



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

July 7, 2014

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
AND VIA ELECTRONIC MAIL

Kristina M. Woods, Esq.
Law Department
Ashland Inc.
5200 Blazer Parkway
Dublin, Ohio 43017

Dear Ms. Woods:

Enclosed please find a file-stamped copy of the executed RCRA Section 3008(h) Administrative Order on Consent (Consent Order), in the matter of Hercules Incorporated, Docket No. RCRA-04-2014-4201(b). The Consent Order was signed by the EPA on July 3, 2014, making its effective date Tuesday, July 8, 2014.

If you have any questions, please feel free to contact me at (404) 562-8569. Legal inquiries should be directed to Colleen E. Michuda at (404) 562-9685. Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey T. Pallas".

Jeffrey T. Pallas
Deputy Director
RCRA Division

Enclosure: Consent Order, dated July 3, 2014

cc: Karl S. Bourdeau, Beveridge & Diamond, P.C., via electronic mail
John A. Brunini, Butler Snow LLP, via electronic mail

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HEARING CLERK

RCRA SECTION 3008(h) ORDER ON CONSENT

ISSUED TO

Hercules Incorporated

Docket No. RCRA-04-2014-4201(b)

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FIGURES

Figure 1 (Site Aerial Map)

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ATTACHMENTS

Attachment 1 (Administrative Record Index)

Attachment 2 (Interim Measures Scope of Work)

Attachment 3 (Sewer Scope of Work)

Attachment 4 (Data Management Memorandum)

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4**

IN THE MATTER OF:)	Docket Number: RCRA-04-2014-4201(b)
)	
Hercules Incorporated)	Proceeding under Section 3008(h)
613 W. 7 th Street)	of the Resource Conservation and
Hattiesburg, Mississippi 39401)	Recovery Act, as amended,
)	42 U.S.C. § 6928(h)
)	
EPA I.D. No: MSD008182081)	
)	
<u>Respondent.</u>)	

ADMINISTRATIVE ORDER ON CONSENT

I. JURISDICTION

1. This Administrative Order on Consent (“Consent Order”) is entered into pursuant to the authority vested in the Administrator of the United States Environmental Protection Agency (“EPA”) by Section 3008(h) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act of 1976 (“RCRA”), as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. § 6928(h). The authority vested in the Administrator to enter into orders under Section 3008(h) of RCRA has been delegated to the Regional Administrators by EPA Delegation Nos. 8-31 and 8-32, dated May 11, 1994, and has been further delegated by the Regional Administrator for Region 4 to the Deputy Director, RCRA Division, pursuant to Regional Delegation Nos. 8-31 and 8-32, dated August 18, 2010.

2. This Consent Order is entered into by the EPA and Hercules Incorporated (“Hercules”), a company organized under the laws of the State of Delaware. Hercules (“Respondent”) is an owner/operator of the Hercules facility, located at 613 W. 7th Street, Hattiesburg, Forrest County, Mississippi (“the Facility”). A map that generally depicts the Facility is attached hereto as Figure 1.

3. Respondent consents to and agrees not to contest the EPA’s jurisdiction to issue this Consent Order or to enforce its terms. Further, Respondent will not contest the EPA’s jurisdiction to compel compliance with this Consent Order in any subsequent enforcement proceedings, either administrative or judicial; to require Respondent’s full or interim compliance with the terms of this Consent Order; or to impose sanctions for violations of this Consent Order.

4. Respondent waives any rights to request a hearing on this matter pursuant to Section 3008(b) of RCRA, 42 U.S.C. § 6928(b), and 40 C.F.R. Part 24, and consents to the issuance of this Consent Order without a hearing pursuant to Section 3008(b) of RCRA as a Consent Order issued pursuant to Section 3008(h) of RCRA.

5. For purposes of this Consent Order only, and except as otherwise provided herein, Respondent waives any and all remedies, claims for relief and otherwise available rights to judicial or administrative review that Respondent may have with respect to any issue of fact or law set forth in this Consent Order, including any right of judicial review under Chapter 7 of the Administrative Procedure Act, 5 U.S.C. §§ 701-706, providing for review of final agency action.

6. The EPA and Respondent recognize that this Consent Order has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Consent Order do not constitute an admission of any liability, including, but not limited to, an admission that the Facility has ever operated subject to the interim status authorities under RCRA. Respondent does not admit, and retains the right to controvert in any proceeding (including, but not limited to, *City of Hattiesburg v. Hercules, Inc. and Ashland, Inc.*, Civil Action No. 2:13-cv-208KS-MTP, USDC, Southern District of Mississippi, Eastern Division), other than proceedings to implement or enforce this Consent Order, the validity of the EPA's findings of fact, conclusions of law, and determinations in Sections V (Findings of Fact) and VI (Conclusions of Law and Determinations) of this Consent Order, many of which Respondent disputes. Respondent agrees to comply with and be bound by the terms of this Consent Order and further agrees that it will not contest the basis or validity of this Consent Order or its terms.

II. DEFINITIONS

7. Unless otherwise expressly provided herein or listed below, terms used in this Consent Order, which are defined in RCRA, 42 U.S.C. §§ 6901-6992k, or in regulations promulgated under RCRA, shall have the definitions given to them in RCRA or in such regulations.

- a. Acceptable or acceptable, in the phrase "In a manner acceptable to the EPA..." shall mean that submittals or completed work meet the terms and conditions of this Consent Order, attachments, scopes of work, approved work plans, the EPA's written comments, and/or guidance documents identified by the EPA as being applicable to the Work performed pursuant to this Consent Order.
- b. Additional work shall mean any activity or requirement that is not expressly covered by this Consent Order or its attachments but is determined by the EPA to be necessary to fulfill the purposes of this Consent Order as presented in Section III (Statement of Purpose).
- c. Administrative Record shall mean the record compiled and maintained by the EPA supporting this Consent Order. An index of the Administrative Record for this Consent Order is included as Attachment 1. For information on the contents of the Administrative Record, see "Guidance on Administrative Records for RCRA 3008(h) Actions," OSWER Directive 9940.4 (July 6, 1989), and the EPA's "Action Development Process: Administrative Records Guidance" (Sept. 2011).
- d. Area of concern or AOC shall include any discrete contiguous area that is not a solid waste management unit (SWMU) and has a probable release of hazardous waste or

hazardous constituents that is determined by the EPA to pose a current or potential threat to human health or the environment. Although the Facility is currently

undergoing an investigation pursuant to a RCRA Section 3013 Order, no formal designation of AOCs has been made.

