true and correct to	the best of my	knowledge and	bellef.
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Printed Name:	Walter D. Langhans	Signature:	5	
ATTACHMENTS				
ATTACIMILATIO				-best-ulleun Istoomootive

- 1 \$2,000 application fee, of which \$500 ic non refundable, in the form of a check or money order made payable to the Mississippi Department of Environmental Quality, and
- 2 Technical Submittal(s) (i.e., Site Characterization Work Plan; or Site Characterization Report and/or Corrective Action Plan).

BEFORE THE MISSISSIPPI COMMISSION ON ENVIRONMENTAL QUALITY

In re:	Matter of Hercules Incorporated Hercules Plaza	Order No.
	1313 N. Market Street	
	Wilmington, DE 19894-0001	

The Mississippi Commission on Environmental Quality ("Commission"), the Mississippi Department of Environmental Quality ("MDEQ") and Hercules Incorporated ("Hercules, Inc.") now enter the following agreement pursuant to the Uncontrolled Site Voluntary Evaluation Program ("Program") created in Miss. Code Ann. 17-17-54(2) (Supp. 1996), as follows:

- 1. Hercules, Inc. is the owner and operator of a chemical production facility ("siteSite") located near in Hattiesburg, Mississippi. MDEQ has reason to believe that conditions exist at the siteSite that warrant oversight by MDEQ. Hercules, Inc. has transmitted information regarding these conditions in the form of a United States Environmental Protection Agency Region IV Memorandum Results of Purgeable Organic analysis, dated August 8, 1992, a United States Environmental Protection Agency Region IV Memorandum Results of Extractable Organic Analysis, dated September 30, 1992 and a report from Bonner Analytical Testing Company entitled Monitoring Well Sampling Event, dated September 25, 1998.
- 2. The siteSite is an uncontrolled site within the purview of Miss. Code Ann. · 17-17-54. Hercules, Inc. desires to submit this site for participation in the Program. By this agreement, MDEQ accepts the siteSite for participation in the Program.
- 3. Hercules, Inc. agrees The Parties agree to the following terms and conditions of participation in the Program:

For at least the first twelve months in which this Agreed Order is effective, these costs will be calculated at the rate of \$75.00 per hour for each hour of MDEQ project officer time spent reviewing, assessing, investigating, reporting on, taking administrative action in regard to, analyzing or studying the siteSite or the information and plans regarding the siteSite submitted by Hercules, Inc., plus MDEQ's actual costs (above and beyond project officer time) for obtaining and analyzing split samples and additional samples deemed necessary by MDEQ. Analytical costs will be charged as shown on the relevant schedule of analytical costs, attached to this order as Appendix 1. MDEQ reserves the right to increase or decrease the per hour and analytical cost schedule at any time after the first twelve months in which this Agreed Order is effective. In case of such an increase or decrease, MDEQ will notify Hercules, Inc. in writing of the new cost schedule, and the new cost schedule will become effective forty-

HERCULES INORPOROATED Agreed Order Page No. 2

five days after the date of the written notice to Hercules, Inc. . If Hercules, Inc. determines to discontinue its participation in the Program for the siteSite after a change by MDEQ in the per hour and analytical cost schedule, Hercules, Inc. may terminate its participation in the program as is stated in paragraph 9, below. MDEQ will send an invoice to Hercules, Inc. on a monthly basis stating the program costs assigned to the siteSite that have not been paid prior to the date of invoice by Hercules, Inc., and Hercules, Inc. will pay that amount to MDEQ, for deposit into the Uncontrolled Site Evaluation Trust Fund ("Fund"), within 45 days following the invoice date.

- 4. MDEQ will expedite review and evaluation of the investigative assessments, work plans, remedial investigation plans, scopes of work, and remediation design plans submitted by Hercules, Inc. regarding the siteSite.
- 5. Hercules, Inc. will obtain on behalf of MDEQ access to the siteSite to be evaluated pursuant to this Agreed Order, whether the site to be evaluated is owned and/or operated by Hercules, Inc. or by a third party. If the sitearea to be evaluated includes property that is owned or operated by a third party, Hercules, Inc. will make reasonable efforts to provide to MDEQ within ten days of the execution of this Agreed Order by Hercules, Inc. determination that property not owned by Hercules will be evaluated, a copy of a document assuring MDEQ site access for the remainder of MDEQ's involvement with this siteSite. Reasonable efforts to obtain access does not include payment to the third party if the payment exceeds the fair rental rate for the property for the time which employees or contractors of Hercules or the MDEQ are physically present on such third party's property.
- 6. This agreement is not entered in lieu of any penalty or enforcement action that MDEQ or the Commission may otherwise take in regard to the siteSite or against Hercules, Inc. MDEQ and the Commission reserve the right to take any and all administrative and/or legal actions they deem necessary in regard to the siteSite and/or against Hercules, Inc. and Hercules reserves all rights to contest such actiona and defenses that may be available to it. Provided, however, that so long as Hercules is in compliance with the terms of this Order, MDEQ and the Commission shall refrain from bringing any enforcement against Hercules regarding any matters within the scope of this Order. This agreement does not represent the settlement or release of any liability of Hercules, Inc. for any action, inaction or property condition. Hercules, Inc. neither admits nor denies liability regarding the environmental condition of the siteSite. MDEQ accepts no responsibility by entering this agreement for activity taken at the siteSite or for the past, present or future condition of or contamination present at the siteSite.
- 7. If any part of any amount invoiced to Hercules, Inc. by MDEQ under this agreement is not paid within thirty days after the due date (seventy five days after the date of

HERCULES INORPOROATED Agreed Order Page No. 3

Hercules' receipt of the invoice), Hercules shall pay interest in the amount of 12% per annum and if more than two invoices in a row are more than 75 days late, a penalty of up to twenty-five percent of the amount due may be imposed by further order of the Commission and added thereto pursuant to Miss. Code Ann. 17-17-54(4). If MDEQ is required to pursue legal action to collect fees incurred, reasonable attorneys' fees and costs may be assessed against the nonpaying party.

- 8. MDEQ may suspend immediately any activities or actions related to the administration or evaluation of the uncontrolled site or sites that are the subject of this agreement if Hercules, Inc. fails to meet any condition or requirement of or violates any of the following: (1) This agreed order Agreed Order or any other order of the Commission pertaining to the siteSite to be evaluated pursuant to this Agreed Order; (2) Miss. Code Ann. 17-17-54 (Supp. 1996); (3) any rule or regulation promulgated by the Commission, or (4) any permit issued by the Mississippi Environmental Quality Permit Board.
- 9. Either Hercules, Inc. or MDEQ may terminate this agreement upon thirty days prior written notice to the other party. The effective date of the termination will be the thirtieth day after receipt by either party of a written notification of termination. Within thirty days of the effective date of termination, MDEQ will deliver to Hercules, Inc. an invoice for all work accomplished prior to the effective date of termination for which Hercules, Inc. previously has not remitted payment. Hercules, Inc. will pay the invoice amount to MDEQ, for deposit into the Uncontrolled Site Evaluation Trust Fund ("Fund"), within 3045 days following the invoice date. As of the effective date of termination, MDEQ will cease the expedited review of the siteSite, and MDEQ thereafter will determine whether and when to resume review of siteSite information within the normal time frame of the MDEQ uncontrolled sites program and Hercules will not be responsible for the payment of the costs of the MDEQ in reviewing the Site after the termination of this Agreement.