- c. CERCLA shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601-9675.
- f. Comply or compliance may be used interchangeably and shall mean completion of Work required by this Consent Order of a quality approvable by the EPA and in the manner and time specified in this Consent Order or any modification thereof, its attachments or any modification thereof, or written EPA directives. Respondent must meet both the quality and timeliness components of a particular requirement to be considered in compliance with the terms and conditions of this Consent Order.
- g. Contractor or contractor shall include any subcontractor, consultant or laboratory retained to conduct or monitor any portion of the Work performed pursuant to this Consent Order.
- h. Corrective Measures shall mean those measures or actions necessary to control, prevent, or mitigate the release or potential release of hazardous waste or hazardous constituents at or from the Facility into the environment, as necessary to protect human health and the environment.
- i. Data quality objectives shall mean the qualitative or quantitative statements, the application of which is designed to ensure that data of known and appropriate quality are obtained.
- j. Day or day shall mean a calendar day unless expressly stated to be a business day. Business day shall mean a day other than a Saturday, Sunday, or federal holiday. In computing any period of time under this Consent Order, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the end of the next business day.
- k. EPA or U.S. EPA shall mean the United States Environmental Protection Agency, and any successor departments or agencies of the United States.
- l. The Facility shall mean the Hercules Incorporated Facility located at 613 W. 7th Street, Hattiesburg, Mississippi. The Facility includes all contiguous property under the control of Respondent, as depicted on Figure 1. A "facility" shall have the meaning assigned to it in 40 C.F.R. § 260.10.
- m. Hazardous constituents shall mean those constituents listed in Appendix VIII to 40 C.F.R. Part 261 or Appendix IX to 40 C.F.R. Part 264.

- n. Hazardous waste shall mean hazardous waste as defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), or 40 C.F.R. § 260.10. This term includes hazardous constituents as defined above.
- o. Interim Measures or IM shall mean those actions which can be initiated in advance of implementation of the final corrective action for the Facility to achieve the goal of Stabilization. Interim Measures initiate cleanup at the Facility and control or eliminate the release of hazardous waste or hazardous constituents at or from the Facility as necessary to protect human health and/or the environment.
- p. Interim Measures Scope of Work or IM SOW shall mean the outline of work Respondent must use to develop all work plans and reports required by this Consent Order as set forth in this Consent Order and Attachment 2. The IM SOW and any modifications or amendments thereto are incorporated into this Consent Order and are an enforceable part of this Consent Order.
- q. MDEQ shall mean the Mississippi Department of Environmental Quality, and any successor departments or agencies of the State of Mississippi.
- r. RCRA shall mean the Resource Conservation and Recovery Act of 1976, as amended, 42 U.S.C. §§ 6901 *et seq.*
- s. Receptors or receptors shall mean those humans, animals, or plants and their habitats which are or may be affected by releases of hazardous waste or hazardous constituents from or at the Facility.
- t. Solid waste management unit or SWMU shall mean any discernible unit at which solid wastes have been placed at any time irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility where solid wastes have been routinely and systematically released. Although the Facility is currently undergoing an investigation pursuant to a RCRA Section 3013 Order, no formal designation of SWMUs has been made.
- u. Stabilization shall mean the goal or philosophy of controlling or abating immediate threats to human health and/or the environment from releases of hazardous waste or hazardous constituents and/or preventing or minimizing the migration of hazardous waste or hazardous constituents as necessary to protect human health and/or the environment while long-term Corrective Measures alternatives are being evaluated
- v. United States shall mean the United States of America and each department, agency, and instrumentality of the United States, including the EPA.
- w. Violations or violations of this Consent Order shall mean those actions or omissions, failures or refusals to act by Respondent that result in a failure to meet the terms and conditions of this Consent Order or its attachments.

- x. Work or obligation shall mean any activity Respondent must perform to comply with the requirements of this Consent Order and its attachments.
- y. Work plans shall mean the detailed plans prepared by Respondent to satisfy the requirements of this Consent Order.

III. STATEMENT OF PURPOSE

8. In entering into this Consent Order, the mutual objectives of the EPA and Respondent are to perform Interim Measures ("IM") at the Facility to mitigate and relieve threats to human health and/or the environment. Interim Measures are to be used whenever possible to achieve the initial goal of Stabilization while long-term Corrective Measures are evaluated and implemented as necessary to protect human health and the environment. Respondent is currently characterizing the full nature and extent of the contamination at the Facility pursuant to a RCRA Section 3013 Order, Docket No. RCRA-04-2011-4251, issued by the EPA on May 9, 2011 (hereinafter, "3013 Order").

IV. PARTIES BOUND

9. This Consent Order shall apply to and be binding upon the EPA and upon Respondent and Respondent's officers, directors, employees, agents, successors and assigns, trustees, receivers, and upon all persons, including but not limited to contractors and consultants, acting on behalf of Respondent.

10. No change in ownership or corporate or partnership status relating to the Facility will in any way alter Respondent's responsibility under this Consent Order. Any conveyance of title, easement, or other interest in the Facility, or a portion of the Facility, shall not affect Respondent's obligations under this Consent Order. Respondent will be responsible for and liable for any failure to carry out all activities required of Respondent by the terms and conditions of the Consent Order, regardless of Respondent's use of employees, agents, contractors, or consultants to perform any such tasks.

11. Respondent shall provide a copy of this Consent Order to all contractors, laboratories, and consultants retained to conduct or monitor any portion of the Work performed pursuant to this Consent Order within seven (7) calendar days of the effective date of this Consent Order, or the retention of such person(s), whichever occurs later, and shall condition all such contracts on compliance with the terms of this Consent Order.

12. Respondent shall give written notice of this Consent Order to any successor-in-interest prior to transfer of ownership or operation of the Facility or a portion thereof, and shall notify the EPA and MDEQ in writing no less than thirty (30) calendar days prior to such transfer.

13. Respondent agrees to undertake all actions required by the terms and conditions of this Consent Order, including any portions of this Consent Order incorporated by reference.