SO AGREED AND ORDERED, this 2002.	the day of
	Charles H. Chisolm Executive Director Mississippi Commission on Environmental Quality
AGREED, this the day of _	, 2002.
Hercules Incorporated	
BY:	
TITLE: Hercules, Inc.	 -
STATE OF	
COUNTY OF	
PERSONALLY appeared before in and for the jurisdiction aforesaid, to	ore me, the undersigned authority a Notary Put the within named upon his/her oath and acknowledge to me that
PERSONALLY appeared before in and for the jurisdiction aforesaid, to	the within namedupon his/her oath and acknowledge to me that
PERSONALLY appeared before in and for the jurisdiction aforesaid, to who first being duly sworn, did state the/she is the	the within named upon his/her oath and acknowledge to me that of Hercules , Inc. and is authorized by that
PERSONALLY appeared before in and for the jurisdiction aforesaid, to who first being duly sworn, did state the/she is the	the within namedupon his/her oath and acknowledge to me that
PERSONALLY appeared beform and for the jurisdiction aforesaid, to who first being duly sworn, did state he/she is the	the within named upon his/her oath and acknowledge to me that of Hercules , Inc. and is authorized by that

HERCULES INORPOROATED Agreed Order Page No. 5



STATE OF MISSISSIPPI

DAVID RONALD MUSGROVE, GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

June 11, 2003

Tim Hassett Hercules Incorporated Hercules Research Center 500 Hercules Road Wilmington, DE 19808-1599

FILE COPY

Re:

June 6, 2003 Meeting Follow-up Hercules Inc. Hattiesburg facility

Hattiesburg, Mississippi

Dear Mr. Hassett:

The staff of Mississippi Department of Environmental Quality (MDEQ) has discussed the requests made by Hercules, Inc during our meeting June 6, 2003. In response, MDEQ has the following comments:

- 1. Additional delineation samples addressed in Section 4.4 shall be analyzed for VOCs and Dioxathion.
- 2. MDEQ still requests that you collect groundwater samples from TP-1, TP-4, TP-5, and TP-11 for VOC, SVOC, and Dioxathion analysis. Further review of the Site Investigation Report Appendix B shows that the peizometers installed across the site are of one inch PVC pipe construction material with slotted screen intervals, completed with a sand pack and bentonite seal, appropriate construction for sample collection. Hercules may install additional monitoring wells at these locations to collect water samples if they prefer.
- 3. Rick Sumrall and Jan Patton, with Environmental Permits Division have requested that monitoring wells MW-4, MW-10, and MW-11 be sampled for VOCs and Dioxithion during the Work Plan for Supplemental Site Investigation (WPSSI) mobilization.
- 4. MDEQ has reason to believe that there may be drums buried on a portion of the site not within the former industrial landfill area as shown in the attached figure. MDEQ requests that during the geophysical investigation of the former industrial landfill area Hercules, Inc also investigate the alleged area by utilizing a grid no smaller than 50 ft by 50 ft. MDEQ personnel present at the site must be involved in the exact location of the grid at the time of investigation.

Mr. Tim Hassett June 11, 2003 Page 2

- 5. The Hercules Incorporated Hattiesburg Plant "Safety and Security Requirements for Contractors" states, "Taking photographs, making sketches, or writing descriptions of Company property or products, without prior approval, is prohibited." As this time, MDEQ formally requests permission from Hercules, Inc. to use a camera during its environmental investigation to photograph investigative measures as well as environmental anomalies as they may be encountered.
- 6. As discussed in the meeting, the Revised WPSSI shall be submitted for MDEQ review and approval by June 27, 2003.

Also discussed was the need for a more formal working arrangement. Included for your review are DRAFT copies of the Administrative Order and the Voluntary Evaluation Program (VEP) Order, as well as an application for the VEP program. As you will notice, there have been changes made to the VEP program which no longer call for an initial fee to enter the program.

MDEQ requests that Hercules, Inc. clearly notify MDEQ of its decision by June 27, 2003. If you have any questions or comments, please contact Mr. William McKercher at (601) 961-5731.

Sincerely,

William McKercher Project Manager

William Mc Kerchen

Tony Russell, Chief Uncontrolled Sites Branch

MRsell

Enclosures

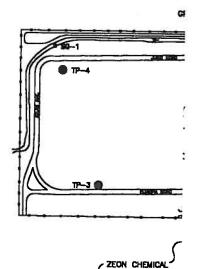
CC:

Jerry Banks - MDEQ
Phil Bass - MDEQ
Rick Sumrall - MDEQ
Walter Langhans - Hercules, Inc.
Gay Trovei - Hercules, Inc.
Charlie Jordan - Hercules, Inc.

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LIES 05/17/03 S.PHOJECTS/JER22173/DWGS/HER22173-DATAdwg





STAFF GAUGE LOCATION AND IDENT

BUSTOMER

TO RIVER

TO RIVER

CORPORATION

TP-12 • PIEZOMETER LOCATION AND IDENTIF

CM-1 - CREEK MEDIA SAMPLING POINT LOW

APPROXIMATE PROPERTY BOUNDARY SERVICE.

--- — APPROXIMATE BOUNDARY OF FORM LANDFILL AREA

NOTES

1. BASE MAP PROVIDED BY HERCULES, INCORPO

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SITE PLAN SHOWING DATA POINT LOCATIONS

PROJECT NO.
HER22173
CAD FILE
HER22173-DATA.dwg
FIGURE

HERCULES CHEMICAL CO. HATTIESBERG, MISSISSIPPI

2

BEFORE THE MISSISSIPPI COMMISSION ON ENVIRONMENTAL QUALITY

MISSISSIPPI COMMISSION ON ENVIRONMENTAL QUALITY

COMPLAINANT

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VS.

ORDER	NO.	

HERCULES, INC. P.O. BOX 1937 WEST SEVENTH STREET HATTIESBURG, MISSISSIPPI 39401

RESPONDENT

ORDER

The above captioned cause came before the Executive Director of the Mississippi Department of Environmental Quality this day for ex parte consideration under the authority of Section 49-2-13 of the Mississippi Code Annotated (Rev. 1990), and the Executive Director, having heard and considered the evidence therein, and having determined that an Administrative Order should be issued prefatory to any evidentiary hearing and without making any final adjudication of the fact or law, finds as follows:

1.

The Respondent is subject to Mississippi Code Annotated §§ 17-17-1 et. seq. (Rev. 1995 and Supp. 1998) and §§ 49-17-1 et. seq. (Rev. 1990 and Supp. 1998) and the rules and regulations of the Mississippi Commission on Environmental Quality (Commission).

2.

Respondent is the owner and operator of a chemical manufacturing business located in Hattiesburg, Mississippi. The facility has been in operation since 1923 and is situated on approximately a two hundred acre tract of land surrounded by industrial and residential properties. The site includes a wastewater treatment plant, a landfill, and settling ponds. Access to the site is controlled with a fence. Greens Creek flows from west to east across the northern portion of the site and discharges into the Bowie River. The site is within the recharge area for the Miocene Aquifer System.

3.

In 1993, B&V Waste Science and Technology Corp. conducted a site investigation in order to collect data on potentially hazardous environmental conditions at the site. The

investigation revealed the presence of two (2) hazardous constituents in the on-site soils above an action level: arsenic and dieldrin. Furthermore, numerous unidentified organic compounds were detected in the soils at elevated levels (500-20,000 mg/kg). The investigation of the groundwater also revealed the presence of the following four (4) heavy metals above the U.S. Environmental Protection Agency's maximum contaminant levels (MCLs): arsenic, barium, lead, and mercury.

4.

In 1998, sampling and analysis of groundwater revealed the presence of arsenic, chromium, and lead above the MCL's. The 1998 sampling and analysis of groundwater also detected two other hazardous substances: dioxathion and chlormephos.

5.

In December 2002, sampling and analysis of groundwater from monitoring wells MW-1 thru MW-11 confirmed the presence the hazardous substance dioxathion in groundwater. The investigation also revealed the presence of fourteen volatile organic chemicals present in groundwater at concentrations exceeding levels found to be protective of human health and the environment. These concentrations were verified thru confirmation samples collected in February 2003.

6.

On February 3, 2003, MDEQ requested that Hercules, Inc submit the following by a date later set as April 4, 2003:

- A. A geophysical survey work plan to define the horizontal extent of the former industrial landfill and confirm the presence or absence of buried drums,
- B. A Supplemental Site Characterization Work Plan to vertically and horizontally delineate the nature and extent of the groundwater contamination.
- C. A detailed Site Characterization Report.

7.

On April 24, 2003, MDEQ requested that Hercules, Inc resubmit their Work Plan for Supplemental Site Investigation to included requested modifications listed in said letter. The Revised Work Plan for Supplemental Site Investigation is to be submitted to MDEQ for review and approval by June 27, 2003.

8

Premises considered, the Executive Director finds that the Respondent has violated Miss. Code Ann. Section 49-17-29 (Rev. 1999) and applicable rules and regulations of the Commission.