V. FINDINGS OF FACT

14. Based upon the Administrative Record, an index of which is included as Attachment I, EPA Region 4 has made the following findings of fact¹:

- a. Respondent is a Delaware corporation doing business in the State of Mississippi and is a "person" as defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).
- b. Respondent's Facility includes a wastewater treatment impoundment basin ("IB"), which served as a primary sedimentation unit for the Facility's wastewater treatment process.
- c. In March 1990, the EPA issued the Toxicity Characteristic Rule ("TC Rule"), which replaced the Extraction Procedure ("EPTox") Leach Test with the Toxicity Characteristic Leaching Procedure ("TCLP") and added benzene to the list of characteristic hazardous wastes. The TC Rule became effective on September 25, 1990.
- d. Based on Hercules' own TCLP sampling and analysis, the IB contains waste exhibiting the characteristic of toxicity for benzene, which has a hazardous waste code of D018.
- e. Based on data collected during the ongoing investigations being conducted pursuant to the 3013 Order, certain wastes and hazardous constituents, including, but not limited to benzene, carbon tetrachloride, and chloroform, have been released into the soil and groundwater at the Facility and off-site areas.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

15. Based on the foregoing findings of fact and after consideration of the Administrative Record, the Deputy Division Director of EPA Region 4's RCRA Division, has made the following conclusions of law and determinations:

- a. Respondent is a "person" within the meaning of Section 1004(15) of RCRA, 42 U.S.C. § 6903(15).
- b. By storing D018 hazardous waste in the IB after the September 25, 1990, TC Rule effective date, Respondent became the owner and operator of a facility subject to the interim status requirements of Section 3005(e) of RCRA, 42 U.S.C. § 6925(e).
- c. Certain wastes and constituents found at the Facility, including, but not limited to benzene, carbon tetrachloride, and chloroform, are hazardous wastes and/or hazardous constituents pursuant to Sections 1004(5) and 3001 of RCRA, 42 U.S.C. §§ 6903(5) and 6921, and 40 C.F.R. Part 261.

¹ The documents contained in the Administrative Record, including the 3013 Order and its Administrative Record, set forth additional facts pursuant to which this Consent Order is issued.

- d. There is or has been a release of hazardous wastes or hazardous constituents into the environment from the Facility.
- e. The actions required by this Consent Order are necessary to protect human health and/or the environment.

VII. PROJECT COORDINATOR

16. EPA hereby designates as its Project Coordinator:

Meredith C. Anderson
Restoration and Underground Storage Tank Branch
RCRA Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303
404-562-8608
anderson.meredith@epa.gov

Respondent has designated the following as its Project Coordinator:

Tim Hassett, P.E.
Remediation Project Manager
Environmental Health, Safety & Product Regulatory
Ashland Hercules Research Center
500 Hercules Road
Wilmington, Delaware 19808-1599
302-995-3456
tdhassett@ashland.com

MDEQ has designated the following as its Project Coordinator:

Willie McKercher
MDEQ
P.O. Box 2261
Jackson, Mississippi 39225
601-961-5731
Willie_McKercher@deq.state.ms.us

17. Each Project Coordinator shall be responsible for overseeing the implementation of this Consent Order and for designating a person to act in his/her absence. The EPA Project Coordinator will be the EPA's designated representative for the Facility. The MDEQ Project Coordinator will be the MDEQ's designated representative for the Facility. To the maximum extent practicable, all communications between Respondent and the EPA and MDEQ, and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to this Consent Order, shall be directed through the Project Coordinators. The absence

of the EPA or MDEQ Project Coordinators from the Facility shall not be cause for the stoppage of work.

18. The parties may change their Project Coordinators. Respondent shall provide the EPA and MDEQ with a written notice of any change in its Project Coordinator. Such notice shall be provided at least seven (7) calendar days prior to the change in Project Coordinator.

VIII. WORK TO BE PERFORMED

19. Pursuant to Section 3008(h) of RCRA, Respondent agrees to and is hereby ordered to perform the acts specified in this section, in the manner and by the dates specified herein. All Work undertaken pursuant to this Consent Order shall be performed in a manner consistent with the attached Interim Measures Scope of Work ("IM SOW") (Attachment 2), RCRA, and other applicable federal and state laws and their implementing regulations, and consistent with all relevant EPA guidance documents as appropriate to the Facility and the Work to be performed by Respondent under this Consent Order. Relevant guidance may include, but is not limited to, the documents listed at http://www.epa.gov/reg3wcmd/ca/ca_resources.htm, which are incorporated by reference as if fully set forth herein.

20. Consistent with the Statement of Purpose set forth in Section III, the EPA, in consultation with MDEQ, and Respondent shall evaluate available data and assess the need for Interim Measures ("IM"), in addition to those specifically required by this Consent Order. IM shall be used whenever possible to achieve the performance objectives of control, mitigation, and/or removal of off-site hazardous waste and hazardous constituents originating from the Hercules Facility and the reduction of risk to off-site receptors.

21. Respondent shall perform the specific IMs as set forth below in accordance with the time frames set forth herein:

a. The EPA and Respondent acknowledge that Respondent has agreed and is contractually obligated to the City of Hattiesburg to perform the work outlined in Attachment 3 ("Sewer SOW") in accordance with the terms and conditions of an agreement between the City of Hattiesburg and Respondent. Pursuant to this Consent Order, those aspects of the Sewer SOW relating to characterization and management of contaminated media and addressing protection of workers and prevention of unacceptable exposure of the public to hazardous constituents encountered within the area of work while the work is performed pursuant to the Sewer SOW, shall be subject to oversight by the EPA and/or MDEQ. Respondent shall ensure that hazardous waste determinations are performed on all groundwater, soils, and other waste materials generated during the sewer work, and shall manage all wastes in accordance with applicable federal and state regulations. Prior to commencing this work, Respondent shall submit to the EPA and MDEQ a Contingency Plan providing for activities to be undertaken in the event that air monitoring indicates an unacceptable risk to workers or off-site receptors during the sewer work. Respondent shall provide copies of all sampling data, waste manifests, and disposal records to the EPA and MDEQ.

b. Within forty-five (45) calendar days of the effective date of this Consent Order, Respondent shall submit to the EPA and MDEQ an IM work plan ("IM WP") for the implementation of the specific Interim Measures noted below:

- Decommissioning of the IB in accordance with the Revised Impounding Basin Decommissioning Work Plan, dated August 5, 2013, as revised in response to MDEQ's Comments, dated May 8, 2014, and approved by the EPA and MDEQ.
- Removal of the underground storage tank(s) (USTs) (and any contaminated environmental media associated with the UST removal) in Area #2, in general accordance with applicable Mississippi UST regulations. See Figure 2 for a layout of the Facility and areas being addressed by this Consent Order.
- Assessment of the former scale(s)/structure(s) in Area #2 to determine if they are sources that need to be removed as an IM, and removal of the structure(s) (and any contaminated environmental media generated by the removal) if such determination is made.
- Removal of the mobile fraction of free product (i.e., Dense non-aqueous phase liquid ("DNAPL")) from groundwater in Area #1, to the extent technically practicable.
- Evaluation of dissolved phase groundwater contamination in Area #1 to determine the level of hydraulic control, mitigation, and/or removal that is required to prevent or minimize, and/or reduce the extent of the migration of hazardous constituents towards residential areas (including the residence at 135 W. 8th Street), and implement the appropriate IM, if necessary and to the extent technically practicable, to mitigate unacceptable risks to receptors at such residences.
- Evaluation of dissolved phase groundwater contamination in Area #2 to determine if it is off-site and, if so, determine the level of hydraulic control, mitigation, and/or removal that is required to prevent or minimize, and/or reduce the extent of the migration of hazardous constituents towards residential areas, and implement the appropriate IM, if necessary and to the extent technically practicable, to mitigate unacceptable risks to receptors at such residences.
- Continue to evaluate the vapor intrusion pathway at residences in Area #1 (including, at a minimum, four (4) quarters of crawl space and ambient air monitoring at the residence at 135 W. 8th Street under the 3013 Order), and then, if it is determined, based on a multiple lines of evidence approach, that an unacceptable risk to human health exists, institute mitigation and/or remediation of the vapor intrusion pathway as necessary to protect human health, as determined by the EPA in consultation with MDEQ.

22. In the event Respondent identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers solid waste management units not previously identified, Respondent shall notify the EPA and MDEQ Project Coordinators, orally within 48 hours of discovery and in writing within five (5) calendar days of such discovery, summarizing the immediacy and magnitude of the potential threat(s) to human health and/or the environment. Upon written request of the EPA and within ten (10) calendar days, Respondent shall submit to the EPA and

MDEQ an additional work plan that identifies Interim Measures which will mitigate the threat. The EPA will specify the contents of such work plan. If the EPA determines that immediate action is required, the EPA Project Coordinator may orally authorize Respondent to act prior to the EPA's receipt of the additional work plan.

23. If the EPA or MDEQ identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers solid waste management units not previously identified, the EPA will notify Respondent in writing. Upon written request by the EPA and within ten (10) calendar days of receiving the EPA's written notification, Respondent shall submit to the EPA and MDEQ an additional work plan that identifies Interim Measures which will mitigate the threat. The EPA will specify the contents of such work plan. If the EPA determines that immediate action is required, the EPA Project Coordinator may orally require Respondent to act prior to Respondent's receipt of the EPA's written notification.

24. All IM work plans shall ensure that the IM are consistent with the objectives of, and contribute to the performance of, any long-term Corrective Measures which may be required at the Facility.

25. Concurrent with the submission of any IM work plan, Respondent shall submit to the EPA and MDEQ a Project Management Plan, which includes a description of how the work will be managed and which shall list the names and qualifications of project personnel; a Quality Assurance Project Plan ("QAPP") in accordance with Section X (Quality Assurance); and a Health and Safety Plan ("HASP"). All such plans shall be prepared in accordance with EPA guidance documents and requirements.

26. Previously submitted plans, data, or reports under the 3013 Order may be relied upon to fulfill the requirements of this Consent Order, with the prior approval of the EPA. Proper citation of any such source information or data should be included in all submittals to the EPA and MDEQ.

27. Design, construction and implementation, operation and maintenance, and performance monitoring of the Interim Measures outlined in any approved IM work plan shall be conducted in a timely manner to achieve the IM performance objectives and in accordance with approved design specifications and plans.

IX. AGENCY APPROVALS/PROPOSED CONTRACTOR/ ADDITIONAL WORK

A. EPA APPROVALS

28. The EPA and MDEQ will review all written proposals, work plans, draft and final reports, and any other documents required to be submitted under this Consent Order ("submissions"). The EPA, after consultation with MDEQ, may: (a) approve the submission; (b) approve the submission with modifications; (c) disapprove the submission and direct Respondent to resubmit the document after incorporating the EPA's and/or MDEQ's comments; or (d) disapprove the submission and assume responsibility for performing all or any part of the work.

Consistent with Paragraph 31 below, unless the EPA determines that a submission is wholly inconsistent with the requirements of this Consent Order, the EPA shall provide Respondent at least one reasonable opportunity to revise the submission prior to approving the submission with the EPA's own modifications or disapproving the submission and assuming responsibility for any part of the work. The EPA, after consultation with MDEQ, may also approve, modify, or disapprove a portion of a submission. As used in this Consent Order, the terms "approval by the EPA," "EPA approval," or a similar term means the action described in (a) or (b) of this paragraph.

29. Prior to the EPA's written approval, with or without modifications, no written proposal, work plan, report, or other submission shall be construed as approved and final. Oral advice, suggestions, or comments given by EPA representatives will not constitute approval, nor shall any oral approval or oral assurance of approval be considered as binding.

30. Upon receipt of a notice of disapproval pursuant to Paragraph 28, or a request for a modification, Respondent shall, within fifteen (15) calendar days, or such longer time as specified by the EPA in its notice of disapproval or request for modification, correct the deficiencies, and resubmit the work plan, report, specification, schedule, or other submission in accordance with the EPA's written comments for approval. Notwithstanding the notice of disapproval, or approval with modifications, Respondent shall proceed, at the direction of the EPA, to take any action required by any approved portion of the submission. Revised submittals are also subject to EPA approval, approval with conditions and/or modifications, or disapproval. For purposes of Respondent's submissions, dispute resolution under Section XVI shall apply only to: (i) submissions disapproved and revised by the EPA; (ii) submissions disapproved by the EPA, then revised and resubmitted by the Respondent, and again disapproved by the EPA; or (iii) submissions disapproved by the EPA with assumption by the EPA of responsibility for the work.

31. Subject to Section XVI (Dispute Resolution), if, after providing Respondent with the opportunity to correct and resubmit any submittal required under this Consent Order, the EPA, in consultation with MDEQ, determines that the submittal still fails to meet the technical or administrative requirements of this Consent Order or applicable regulations, the EPA may modify the submission with the EPA's and/or MDEQ's comments and finalize and approve the document for implementation by Respondent.