IT IS, THEREFORE, ORDERED as follows:

A. Within 30 days of the date of this Order, Respondent must submit an INTERIM corrective action plan, which addresses the following in the order listed:

- 1) the hydraulic control and capture of any off-site contaminants,
- 2) the elimination of actual exposure to individuals (receptors),
- 3) the elimination or minimization of further plume expansion or migration,
- 4) the elimination of potential exposure to receptors, and
- 5) the reduction of concentrations of contaminants to levels protective of human health and the environment.
- B. Implement the INTERIM corrective action plan within 60 days of the date of this Order.
- C. Respondent must submit the Revised Work Plan for Supplemental Site Investigation to MDEQ for review and approval by June 27, 2003. It shall identify and define the extent of soil and groundwater contamination in the format prescribed by MDEQ. A proposed schedule must accompany the Site Characterization Work Plan indicating all phases of Site Characterization activities, including a proposed Site Characterization completion date.
- D. Respondent shall respond in writing to any comment letter from MDEQ concerning the Site Characterization Work Plan within thirty (30) days of the date of MDEQ's letter, unless otherwise approved by MDEQ. The Respondent's written response must address all items in MDEQ's comment letter.
- E. Respondent must begin implementation of the Revised Work Plan for Supplemental Site Investigation according to the schedule.
- F. Respondent must complete execution of the approved Revised Work Plan for Supplemental Site Investigation according to the schedule.
- G. Within 60 days of completion of the site characterization activities the Respondent must submit to the MDEQ a Site Characterization Report, in the format prescribed by MDEQ, detailing the findings developed as a result of implementation of the Revised Work Plan for Supplemental Site Investigation.
- H. Once MDEQ has issued a letter concurring that the site has been adequately characterized, the Respondent must submit to MDEQ for approval within forty-

five (45) days of the date of this concurrence letter, a FINAL Corrective Action Plan, in the format prescribed by MDEQ. A schedule must accompany the Corrective Action Plan, including all phases of Corrective Action activities.

- I. Once MDEQ has issued a letter concurring with the Corrective Action Plan, Respondent must implement the approved corrective actions within forty-five (45) days of the date of the letter of concurrence.
- J. Within thirty (30) days of the completion of any corrective action, Respondent shall submit a Corrective Action Report describing the activities and demonstrating compliance with remedial goals and objectives.
- K. Respondent must continue quarterly monitoring for the approved eight consecutive quarterly sampling events. Quarterly Groundwater Monitoring Reports must be submitted to MDEQ within 30 days of the actual sampling event.

9.

This Order does not address fines, penalties, other sanctions, further removal and/or remedial actions and/or future violations of environmental laws, rules and regulations. Nothing contained in this Order shall limit the rights of the Commission to take enforcement or other actions against Respondents for violations addressed herein, violations not addressed herein, fines, penalties, other sanctions, further clean up actions and/or future violations of environmental laws, rules and regulations.

10.

Violation of the environmental laws and regulations of the State of Mississippi can subject Respondent to penalties totaling up to \$25,000 per day per violation. The failure to comply with this order will be considered a continuing violation of those law and regulations, subjecting Respondent to further penalties of up to \$25,000 per day.

11.

If aggrieved by this Order, Respondent may request a hearing before the Commission by filing a sworn petition with the Commission within thirty (30) days after the date of this Order in the manner set forth in Miss. Code Ann. Section 49-17-41 (Rev. 1999).

ORDERED, this the	_ day of	, 2003.
		MISSISSIPPI COMMISSION ON ENVIRONMENTAL QUALITY
		BY: Charles H. Chisolm EXECUTIVE DIRECTOR MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

DRAFT Hercules Administrative Order 6-6-03



Application	No.

Applicant		· · · · · · · · · · · · · · · · · · ·	
Site Name:	5		
Site Owner (If Different From Applicant)			
Address of Site (Street)			, , , , , , , , , , , , , , , , , , , ,
City of Site	County		Zip
Contact Person:	-		We are a second of the second
Mailing Address			
City	State		Zip
Email	Phone	Fax	
Brief Paragraph Describing Nature of Impacts (to Air, Soil, Groundwater, Surface Water), Chemicals of Concern, and Area Impacted	* -		
Party Assuming Responsibility for MDEQ Oversight	Costs		
Name			
Address (Street and P.O. Box)	Fig. 1		
City	State		ZIp
Contact Person			
Emali	Phone	Fax	
Financial Contact (for Payment of MDEQ Invoice)			
Firm			
Address for Involce			
City Control of the C	State		Zip
Contact Person			
Email .	Phone	Fax	
Environmental Consulting Firm			
-irm's Name			
Address			1
City	State		Zip
Project Manager			
Emali	Phone	Fax	1
NANCIAL RESPONSIBILITIES The Applicant agrees to pay to the Mississippi Department of the site under the Uncontrolled Site Volunt inual basis and the Applicant will be notified of any response.	ent of Environmental Quality (MDEQ) all costs tary Evaluation Program (VEP) at the rate of \$ ate change prior to implementation of the chan	of the MDEQ associated with t 75.00 per hour. The hourly ra	te may be adjusted on an
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Printed Name:	Signature:		

- 1. \$2,000 application fee, of which \$500 is non refundable, in the form of a check or money-order made payable to the Mississippi Department of Environmental Quality, and
- 2. Technical Submittal(s) (i.e., Site Characterization Work Plan; or Site Characterization Report and/or Corrective Action Plan).

ATTACHMENTS

BEFORE THE MISSISSIPPI COMMISSION ON ENVIRONMENTAL QUALITY

In re: Matter of Hercules Incorporated Hercules Plaza
1313 North Market Street
Wilmington, DE 19894-0001

Order	No.		

DRAFT

The Mississippi Commission on Environmental Quality ("Commission"), the Mississippi Department of Environmental Quality ("MDEQ") and Hercules Incorporated, ("Hercules, Inc.") now enter the following agreement pursuant to the Uncontrolled Site Voluntary Evaluation Program ("Program") created in Miss. Code Ann. '17-17-54(2) (Supp. 1996), as follows:

- 1. Hercules, Inc. is the owner and operator of a chemical production facility ("site") located near Hattiesburg, Mississippi. MDEQ has reason to believe that conditions exist at the site that warrants oversight by MDEQ. Hercules, Inc. has transmitted information regarding these conditions in the form of a United States Environmental Protection Agency Region IV Memorandum Results of Purgeable Organic Analysis, dated August 8, 1992, a United States Environmental Protection Agency Region IV Memorandum Results of Extractable Organic Analysis, dated September 30, 1992, and a report from Bonner Analytical Testing Company entitled Monitoring Well Sampling Event, dated September 25, 1998.
- 2. The site is an uncontrolled site within the purview of Miss. Code Ann. ' 17-17-54. Hercules, Inc. desires to submit this site for participation in the Program. By this agreement, MDEQ accepts the site for participation in the Program.
- 3. Hercules, Inc. agrees to the following terms and conditions of participation in the Program:

For at least the first twelve months in which this Agreed Order is effective, these costs will be calculated at the rate of \$75.00 per hour for each hour of MDEQ staff and/or contractor time spent reviewing, assessing, investigating, reporting on, taking administrative action in regard to, analyzing or studying the Site or the information and plans regarding the Site submitted by Hercules, Inc., including MDEQ's actual costs (above and beyond staff/contractor time) for obtaining and analyzing split samples and additional samples deemed necessary by MDEQ. Analytical costs will be charged as shown on the relevant schedule of analytical costs, attached to this Order as Appendix 1. MDEQ reserves the right to increase or decrease the hourly rate and analytical cost schedule at any time after the first twelve months in which this Agreed Order is effective. In case of such an increase or decrease, MDEQ will notify Hercules, Inc. in writing of the new cost schedule, and the new cost schedule

will become effective forty-five days after the date of the written notice to Hercules, Inc. If Hercules, Inc. determines to discontinue its participation in the Program for the site after a change by MDEQ in hourly rate and analytical cost schedule, Hercules, Inc. may terminate its participation in the program as is stated in paragraph 9, below. MDEQ will send an invoice to Hercules, Inc. on a monthly basis stating the program costs assigned to the site that have not been paid prior to the date of invoice by Hercules, Inc., and Hercules, Inc. will pay that amount to MDEQ, for deposit into the Uncontrolled Site Evaluation Trust Fund ("Fund"), within 45 days following the invoice date.

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- 5. Hercules, Inc. will obtain on behalf of MDEQ access to the site to be evaluated pursuant to this Agreed Order, whether the site to be evaluated is owned and/or operated by Hercules, Inc. or by a third party. If the site to be evaluated is owned or operated by a third party, Hercules, Inc. will provide to MDEQ within ten days of the execution of this Agreed Order by Hercules, Inc. a copy of a document assuring MDEQ site access for the remainder of MDEQ's involvement with this site.
- 6. This agreement is not entered in lieu of any penalty or enforcement action that MDEQ or the Commission may otherwise take in regard to the site or against Hercules, Inc. MDEQ and the Commission reserve the right to take any and all administrative and/or legal actions they deem necessary in regard to the site and/or against Hercules, Inc. This agreement does not represent the settlement or release of any liability of Hercules, Inc. for any action, inaction or property condition. Hercules, Inc. neither admits nor denies liability regarding the environmental condition of the site. MDEQ accepts no responsibility by entering this agreement for activity taken at the site or for the past, present or future condition of or contamination present at the site.
- 7. If any part of any amount invoiced to Hercules, Inc. by MDEQ under this agreement is not paid within thirty days after the due date (seventy five days after the date of the invoice), a penalty of up to twenty-five percent of the amount due may be imposed by further order of the Commission and added thereto pursuant to Miss. Code Ann. '17-17-54(4). If MDEQ is required to pursue legal action to collect fees incurred, reasonable attorneys' fees and costs may be assessed against the nonpaying party.

- 8. MDEQ may suspend immediately any activities or actions related to the administration or evaluation of the uncontrolled site or sites that are the subject of this agreement if Hercules, Inc. fails to meet any condition or requirement of or violates any of the following: (1) This agreed order or any other order of the Commission pertaining to the site to be evaluated pursuant to this Agreed Order; (2) Miss. Code Ann. '17-17-54 (Supp. 1996); (3) any rule or regulation promulgated by the Commission, or (4) any permit issued by the Mississippi Environmental Quality Permit Board.
- 9. Either Hercules, Inc. or MDEQ may terminate this agreement upon thirty days prior written notice to the other party. The effective date of the termination will be the thirtieth day after receipt by either party of a written notification of termination. Within thirty days of the effective date of termination, MDEQ will deliver to Hercules, Inc. an invoice for all work accomplished prior to the effective date of termination for which Hercules, Inc. previously has not remitted payment. Hercules, Inc. will pay the invoice amount to MDEQ, for deposit into the Uncontrolled Site Evaluation Trust Fund ("Fund"), within 45 days following the invoice date. As of the effective date of termination, MDEQ will cease the expedited review of the site, and MDEQ thereafter will determine whether and when to resume review of site information within the normal time frame of the MDEQ uncontrolled sites program.

SO AGREED AND ORDERED, this the 2003.	day of,
	Charles H. Chisolm Executive Director Mississippi Commission on Environmental Quality
AGREED, this the day of	, 2003.
BY:	
TITLE: Hercules, Inc.	
STATE OF	<u>-</u>
COUNTY OF	
jurisdiction aforesaid, the within namedduly sworn, did state upon his/her oath	ne, the undersigned authority in and for the who first being and acknowledge to me that he/she is the orized by that Corporation to sign this Agreemen Hercules, Inc.
SWORN TO AND SUBSCRIBED	BEFORE ME, this the day o
	NOTARY PUBLIC
MAY COMMISSION EVEIDES:	

Page 4 of 4



STATE OF MISSISSIPPI

DAVID RONALD MUSGROVE, GOVERNOR MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

MEMORANDUM

TO:

Hercules, Inc - To File

FROM:

William McKercher

DATE:

October 21, 2002

RE:

Hercules, Inc. Meeting with MDEQ - June 6, 2003

1) Introductions – W. McKercher

Present:

MDEQ – Phil Bass, Jerry Banks, Tony Russell, Kelly Riley, Jan Patton, Rick Sumrall, Willie McKercher Hercules, Inc. – Tim Hassett, Gay Trovei, Walter Langhans, Charlie Jordan

- 2) Purpose J. Banks/ W. McKercher
 - Need for a more formal working arrangement
 - Administrative Order or Voluntary Evaluation Program
- 3) Review of Status and Site History T. Hassett
- 4) Discussion of Future Investigation of the Site Open Discussion
 - Overall objectives of the Uncontrolled Sites Branch
 - i. Perform a complete assessment of AOCs on the property
 - ii. Have Hercules put together a remediation plan
 - iii. Complete corrective actions at the site
 - 4/24/03 comment letter from MDEQ to Tim Hassett
 - i. #2 Hercules should report the MDL, not the PQL
 - ii. #6 Duplicates will be required on a 1 duplicate per 10 sample basis, ensuring that there is at least one duplicate per batch of samples sent to the lab.
 - iii. #12 MDEQ promised to review whether or not SVOCs should be required for the additional delineation samples.

- iv. #15 MDEQ promised to review the piezometer installation records to see if they were of a proper construction to allow for proper sampling. Response would be provided in a follow up letter to the meeting.
- Areas of Concern VOCs are the new driver for the investigation, however, Dioixthion is still a component of the investigation.
 - i. Former Industrial Landfill
 - 1. Geophysical investigation will be performed.
 - 2. Any anamolies will be investigated.
 - 3. Drums encountered shall be extracted, characterized and properly disposed of.
 - ii. Wastewater Sludge pits
 - 1. MDEQ promised we would determine if monitoring wells MW-4, MW-10, and MW-11 should be sampled again during the next round of work.
 - iii. Former Delnav Production Area
 - 1. Vertical and Horizontal delineation
 - 2. Confirm depth of confining layer.
 - 3. Continued monitoring to ensure no plume expansion or migration.
 - iv. Green's Creek
 - Collection of upstream sample where the creek enters the property.
 - v. Other areas of potential concern
 - Investigations taking place north of the facility
- Program Guidance
 - i. MDEQ Brownfield Regulations
 - ii. EPA Region IV Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (EISOPQAM)
- Communications
- 5) Review and Closure of Meeting W. McKercher

MDEQ will review the requests made by Hercules, Inc. and reply back with a follow-up letter to this meeting. Since they will be awaiting that letter for changes to be made to the Work Plan for Supplemental Site Investigation, the deadline for that report has been moved June 27, 2003.

Mississippi Department of Environmental Quality Meeting Attendees List

Date	June 6, 2003 Hercules, Inc. – Hattiesburg, MS Site		
Company & Site			
Location	101 Capitol Center		

Participant	Company Organization	Email Address	Phone Number
Jerry Banks	MDEQ	Jerry_Banks@deq.state.ms.us	(601) 961-5100
Kelly Riley	MDEQ	Kelly_Riley@deq.state.ms.us	(601) 961-5369
Tony Russell	MDEQ	Tony_Russell@deq.state.ms.us	(601) 961-5318
Rick Sumrall	MDEQ	Rick_Sumrall@deq.state.ms.us	(601) 961-5791
Jan Patton	MDEQ	Jan_Patton@deq.state.ms.us	(601) 961-5782
Willie McKercher	MDEQ	Willie_McKercher@deq.state.ms.us	(601) 961-5731
Christe Jenen	HEREAGES	CJURDANO HELE, COM	601 584 3360
Gay Tovei	Hercules	atroveicherc.com	302-995-3460
TIM HOSSET	'(+ HASSATIA HEAR. COM	302-995-345
LAU LANGHAW	. 1	WLANGHANKE HEAR. GOR	601-554-3226
Phil Bass	mora	Philabass odeg state ms. as	
		b	



May 23, 2003

Mr. Tony Russell
Environmental Engineer
Office of Pollution Control
Mississippi Department of Environmental Quality (MDEQ)
Jackson, Mississippi 39289-0385

Re: Response to Comments
Site Investigation Report
Hercules Incorporated
Hattiesburg, Mississippi
ESI Project No. HER22173

Dear Mr. Russell:

On behalf of Hercules, Incorporated (Hercules), Eco-Systems, Inc. (Eco-Systems) is pleased to submit the enclosed copies of the analytical data reports for the December 2002 sampling event. These reports were requested in your letter to Hercules dated April 24, 2003.