32. Subject to Section XVI (Dispute Resolution), within fifteen (15) calendar days following EPA approval of a submission or portion thereof, or the EPA's modification of a submission pursuant to Paragraph 31, Respondent shall implement such approved document or portion.

33. Subject to Section XVI (Dispute Resolution), all written proposals, work plans, reports, and/or other submissions required by this Consent Order are, upon approval by the EPA (including modification and approval), incorporated into this Consent Order. Any noncompliance with such EPA-approved written proposals, work plans, reports, specifications, schedules, and other submissions shall constitute noncompliance with this Consent Order. Oral advice or approvals given by EPA representatives shall not relieve Respondent of its obligation to obtain formal, written approvals required by this Consent Order.

B. PROPOSED CONTRACTOR/CONSULTANT

34. All Work performed by Respondent pursuant to this Consent Order shall be under the direction and supervision of an individual who has demonstrated expertise in hazardous waste site investigation. As part of Respondent's Project Management Plan, required pursuant to Paragraph 25 above, before any Work is performed, Respondent shall submit to the EPA and MDEQ, in writing, the name, title, and qualifications of the supervisory personnel and of any contractors or subcontractors to be used in carrying out the terms of this Consent Order. Additionally, Respondent shall ensure that when a license is required, only licensed individuals shall be used to perform any Work required by this Consent Order. The EPA reserves the right to disapprove Respondent's contractor and/or consultant at any time during the period that this Consent Order is effective. If the EPA disapproves a contractor or consultant, then Respondent must, within thirty (30) calendar days of receipt from the EPA of written notice of disapproval, notify the EPA, in writing, of the name, title, and qualifications of any replacement. The EPA's disapproval shall not be subject to review under Section XVI (Dispute Resolution).

35. Respondent shall provide at least ten (10) calendar days written notice to the EPA and MDEQ prior to changing any contractor or subcontractor.

C. ADDITIONAL WORK

36. The EPA, in consultation with MDEQ, may determine, or Respondent may propose, that certain additional Interim Measures, including investigatory work, engineering evaluation, remediation, or procedure/methodology modifications, are necessary in addition to or in lieu of the tasks specifically identified in and required by Paragraph 21 of this Consent Order and/or included in any EPA-approved work plan, when such additional work is necessary to meet the purposes set forth in Section III (Statement of Purpose). If the EPA, after consultation with MDEQ, determines that Respondent shall perform additional work, the EPA will notify Respondent in writing and specify the basis for its determination that the additional work is necessary. Within fifteen (15) calendar days after the receipt of such determination, Respondent shall have the opportunity to meet or confer with the EPA and MDEQ to discuss the additional work. If required by the EPA, Respondent shall submit for EPA approval a work plan for the additional work. The EPA will specify the contents of such work plan. Such work plan shall be submitted to the EPA and MDEQ within thirty (30) calendar days of receipt of the EPA's determination that additional work is necessary, or according to an alternative schedule established by the EPA. Upon approval of a work plan by the EPA, Respondent shall implement it in accordance with the schedule and provisions contained therein.

X. QUALITY ASSURANCE

37. All sampling undertaken pursuant to this Consent Order shall be performed in accordance with the EPA-approved terms and schedules, and in a manner consistent with the EPA's "Field Branches Quality System and Technical Procedures," which is available at <http://www.epa.gov/region4/sesd/fbqstp/index.html>.

38. Respondent shall follow EPA guidance for sampling and analysis. Respondent shall submit a QAPP pursuant to the March 2001 "U.S. EPA Requirements for Quality Assurance Project Plans" (EPA QA-R5), available at <http://www.epa.gov/QUALITY/qs0docs/r5-final.pdf>. All work plans submitted pursuant to this Consent Order and Respondent's QAPP shall contain quality assurance/quality control (QA/QC) and chain of custody procedures for all sampling, monitoring, and analytical activities. Any deviations from the QA/QC and chain of custody procedures in approved work plans must be approved by the EPA prior to implementation; must be documented, including the reasons for the deviations; and must be reported in the applicable report.

39. The name(s), address, telephone number, and contact person of each analytical laboratory Respondent proposes to use must be specified in the applicable work plan(s).

40. All work plans required under this Consent Order shall include data quality objectives for each data collection activity to ensure that data of known and appropriate quality are obtained and that data are sufficient to support their intended use(s). Guidance regarding data quality objectives can be found in the February 2006 "U.S. EPA Guidance for the Data Quality Objectives Process," available at <http://www.epa.gov/quality1/qs-docs/g4-final.pdf>.

41. Respondent shall monitor to ensure that high quality data are obtained by its consultant(s) or contract laboratories. Respondent shall ensure that laboratories used by Respondent for analysis perform such analysis according to the latest approved edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), or other methods deemed satisfactory to the EPA. If methods other than EPA methods are to be used, Respondent shall specify and submit all such protocols for EPA approval in the applicable work plan. The EPA may reject any data that does not meet the requirements of the approved work plan, or EPA analytical methods, and may require resampling and additional analysis.

42. Respondent shall ensure that the laboratories it uses for analyses participate in a QA/QC program equivalent to that which is followed by the EPA. The EPA may conduct a performance and QA/QC audit of each laboratory chosen by Respondent before, during, or after sample analyses. Upon request by the EPA, Respondent shall have its laboratory perform analyses of samples provided by the EPA to demonstrate laboratory performance. If the audit reveals deficiencies in a laboratory's performance or QA/QC, resampling and additional analysis may be required.

XI. SAMPLING AND DATA/DOCUMENT AVAILABILITY

43. Respondent shall submit to the EPA and MDEQ upon request the results of all sampling and/or tests or other data generated by divisions, agents, consultants, or contractors pursuant to this Consent Order. All monitoring results and data shall be submitted to the EPA and MDEQ in accordance with the format specified in the EPA Region 4 "Data Management and Electronic Data Deliverables" Memorandum (April 23, 2010), appended as Attachment 4. Reporting of groundwater monitoring results shall, at a minimum, include well construction details, water level contours, contaminant trend graphs, and plume concentration diagrams. All analytical quantitation limits for constituents identified in any work plan must be below the appropriate human health and/or ecological risk-based limits, as practicable. At its discretion,

implementation of all field work specified in the work plans shall be overseen by the EPA and/or MDEQ.

44. Notwithstanding any other provisions of this Consent Order, the United States retains all of its information gathering and inspection authorities and rights, including the right to bring enforcement actions related thereto, under RCRA, CERCLA, and any other applicable statutes or regulations.

45. Respondent shall notify the EPA and MDEQ in writing at least ten (10) calendar days prior to beginning each separate phase of field work approved under any work plan required by this Consent Order. If Respondent believes it must commence emergency field activities without delay, Respondent may seek emergency telephone authorization from the EPA Project Coordinator or, if the EPA Project Coordinator is unavailable, his/her Section or Branch Chief, or the MDEQ Project Coordinator, to commence such activities immediately. At the request of the EPA, Respondent shall provide or allow the EPA and MDEQ or their authorized representative to take split or duplicate samples of all samples collected by Respondent pursuant to this Consent Order. Similarly, at the request of Respondent, the EPA shall allow Respondent or its authorized representative(s) to take split or duplicate samples of all samples collected by the EPA or MDEQ under this Consent Order.

46. Respondent may assert a business confidentiality claim covering all or part of any information submitted to the EPA and MDEQ pursuant to this Consent Order. Any assertion of confidentiality must be accompanied by information that satisfies the items listed in 40 C.F.R. §2.204(e)(4) or such claim shall be deemed waived. Information determined by the EPA to be confidential shall be disclosed only to the extent permitted by 40 C.F.R. Part 2, Subpart B. If no such confidentiality claim accompanies the information when it is submitted to the EPA, the information may be made available to the public by the EPA without further notice to Respondent. Respondent agrees not to assert any confidentiality claim with regard to any physical, sampling, monitoring, or analytical data.

XII. ACCESS

47. Consistent with Respondent's policies and practices regarding health and safety at the Facility, the EPA and MDEQ, and their contractors, employees, and/or any duly designated EPA or MDEQ representatives are authorized to enter and freely move about the Facility pursuant to this Consent Order for the purposes of, inter alia: interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts related to the Facility; reviewing and monitoring the progress of Respondent in carrying out the terms of this Consent Order; conducting such tests, sampling, or monitoring as the EPA or MDEQ deem necessary; using a camera, sound recording, or other documentary type equipment; conducting investigations regarding contamination at or near the Facility; verifying the reports and data submitted to the EPA and MDEQ by Respondent; and implementing the Work pursuant to the conditions set forth in Paragraph 95 (Performance Failure). Respondent agrees to provide the EPA and MDEQ and their representatives access at all reasonable times to the Facility and subject to Paragraph 48 below, to any other property to which access is required for implementation of this Consent Order. Respondent shall permit such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to Work undertaken

pursuant to this Consent Order and that are within the possession or under the control of Respondent or its contractors or consultants.

48. To the extent that Work being performed pursuant to this Consent Order must be done beyond the Facility property boundary, Respondent shall use its best efforts to obtain access agreements necessary to complete Work required by this Consent Order from the present owner(s) of such property within thirty (30) calendar days of the date that the need for access becomes known to Respondent. "Best efforts" as used in this paragraph means the efforts that a reasonable person in the position of Respondent would use so as to achieve the goal in a timely manner, including the cost of employing professional assistance and the payment of reasonable sums of money. Best efforts shall include, at a minimum, a certified letter from Respondent to the present owner(s) of such property requesting access agreement(s) to permit Respondent and its authorized representatives to access such property, and the payment of reasonable compensation in consideration of granting access. Any such access agreement shall provide for access by the EPA and MDEQ and their representatives. Respondent shall ensure that the EPA and MDEQ Project Coordinators have a copy of any access agreement(s). In the event that agreements for access are not obtained within thirty (30) calendar days of approval of any work plan for which access is required, or of the date that the need for access became known to Respondent, Respondent shall notify the EPA and MDEQ in writing within fourteen (14) calendar days thereafter of both the efforts undertaken to obtain access and the failure to obtain access agreements. The EPA may, at its discretion, assist Respondent in obtaining access. In the event the EPA obtains access, Respondent shall undertake the EPA-approved Work on such property.

49. Respondent agrees to indemnify the United States as provided in Section XXI (Indemnification), for any and all claims arising from activities on such property.

50. Nothing in this section limits or otherwise affects the EPA's right of access and entry pursuant to applicable law, including RCRA and CERCLA.

51. Notwithstanding the lack of access, nothing in this section shall be construed to limit or otherwise affect Respondent's liability and obligation to perform Interim Measures, including Interim Measures beyond the Facility boundary as required by RCRA and 40 C.F.R. § 264.101(c).

XIII. RECORD PRESERVATION

52. Respondent shall retain, during the pendency of this Consent Order and for a minimum of six (6) years after its termination, all non-identical data, records, and documents now in its possession or control or which come into its possession or control which relate in any way to this Consent Order or to hazardous waste management and/or disposal at the Facility. Respondent shall notify the EPA in writing ninety (90) calendar days prior to the destruction of any such records, and shall provide the EPA with the opportunity to take possession of any such records. Such written notification shall reference the effective date, caption, and docket number of this Consent Order and shall be addressed to:

EPA Project Coordinator
RCRA Corrective Action Section
Restoration and Underground Storage Tank Branch
RCRA Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

53. Respondent further agrees that within thirty (30) calendar days of retaining or employing any agent, consultant, or contractor for the purpose of carrying out the terms of this Consent Order, Respondent will enter into an agreement with any such agents, consultants, or contractors whereby such agents, consultants, and/or contractors will be required to provide Respondent a copy of all documents produced pursuant to this Consent Order.

54. All documents pertaining to this Consent Order shall be stored by Respondent in a centralized location to afford ease of access by the EPA or its representatives.

55. Respondent shall provide data, records and documents retained under this section at any time before the expiration of the six (6) year period at the written request of the EPA.

XIV. REPORTING AND DOCUMENT CERTIFICATION

56. Respondent shall submit two (2) copies (one (1) hard copy and one (1) electronic copy) of all work plans, reports, or other documents to the EPA and MDEQ consistent with the timelines in this Consent Order, the IM SOW, or in any approved work plan. Electronic submittals may be made electronically on the due date, provided that the hard copies shall be placed in overnight delivery the same date.