If you have any questions or require additional information, please do not hesitate to call Mr. Timothy Hassett at (302) 995-3456.

Sincerely,

Charles V. Coney, P.G.

Senior Scientist

cc: Timothy Hassett – Hercules, Inc.

C. S. Jordan - Hercules, Hattiesburg



WLanghans@Herc.com

05/22/03 04:19 PM

To: Willie_McKercher@deq.state.ms.us

Subject: Re: Possible meeting dates

That will work, thanks.

Willie_McKercher@deq.

state.ms.us

To:

WLanghans@Herc.com

cc:

CJordan@Herc.com,

GTrovei@Herc.com,

05/22/2003 01:27 PM

THassett1@Herc.com,

Tony Russell@deq.state.ms.us,

Jerry_Banks@deq.state.ms.us

Subject: Re: Possible

meeting dates

Thank you Walt. Let's set the official meeting time for 10:00 am on June 6, 2003. As requested, I will get with Tim to establish an agenda for the meeting to be distributed prior to June 6, 2003.

Willie McKercher

Mississippi Department of Environmental Quality

Phone: (601) 961-5731 Fax: (601) 961-5300

Willie McKercher@deq.state.ms.us

WLanghans@Herc.co

m

To:

Willie_McKercher@deq.state.ms.us

cc:

THassett1@Herc.com, GTrovei@Herc.com, CJordan@Herc.com

05/21/03 08:42 AM

Subject: Re: Possible

meeting dates

Willie,

I have checked with everyone and the best time for us will be June 6th 9 - 12.

I have copied Tim on this E-Mail and am asking that the two of you to author an agenda so we may all get the maximum benefit from the meeting by being prepared, thanks.

Walt

Willie McKercher@deq.

state.ms.us

To:

wlanghans@herc.com

cc:

05/19/2003 12:08 PM

Subject: Possible

meeting dates

Walter,

Here is a list of possible meeting times and dates. Please review them and get back to me as to which date will work for you and the other Hercules representatives to be present.

June 5 - meeting time within 9 - 12, 1 - 4

June 6 - meeting time within 9 - 12

June 13 - meeting time within 9 - 12, 1 - 3

You can call or simply respond by email. Thanks.

Willie McKercher

Mississippi Department of Environmental Quality

Phone: (601) 961-5731 Fax: (601) 961-5300

Willie McKercher@deq.state.ms.us



THassett1@Herc.com 05/23/03 12:46 PM

To: Willie_McKercher@deq.state.ms.us

Subject: draft Agenda

Willie,

Per our conversation today our main focus is to better understand the expected endpoint from MDEQ and establish groundrules and a process for getting there. The following is a draft agenda for the meeting June 6, 2003:

Introductions and purpose
Brief Recap of Site History
Discussion of the 4/24/03 Letter from MDEQ to Tim Hassett
Discussion of Future Investigation of the Site
 Overall Objective of Uncontrolled Sites Division
 Program Rules and Guidance
 Communications & Groundrules
Discussion of the need for a more formal working arrangement
 Voluntary
 Order
Path Forward

Please feel free to edit this to ensure we cover the issues that MDEQ wishes. Who will be at the meeting? You had mentioned that Phil Bass and Jerry Banks asked you to coordinate this meeting with Hercules.. will they be in attendance?

Tim Hassett
SHERA
Hercules Incorporated
Hercules Research Center
500 Hercules Road
Wilmington, Delaware 19808-1599
thassettl@herc.com
(302) 995-3456 phone
(302) 995-3485 fax



STATE OF MISSISSIPPI

DAVID RONALD MUSGROVE, GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

April 24, 2003

Tim Hassett
Hercules Incorporated
Hercules Research Center
500 Hercules Road
Wilmington, DE 19808-1599

FILE COPY

Re:

Site Investigation Report and Work Plan for Supplemental Site

Investigation, each dated April 2003 Hercules Inc. Hattiesburg facility Hattiesburg, Mississippi

Dear Mr. Hassett:

The Mississippi Department of Environmental Quality (MDEQ) has completed its review of the above referenced documents and has the following comments:

- The Site Investigation Report does not include the lab analytical data sheets for the December 2002 sampling event, which included the full round of groundwater sampling. These results were also not included in the Interim Groundwater Monitoring Report of January 2003. Please submit the subsequent lab analytical data sheets for the December 2002 sampling event for MDEQ review.
- 2. The lab analytical data sheets for the February 2003 sampling event state that the PQL was set at 10 ppb. This is not acceptable to MDEQ. As stated in prior communications, the detection levels must be set at a level that meets the MDEQ Tier 1 TRGs or provide rational as to why certain TRG concentrations cannot be met.
- 3. Table 1 of the Site Investigation Report does not include groundwater elevation data for monitoring wells MW-7 thru MW-11. All future potentiometric surface maps must include these five wells as well as those listed in Table 1.
- 4. Section 1 of the Sampling and Analysis Protocol for the Determination of Dioxathion in Water located in Appendix A should be modified to consistently reflect groundwater sampling with a peristaltic pump. Several mixed references to sampling with a bailer are made.

- 5. The Work Plan for Supplemental Site Investigation (WPSSI) groundwater portion does not include a figure detailing the initial temporary well locations. The report also does not state how many wells will be used in the initial investigation. It only states, "It is estimated that up to 15 groundwater samples may be collected, depending on site conditions." How was this number derived? A Revised WPSSI shall be submitted for MDEQ review and approval. The Revised WPSSI shall include the number of initial groundwater samples, a figure detailing their locations, and shall remove any statement putting a maximum on the number of samples necessary for delineation of groundwater contamination at the site.
- 6. Due to the "quickly as possible" analysis to be performed by Bonner Analytical, MDEQ would like to ensure sample quality by submitting blind duplicates at a rate of one blind duplicate per each five groundwater samples collected.
- 7. In a letter provided to you dated February 3, 2003, MDEQ stated, "Due to the elevated concentrations of VOCs detected in the shallow groundwater at the facility, MDEQ also requires Hercules, Inc. to submit a Supplemental Site Characterization Work Plan to vertically and horizontally delineate the nature and extent of the groundwater contamination..." The Revised WPSSI shall include discussion of the VERTICAL delineation of contamination as well.
- 8. Page 7, Section 4.3 of the WPSSI states, "A filter sock will be applied and secured to the screened interval prior to installation into the borehole." No details are given to the nature of the "filter sock". MDEQ does not allow filtered samples, and would in turn recommend the use of pre-packed sand screens. The use of the pre-packed sand screens instead of the filter socks would still allow the remainder of the installation to proceed as written.
- 9. To what depth will the temporary monitoring wells be advanced? Please provide answer and justification in the Revised WPSSI.
- 10. Page 8, Section 4.3.2 of the WPSSI incorrectly describes traditional volume-based purging. Traditional volume-based purging is accomplished by removing at least three full well volumes. Once this has been completed, the well may be sampled only after temperature, pH, conductivity, and turbidity have stabilized or the purge volume surpasses five well volumes.

- 11. Page 8, Section 4.3.2 of the WPSSI also states that ", groundwater to be collected for analysis will be sampled simply by collecting water from the discharge stream (tubing or bailer) directly into the Teflonlined containers for subsequent laboratory analysis." This is true while sampling for metals, semi-volatile organic compounds (SVOCs), pesticides, herbicides, and Dioxathion, however while sampling for volatile organic compounds (VOCs) with a peristaltic pump, the tubing must be extracted, then used to fill the sample containers because the fluids cannot be allowed to pass through the pump-head.
- 12. Additional delineation samples addressed in Section 4.4 shall be analyzed for VOCs, SVOCs, and Dioxathion.
- 13. Please include in the Revised WPSSI a figure detailing the boundaries of the grid for the geophysical investigation area.
- 14. Surface water and sediment samples collected from Green's Creek suggest that the highest concentrations of contaminants exist upstream. In order to confirm, MDEQ request that surface water and sediment samples be collected where Green's Creek enters the Hercules property for VOC and Dioxathion analysis, and that CM-1 be re-sampled for surface water VOC analysis.
- 15. In addition, MDEQ requests that you collect groundwater samples from TP-1, TP-4, TP-5, and TP-11 for VOC, SVOC, and Dioxathion analysis.
- 16.MDEQ requests that Bonner Analytical representatives not be present during sample collection. Bonner Analytical can prepare containers in advance and have labels ready, however, their presence during sampling interferes with their ability to objectively analyze blind duplicates. Since the Bonner Analytical office and laboratory is located in Hattiesburg, MS, arrangements can be made for delivery of samples to the lab at the end of each day. Furthermore, a labeling system for blind duplicates and rinsate samples should be submitted to MDEQ for approval in the Revised WPSSI.