57. Unless otherwise specified, all reports, correspondence, approvals, disapprovals, notices, or other submittals relating to or required under this Consent Order shall be in writing and shall be hand delivered, sent by certified mail, return receipt requested, by overnight express mail, or by email, to the following representatives of the EPA, MDEQ, and Respondent:

a. Documents to be submitted to the EPA should be sent to:

Meredith C. Anderson
Restoration and Underground Storage Tank Branch
RCRA Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303
404-562-8608
anderson.meredith@epa.gov

b. Documents to be submitted to MDEQ should be sent to:

Willie McKercher
MDEQ
P.O. Box 2261
Jackson, Mississippi 39225
601-961-5731
Willie_McKercher@deq.state.ms.us

c. Documents to be submitted to Respondent should be sent to:

Tim Hassett, P.E.
Remediation Project Manager
Environmental Health, Safety & Product Regulatory
Ashland Hercules Research Center
500 Hercules Road
Wilmington, Delaware 19808-1599
302-995-3456
tdhassett@ashland.com

58. Any work plan, report or other document submitted by Respondent pursuant to this Consent Order which makes any representation concerning Respondent's compliance or noncompliance with any requirement of this Consent Order shall be certified by a "responsible corporate officer" of Respondent or a duly authorized representative. A "responsible corporate officer" means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation.

59. The certification required by Paragraph 58 above, shall be in the following form:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature: _____

Name: _____

Title: _____

Date: _____

XV. DELAY IN PERFORMANCE/STIPULATED PENALTIES

60. Unless there has been a written modification by the EPA of a compliance date, a written modification by the EPA of an approved work plan condition, or excusable delay as defined in Section XVII (Force Majeure and Excusable Delay), if Respondent fails to comply with any term or condition set forth in this Consent Order in the time or manner specified herein, the EPA may, by written demand, direct Respondent to pay stipulated penalties as set forth below.

- a. For failure to commence, perform, and/or complete field work in a manner acceptable to the EPA or at the time required pursuant to this Consent Order: \$1,000 per day for the first seven (7) calendar days of such violation; \$1,500 per day for the eighth through twenty-first day of such violation; and \$2,000 per day for each day of such violation thereafter;
- b. For failure to complete and submit any work plans or reports (other than progress reports) in a manner acceptable to the EPA or at the time required pursuant to this Consent Order, or for failure to notify the EPA of immediate or potential threats to human health and/or the environment, new releases of hazardous waste and/or hazardous constituents and/or solid waste management units not previously identified, as required by this Consent Order: \$750 per day for the first seven days of such violation; \$1,000 per day for the eighth through twenty-first day of such violation; and \$1,500 per day for each day of such violation thereafter;
- c. For failure to complete and submit, other written submittals not included in Paragraph 60.b. of this section in a manner acceptable to the EPA or at the time required pursuant to this Consent Order: \$250 per day for the first seven days of such violation; \$750 per day for the eighth through twenty-first day of such violation; and \$1,000 per day for each day of such violation thereafter;
- d. For failure to comply with any other provisions of this Consent Order in a manner acceptable to the EPA: \$750 per day for the first seven days of such violation; \$1,000 per day for the eighth through twenty-first day of such violation; and \$1,500 per day for each day of such violation thereafter.

61. Penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the day of correction of the violation. Nothing herein shall prevent the simultaneous accrual of separate stipulated penalties for separate violations of this Consent Order. Penalties shall continue to accrue regardless of whether the EPA has notified the Respondent of a violation, provided, however, that stipulated penalties shall not accrue with respect to any deficient submission under Paragraph 28 during the period, if any, beginning on the thirty-first (31st) day after the EPA's receipt of such submission until the date that the EPA notifies Respondent of any deficiency.

62. All penalties owed to the United States under this section shall be due and payable within thirty (30) calendar days of Respondent's receipt from the EPA of a written demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under

Section XVI (Dispute Resolution). Such a written demand will describe the violation and will indicate the amount of penalties due.

63. Interest shall begin to accrue on any unpaid stipulated penalty balance beginning on the thirty-first (31st) day after Respondent's receipt of the EPA's demand letter. Interest shall accrue at the Current Value of Funds Rate established by the Secretary of the Treasury. Pursuant to 31 U.S.C. § 3717, an additional penalty of 1% per annum on any unpaid principal shall be assessed for any stipulated penalty payment which is overdue for ninety (90) or more calendar days.

64. All penalties shall be made payable by certified or cashier's check to the United States of America and shall be submitted as follows:

a. Check Payment by U.S. Postal Service:

U.S. Environmental Protection Agency
Fines and Penalties
Cincinnati Finance Center
P.O. Box 979077
St. Louis, Missouri 63197

b. Check Payment by Overnight Commercial Delivery Service:

U.S. Bank
Government Lockbox 979077
U.S. EPA Fines and Penalties
1005 Convention Plaza
SL-MO-C2-GL
St. Louis, Missouri 63101
(314) 418-1028

All such checks shall reference the name of the Facility, Respondent's name and address, and the EPA docket number of this action. Copies of all such checks and letters forwarding the checks shall be sent simultaneously to the EPA Project Coordinator.

65. Respondent shall submit a copy of the payment or a copy of the confirmation of the payment to the following addresses:

Regional Hearing Clerk
U.S. EPA, Region 4
61 Forsyth St., SW
Atlanta, Georgia 30303

Chief, South Section
RCRA Enforcement and Compliance Branch
U.S. EPA, Region 4
61 Forsyth St., SW
Atlanta, Georgia 30303

66. Respondent may dispute the EPA's assessment of stipulated penalties by invoking the dispute resolution procedures under Section XVI (Dispute Resolution). The stipulated penalties in dispute shall continue to accrue, but need not be paid, during the dispute resolution period, provided, however, that stipulated penalties shall not accrue with respect to a decision of the Division Director, RCRA Division, under Paragraph 74, during the period, if any, beginning on the twenty-first (21st) day after the expiration of the Negotiation Period set forth in Paragraph 73 until the date that the Division Director issues a final decision regarding the dispute at issue. Respondent shall pay stipulated penalties and interest, if any, in accordance with the dispute resolution decision and/or agreement. Respondent shall submit such payment to the EPA within fourteen (14) calendar days of receipt of such resolution in accordance with Paragraph 64 of this section.

67. Neither the invocation of dispute resolution nor the payment of penalties shall alter in any way Respondent's obligation to comply with the terms and conditions of this Consent Order.