Mr. Tim Hassett April 24, 2003 Page 4

Please be advised that additional sampling locations may be required as the investigation progresses. MDEQ requests that Hercules submit the subsequent lab analytical data sheets for the December 2002 sampling event by May 23, 2003. The Revised WPSSI reflecting the changes requested herein shall be submitted for MDEQ review and approval by June 13, 2003. If you have any questions or comments, please contact Mr. William McKercher at (601) 961-5731.

Sincerely,

William McKercher Project Manager Tony Russell, Chief Uncontrolled Sites Branch

CC:

Jerry Banks - MDEQ

illion Mc Kuch

Phil Bass - MDEQ

Walter Langhans – Hercules, Inc.

Gay Trovei – Hercules, Inc.

Charlie Jordan – Hercules, Inc.

Charles Coney – EcoSystems, Inc

K:\Shared\Brownfields\Wmckercher\Hercules\RE Site Investigation Report and WP.doc

April 4, 2003

Mr. Tony Russell, Chief Uncontrolled Sites Branch Mississippi Department of Environmental Quality Post Office Box 10385 Jackson, Mississippi 39289-0385

Re: Site Investigation Report Hercules, Inc. Hattiesburg, Mississippi

Dear Mr. Russell:

Please find enclosed two copies of the Site Investigation Report for the Hercules, Inc. facility located in Hattiesburg, Mississippi. This report is being submitted by Eco-Systems, Inc. on behalf of Hercules, Inc.

If you have any questions, please contact Tim Hassett at (302) 995-3456.

Sincerely,

Charles V. Coney, P.G.

Spence Trichell for

Senior Scientist

Caleb H. Dana, Jr., P.E., CHMM

delit to Dang, fr.

Senior Principal Engineer

Cc: Charlie Jordan, Hercules, Inc. Tim Hassett, Hercules, Inc.



April 4, 2003

Mr. Tony Russell, Chief Uncontrolled Sites Branch Mississippi Department of Environmental Quality Post Office Box 10385 Jackson, Mississippi 39289-0385

Re: Work Plan for Supplemental Site Investigation Hercules Incorporated Hattiesburg, Mississippi

Dear Mr. Russell:

On behalf of Hercules, Incorporated (Hercules), Eco-Systems, Inc. (Eco-Systems) is pleased to present this Work Plan for Supplemental Site Investigation for the Hercules facility located in Hattiesburg, Mississippi. Please find enclosed two copies of the work plan.

If you have any questions, please contact Mr. Tim Hassett at (302) 995-3456.

Sincerely,

Sponcor Trickell for Charles V. Coney, P.G.

Senior Scientist

Caleb H. Dana, Jr., P.E., CHMM

sees & Dane, fr.

Senior Principal Engineer

Cc: Charlie Jordan, Hercules, Inc. Tim Hassett, Hercules, Inc.



Hercules Incorporated Research Center 500 Hercules Road Wilmington, DE 19808-1599 (302) 995-3000 www.herc.com

March 7, 2003

VIA FAX AND MAIL

Mr. William McKercher Mississippi Department of Environmental Quality 101 West Capitol Street P O Box 10385 Jackson, MS 39289-0385

RE: Hercules Hattiesburg Plant

Dear Mr. William McKercher

DEQ-OPC

FILE COPY

This letter is document our conversations during this week, to provide an update to the Mississippi Department of Environmental Quality (MDEQ) on recent field activities and to provide a written response to the letter from Tony Russell dated February 3, 2003. The following is a summary of the issues discussed.

Field Activities and Status Report

Monitoring wells MW- 4, MW-8, MW-9 and MW-11 were re-sampled and analyzed for Volatile Organic Compounds (VOC's) per EPA method SW-846 8260. The staff gauges in Green's Creek have been reinstalled and surveyed. The surface water and sediment samples at stations CM-1 and CM-5 were collected and analyzed for VOC's per SW-846 8260 and dioxathion per the soil and groundwater protocol. All of the above activities were completed by 3/5/03. The results of the re-sampling of MW- 8 for VOC's confirms the earlier results obtained in December 2002. A detailed report of these activities and results will be submitted to MDEQ on or before April 4, 2003.

Site Investigation Workplan

On or before April 4, 2003, a workplan will be submitted to MDEQ which will include a plan to conduct a geophysical survey of the former industrial landfill area and a plan to delineate the vertical and horizontal extent of groundwater contamination in the vicinity of the elevated concentration of VOC's. Hercules requests a meeting with MDEQ approximately two weeks after the workplan is submitted to MDEQ, to discuss the technical approach to this project.

Analytical Issues

As per our conversation today, Hercules is willing to reimburse Mississippi State University (MSU) for labs costs incurred in connection with the validation of the analytical protocols for dioxathion. Please send or have MSU send me the invoice.

TDH/ijc

Mr. William McKercher March 7, 2003 Page 2

Please contact me (302) 995-3456 or Charlie Jordan (601) 545-3450 ext. 3360 if you have any questions.

Sincerely,

Timothy D. Hassett Hercules Incorporated

Staff Environmental Engineer

cc:

Mr. Tony Russell - MDEQ C. S. Jordan - Hercules/Hattiesburg W. D. Langhans - Hercules/Hattiesburg G. R. Trovei - Hercules/SHERA Caleb Dana - EcoSystems File: Hattiesburg #102



HERCULES INCORPORATED FAX MESSAGE

Research Center 500 Hercules Road Wilmington, DE 19806-1599

o: Wil	Wam McRo	0		
	- Deboj 1.	rcham_ fa	x no. <u>601-</u>	961-5300
		FA	X No	
ROM:	Timothy D. Hassett SHERA Departmen		Telephone FAX NO.	(302) 995-3485
E:				
ÆSSAGE:	FYI		s	
		lim		
	•			

on guidelines given in SW-846 Method 8000B was met. Table 2 illustrates the raw data obtained in this analysis.

Table 2-Raw Data

Lab ID	Description	Dioxenethion	Dioxathion	Dioxathion	Surrogate
	1	1	(cis)	(trans)	Recovery
BT82042	CM-5 Water	3.07ppb	ND	ND	82.8%
BT82043	CM-5 Soil	ND.	ND	448 ppb	36.2%
BT82044	CM-4 Water	1.19 ppb	ND	ND	42.2%
BT82045	CM-4 Soll	ND	ND	ND	47.4%
BTB2046	CM-3 Water	3.16 ppb	ND	ND	65.4%
BT82047	CM-3 Soli	ND	ND	1370 ppb	59.8%
BT82048	CM-3 Water Duplicate	2.93 ppb	ND	ND	62.6%
BT82049	CM-3 Soil Duplicate	ND	ND	3.18 ppb	61.8%
BT82050	CM-2 Water	ND	8.72 ppb	ND	89.8%
BT82051	CM-2 Soil	סא	ND	ND	59.4%
BTB2052	CM-1 Water	ND	ND	ND	85.2%
BT82053	CM-1 Sall	ND	ND	790 ppb	58.4%
BT82058	Rinsate Blank	ND	ND	ND	89.4%

All soil samples are reported on a dry weight basis.

All samples were spiked with naphthalene (surrogate) prior to extraction. The surrogate was added to follow the extraction efficiency of the method. A method blank, lab control sample, matrix spike, matrix spike duplicate, and a sample duplicate were extracted with both water and soil batches to follow QA/QC procedures. All QA/QC data were found to pass guidelines according to EPA Method 8000, with exception to the soil sample and it's duplicate. The CM-3 soil sample was found to contain 1370 ppb of the dioxathion trans-isomer and the CM-3 duplicate was found to contain 3.18 ppb, both of which are reported as a dry weight basis. Upon examination of the actual samples, it was observed that the samples were of two different physical properties. CM-3 was of a sand and rocky consistency and the CM-3 duplicate was of a gray sand and sediment consistency. Therefore, it is believed that the samples were collected separately and not homogeneously mixed before transfer to sample containers.

Authorized by_

Michael S. Bonner, Ph. D.



Hercules Incorporated
Research Center
500 Hercules Road
Wilmington, DE 19808-1599
(302) 995-3000
www.herc.com

March 7, 2003

VIA FAX AND MAIL

Mr. William McKercher Mississippi Department of Environmental Quality 101 West Capitol Street P O Box 10385 Jackson, MS 39289-0385

RE: <u>Hercules Hattiesburg Plant</u>

Dear Mr. William McKercher

This letter is document our conversations during this week, to provide an update to the Mississippi Department of Environmental Quality (MDEQ) on recent field activities and to provide a written response to the letter from Tony Russell dated February 3, 2003. The following is a summary of the issues discussed.

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Analytical Issues

As per our conversation today, Hercules is willing to reimburse Mississippi State University (MSU) for labs costs incurred in connection with the validation of the analytical protocols for dioxathion. Please send or have MSU send me the invoice.



THassett1@Herc.com 03/07/03 03:56 PM

To: 6019615300.hercfax@Herc.com, Willie_McKercher@deq.state.ms.us

Subject: Hattiesburg Site Update

March 7, 2003

VIA FAX AND MAIL

Mr. William McKercher Mississippi Department of Environmental Quality 101 West Capitol Street P O Box 10385 Jackson, MS 39289-0385

RE: Hercules Hattiesburg Plant

Dear Mr. William McKercher

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TDH/ijc Hburg6

Mr. William McKercher

March 7, 2003 Page 2

> Please contact me (302) 995-3456 or Charlie Jordan (601) 545-3450 ext. 3360 if you have any questions.

> > Sincerely,

Timothy D. Hassett Hercules Incorporated Staff Environmental Engineer

cc:

Mr. Tony Russell - MDEQ

C. S. Jordan ? Hercules/Hattiesburg

W. D. Langhans ? Hercules/Hattiesburg

G. R. Trovei ? Hercules/SHERA

Caleb Dana - EcoSystems File: Hattiesburg #102



STATE OF MISSISSIPPI

DAVID RONALD MUSGROVE, GOVERNOR MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

MEMORANDUM

TO:

Hercules, Inc - To File

FROM:

William McKercher

DATE:

February 12, 2003

RE:

Site Visit – February 11, 2003

On Tuesday, February 11, 2003, I witnessed the sampling of surface water and sediment sample locations CM-3, CM-4, and CM-5 at the Hercules, Inc. facility in Hattiesburg, MS.

Present for sampling were:

Glen Jones – Bonner Analytical Spencer Trichell – EcoSystems, Inc James Hall – EcoSystems, Inc William McKercher – MDEQ

Surface water VOC samples were collected by filling a sterile container into the creek at the specified location, then using the collected water to fill the 40 mL VOC vials. Dioxithion surface water samples were collected by simply dipping the one liter amber bottles into the creek, careful not collect surface debris such as leaves, etc. TOC surface water samples were collected in the same manner using plastic 8 oz. jars.

Sediment samples for dioxithion analysis were collected by Trichell using a decontaminated stainless steel trowel, then placed in 8 oz amber glass jars. Sediment samples for TOC analysis were collected in the same manner. Sediment samples for VOC analysis were collected using a syringe that collected the sediment, and then the sediment was placed in a 40 mL vial with 5 ml of methanol.

At CM-4, the bank on the landfill side of the creek had obvious soil staining from groundwater flowing from the landfill. The staining was of two distinct different types. The most prevalent staining is the easily recognizable iron staining, a result of the darkly colored groundwater as witnessed in MW-5. The second type of noticeable staining is a very glossy sheen that has bound to the soils and appears to be of a very low viscosity. The geology apparent appears that there is a very solid clay layer five to seven feet bgs.



THassett1@Herc.com 10/01/2002 09:45 AM

To: Willie_McKercher@deq.state.ms.us

Subject: EPA Contact

Willie,

The following is the EPA contact farrier.brian@epamail.epa.gov

We are looking for the instrument out put of the Geophysical study that was performed at the Hattiesburg Plant for the ESI April 29, 1993. EPA's contractor was Black & Veatch and if EPA does not have that information I bet B&V does, it is just a matter of getting the right people and permission from EPA. – TDH

Tim Hassett SHERA Hercules Incorporated Hercules Research Center 500 Hercules Road Wilmington, Delaware 19808-1599 thassettl@herc.com (302) 995-3456 phone (302) 995-3485 fax



To: Rick_Sumrall@deq.state.ms.us

cc: Trey_Hess@deq.state.ms.us, Jan_Patton@deq.state.ms.us

Subject: Letters

Rick, thanks for the assistance with the Kilopascals conversion. Following our discussion, in which I ask if you had received the information we had sent relative to our earlier meeting, I noticed that I actually had two copies of one of the letters sent out on August 28th. In order to make sure you, Trey, and Jan received your intended copy, we are sending another copy in the mail just to make sure. Thanks.



August 28, 2002

Mr. Rick Sumrall
Mississippi Department of Environmental Quality
101 West Capitol Street
P O Box 10385
Jackson, MS 39289-0385

RE: Hercules Hattiesburg Plant

Dear Mr. Sumrall

As agreed to in the meeting between Hercules and Mississippi on August 16, 2002, we have updated and revised the soil and groundwater protocols earlier than anticipated and have sent them to Tony Russell and Willie McKercher for review and approval. Should you desire to obtain copy of either of these documents please contact me or perhaps obtain a copy from Mr. Willie McKercher.

Please contact me (302) 995-3456 or Charlie Jordan (601) 545-3450 ext. 3360 if you have any questions.

Sincerely,

Timothy D. Hassett Hercules Incorporated Staff Environmental Engineer

cc:

C. S. Jordan – Hercules/Hattiesburg W. D. Langhans – Hercules/Hattiesburg G. R. Trovei – Hercules/SHERA J. Patton - MDEQ T. Hess – MDEQ M. Williams – MDEQ

Hburg4

Mr. Tony Russell Page 2

W/o attachments Bcc:

B.J Hough – Hercules/SHERA R.L. Williams – Hercules/Legal



August 28, 2002

Hercules Incorporated Research Center 500 Hercules Road Wilmington, DE 19808-1599 (302) 995-3000 www.herc.com

VIA E-MAIL AND OVERNIGHT MAIL

Mr. Tony Russell
Mississippi Department of Environmental Quality
101 West Capitol Street
P O Box 10385
Jackson, MS 39289-0385

RE: Hercules Hattiesburg Plant

Dear Mr. Russell:

As agreed to in our meeting with MDEQ on August 16, 2002, attached are the revised versions of the soil and ground water protocols, updated and changed to reflect the use of High Performance Liquid Chromatography analytical methods. These protocols have been reviewed and approved by Mike Bonner, Bonner Analytical and Testing and we request your assistance in getting these approved with Dr. Earl Alley, MSU. In order to expedite the schedule, we are prepared to collect the exploratory round of groundwater samples within two days following approval of the protocol by Dr. Alley. As requested, a report summarizing the installation of piezometers and wells is being submitted under a separate cover. We have also received an acknowledgment from EPA of our FOIA request from EPA that indicates they will send a copy of the Black & Veatch Environmental Site Investigation Report by September 17, 2002. We will forward this to you upon receipt.

Please contact me (302) 995-3456 or Charlie Jordan (601) 545-3450 ext. 3360 if you have any questions.

Sincerely,

Timothy D. Hassett

Hercules Incorporated

Staff Environmental Facility

Staff Environmental Engineer

TDH/ijc Hbugg4

Enclosed Attachments

Soil Protocol – 8/27/02 Groundwater Protocol 8/27/02 EPA – SW-846 –8321 A



To: Trey_Hess@deq.state.ms.us cc: Tony_Russell@deq.state.ms.us

Subject: Bench marks

Trey, you had ask about well elevations. As I recall your interest was in being able to correlate Hercules and Zeon data. I have spoken with Allen Flynt, Flynt associates, and he indicates he did the well survey work for **both** Hercules and Zeon. Allen told me the wells should be tied together, he discussed the benchmark on Zeon property, and we should have no problem tying everything together. I'm not a geologist, but I assume that means if the well depths are taken at the same time everything should be from the same datum. I trust this is what you were requesting. If not, please let me know your wishes. Thanks.

Mr. Tony Russell Page 3

cc:

C. S. Jordan - Hercules/Hattiesburg

W. D. Langhans - Hercules/Hattiesburg

G. R. Trovei - Hercules/SHERA

R. Sumrall - MDEQ

J. Patton - MDEQ

W. McKercher - MDEQ

T. Hess – MDEQ

M. Williams – MDEQ

C. Dana - Ecosytems

M. Bonner - BATCO

File: Hattiesburg #102





August 26, 2002

Hercules Incorporated Research Center 500 Hercules Road Wilmington, DE 19808-1599 (302) 995-3000 www.herc.com

VIA FAX AND OVERNIGHT MAIL

Mr. Tony Russell
Mississippi Department of Environmental Quality
101 West Capitol Street
P O Box 10385
Jackson, MS 39289-0385

RE: Hercules Hattiesburg Plant

Dear Mr. Russell

Hercules appreciates Mississippi Department of Environmental Quality (MDEQ) staff taking the time last week to meet with us. The following are the highlights of the meeting held at MDEQ's office August 16, 2002 and attended by the following people:

Hercules Incorporated	MDEO	
C. S. Jordan	T. Russell	
W. D. Langhans	R. Sumrall	
G. R. Trovei		
T.D. Hassett	J. Patton	
1.D. Hassett	W. McKercher	
	T. Hess	

1. Program Jurisdiction

Since Hercules is simultaneously addressing the sludge pits under MDEQ's solid waste and uncontrolled sites programs; we raised a concern about potentially receiving inconsistent or perhaps conflicting direction from MDEQ. We then indicated that we would like to coordinate the closure of the sludge pits under both authorities. During the meeting MDEQ acknowledged this concern and said that all communication, coordination and scheduling with MDEQ of the closure of the sludge pits will be through Mr. Rick Sumrall – Enforcement and Compliance, Chemical Division. Hercules agreed to send Ms. Jan Patton a report on how Hercules will manage sludge in the future by September 1, 2002. Ms. Patton also indicated that a closure plan would not be required until the dioxathion investigation was completed

2. Site Investigation - Status Review

For the benefit of all parties present, Hercules presented of events regarding MDEQ's soil and groundwater concerns starting with the Black and Veatch Environmental Site Assessment (1993) and continuing up to the present investigation focused on Dioxathion.

3. July 25, 2002 Letter (Russell to Hassett)

Following the status review, Hercules verbally addressed the July 25 letter from Tony Russell – MDEQ to Timothy Hassett – Hercules. The following is a summary of the MDEQ requests and mutually agreed actions.

- Request to send a well construction report Agreed. Will be delivered by 8/30/02.
- Request to run additional analyses Agreed. Hercules intends to use SW-846 methods 8260 for volatiles and 8270 for semivolatiles.
- Request for report within 45 days of completion of field activities Agreed to 60 days, provided that the results of split samples be supplied no later than one week prior to report due date.
- Request for sample containers Agreed.
- Request for geophysical survey of former industrial landfill Hercules distributed copies of a
 geophysical survey performed by Black & Veatch for review by MDEQ. Hercules also
 indicated that the entire report with appendices was requested from the EPA under the
 Freedom of Information act. Once this report is received, Hercules will conduct its own
 evaluation of the survey and present it to MDEQ for consideration.

4. Site Investigation - Implementation/ Path Forward

Hercules and MDEQ discussed the need for participation in MDEQ's Voluntary Evaluation Program as requested in the July 22, 2002 letter from Tony Russell - MDEQ to Timothy Hassett/Hercules. It was agreed by both parties that neither participation in MDEQ's Voluntary Evaluation Program nor an Administrative Order would be necessary at this time, provided that progress was made on completing the soil and groundwater investigation as described in the Ecosystems Site Investigation Workplan (February 16, 1999), and addenda (3/16/99, 12/27/99), by the end of 2002.

Please contact me (302) 995-3456 or Charlie Jordan (601) 545-3450 ext. 3360 if you have any questions.

Sincerely,

Timothy D. Hassett Hercules Incorporated

Staff Environmental Engineer



STATE OF MISSISSIPPI

DAVID RONALD MUSGROVE, GOVERNOR

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

September 3, 2002

FILE COPY

Mr. Timothy D. Hassett Staff Environmental Engineer Hercules Incorporated 500 Hercules Road Wilmington, DE 19808-1599

Re:

Hercules Plant Site

Hattiesburg, MS

Dear Mr. Hassett:

The Mississippi Department of Environmental Quality (MDEQ) has reviewed your letter dated August 23, 2002, and has the following comments:

- MDEQ requests that the evaluation of the geophysical survey conducted in the landfill area by Hercules be submitted by October 1, 2002.
- 2. It is apparent that Hercules misunderstood the discussion concerning the orders. On behalf of the Department, I stated that MDEQ would take Hercules' request for no administrative order being issued under consideration, and that MDEQ would let Hercules know their decision at a later date. I sent you an email yesterday stating that MDEQ meeting representatives discussed this issue after the meeting and determined that an order is appropriate. I also spoke with legal staff concerning the need for an order, and they also agreed that an order is appropriate. At this time, Hercules has the option to enter into an Agreed Order, or MDEQ likely will go forward with an Administrative Order.

Any questions you have concerning this matter may be directed to me at 601-961-5318.

Sincerely,

DA Rusell

Tony Russell, Chief Uncontrolled Sites Branch

cc:

Rick Sumrall ECED

Kelly Riley Legal

K:\Shared\UCSS\Tony\Hercules\Hercules DEQ req adm order 8-29-02.doc



Tony Russell

To: Willie McKercher/HW/OPC/DEQ@DEQ

09/03/2002 07:57 AM Subject: Bench marks

Tony Russell Mississippi Department of Environmental Quality Uncontrolled Sites Branch 601-961-5318

---- Forwarded by Tony Russell/HW/OPC/DEQ on 09/03/2002 07:46 AM -----



CJordan@Herc.com

To: Trey_Hess@deq.state.ms.us

08/30/2002 06:52 AM cc: Tony_Russell@deq.state.ms.us

Subject: Bench marks

Trey, you had ask about well elevations. As I recall your interest was in being able to correlate Hercules and Zeon data. I have spoken with Allen Flynt, Flynt associates, and he indicates he did the well survey work for both Hercules and Zeon. Allen told me the wells should be tied together, he discussed the benchmark on Zeon property, and we should have no problem tying everything together. I'm not a geologist, but I assume that means if the well depths are taken at the same time everything should be from the same datum. I trust this is what you were requesting. If not, please let me know your wishes. Thanks.



Tony Russell

08/29/2002 10:22 AM

To: earl@ra.msstate.edu Subject: Dioxathion Protocols

Dr. Alley,

Hercules has submitted the attached draft methods prepared by Bonner Lab for you to approve.

Could you let me know how long the approval may take as we need your review/approval before we will allow them to proceed with the sampling???

Tony Russell Mississippi Department of Environmental Quality Uncontrolled Sites Branch 601-961-5318

····· Forwarded by Tony Russell/HW/OPC/DEQ on 08/29/2002 10:06 AM ·····



THassett1@Herc.com

08/28/2002 03:16 PM

To: Tony_Russell@deq.state.ms.us, Willie_McKercher@deq.state.ms.us

cc: earl@ra.msstate.edu, batco@c-gate.net, CJordan@Herc.com, WLanghans@Herc.com, GTrovei@Herc.com, ecosys@earthlink.net

Subject: Dioxathion Protocols