68. The stipulated penalties set forth in this section do not preclude the EPA from pursuing any other remedies or sanctions which may be available to the EPA by reason of Respondent's failure to comply with any of the terms and conditions of this Consent Order. Notwithstanding any other provision of this section, the EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Consent Order.

69. No payments under this section shall be tax deductible for federal tax purposes.

XVI. DISPUTE RESOLUTION

70. The parties shall use their best efforts to informally and in good faith resolve all disputes or differences of opinion. The parties agree that the procedures contained in this section are the sole procedures for resolving disputes arising under this Consent Order.

71. If Respondent disagrees, in whole or in part, with any written decision ("Initial Written Decision") by the EPA pursuant to this Consent Order, Respondent's Project Coordinator shall notify the EPA Project Coordinator of the dispute. The Project Coordinators shall attempt to resolve the dispute informally.

72. If the Project Coordinators cannot resolve the dispute informally, Respondent may pursue the matter formally by placing its objections in writing. Respondent's written objections must be directed to the EPA Project Coordinator. This written notice must be submitted to such person within fourteen (14) calendar days of Respondent's receipt of the Initial Written Decision. Respondent's written objection must set forth the specific points of the dispute, the position Respondent claims should be adopted as consistent with the requirements of this Consent Order,

the basis for Respondent's position, and any matters which it considers necessary for the EPA's determination.

73. The EPA and Respondent shall have fourteen (14) calendar days from the EPA's receipt of Respondent's written objections to attempt to resolve the dispute through formal negotiations. This time period may be extended by the EPA for good cause. During such time period ("Negotiation Period"), Respondent may request a conference with the Chief of the Restoration and Underground Storage Tank Branch, RCRA Division, to discuss the dispute and Respondent's objections. The EPA agrees to confer in person or by telephone to resolve any such disagreement with Respondent as long as Respondent's request for a conference will not extend the Negotiation Period.

74. If the parties are unable to reach an agreement within the Negotiation Period, Respondent has the right to submit any additional written arguments and evidence, not previously submitted, to the Division Director, RCRA Division (the "Division Director"). Based on the record, the Division Director shall provide to Respondent the EPA's written decision on the dispute ("EPA Dispute Decision"), which shall include a response to Respondent's arguments and evidence. Such decision shall be incorporated into and become an enforceable element of this Consent Order, but will not be considered final agency action for purposes of judicial review.

75. Except as provided in Section XV (Delay in Performance/Stipulated Penalties), the existence of a dispute as defined in this section and the EPA's consideration of matters placed into dispute shall not excuse, toll, or suspend any compliance obligation or deadline required pursuant to this Consent Order during the pendency of the dispute resolution process.

XVII. FORCE MAJEURE AND EXCUSABLE DELAY

76. Force majeure, for purposes of this Consent Order, is defined as any event arising from causes not foreseen and beyond the control of Respondent or any person or entity controlled by Respondent, including but not limited to Respondent's contractors, that delays or prevents the timely performance of any obligation under this Consent Order despite Respondent's best efforts to fulfill such obligation. The requirement that Respondent exercise "best efforts to fulfill such obligation" shall include, but not be limited to, best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event as it is occurring, and following the potential force majeure event such that any delay and any adverse effects of the delay are minimized to the greatest extent possible. Force majeure does not include increased costs of the Work to be performed under this Consent Order, financial inability to complete the Work, work stoppages, or other labor disputes.

77. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Order, whether or not caused by a force majeure event, Respondent shall contact by telephone and communicate orally with the EPA Project Coordinator or, in his or her absence, her Section Chief or Branch Chief, or, in the event both of the EPA's designated representatives are unavailable, the Deputy Division Director, RCRA Division, Region 4, within 48 hours of when Respondent first knew that the event might cause a delay. If Respondent wishes to claim a force majeure event, then within five (5) calendar days

thereafter, Respondent shall provide to the EPA in writing the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; all other obligations affected by the event, and what measures, if any, taken or to be taken to minimize the effect of the event on those obligations; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or the environment. Respondent shall include with any notice all available documentation supporting its claim, if any, that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of force majeure for that event, provided, however, that if the EPA, despite any late notice, is able to assess to its satisfaction whether the event is a force majeure event under Paragraph 76 and whether Respondent has exercised its best efforts under Paragraph 76, the EPA may, in its unreviewable discretion, excuse in writing Respondent's failure to submit a timely notice under this paragraph. Respondent shall be deemed to have notice of any circumstances of which its contractors had or should have had notice.

78. If the EPA determines that the delay or anticipated delay is attributable to a force majeure event, the time for performance of such obligation under this Consent Order that is affected by the force majeure event will be extended by the EPA for such time as the EPA determines is necessary to complete such obligation. An extension of the time for performance of such obligation affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation, unless Respondent can demonstrate that more than one obligation was affected by the force majeure event. If the EPA determines that the delay or anticipated delay has been or will be caused by a force majeure event, the EPA will notify Respondent in writing of the length of the extension, if any, for performance of such obligations affected by the force majeure event.

79. If the EPA disagrees with Respondent's assertion of a force majeure event, the EPA will notify Respondent in writing and Respondent may elect to invoke the dispute resolution provision, and shall follow the time frames set forth in Section XVI (Dispute Resolution). In any such proceeding, Respondent shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of this section. If Respondent satisfies this burden, the delay at issue shall be deemed not to be a violation of this Consent Order and the time for performance of such obligation will be extended by the EPA for such time as is necessary to complete such obligation.

XVIII. RESERVATION OF RIGHTS

80. The EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any of the requirements of this Consent Order, including, without limitation, the assessment of penalties under Section 3008(h)(2) of RCRA, 42 U.S.C. §6928(h)(2). This Consent Order shall not be construed as a covenant not to sue, release, waiver, or limitation of any rights, remedies,

powers, and/or authorities, civil or criminal, which the EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States against either Hercules or Ashland Inc.. The EPA specifically reserves the right to pursue Ashland Inc. for the performance of any Work required by this Consent Order, or for any additional tasks determined to be necessary to protect human health and the environment at and around the Facility.

81. The EPA reserves the right, after consultation with MDEQ, to disapprove of work performed by Respondent pursuant to this Consent Order and to order that Respondent perform additional tasks.

82. The EPA reserves the right to perform any portion of the Work consented to herein or any additional site characterization, feasibility study, and remedial work as it deems necessary to protect human health and/or the environment. The EPA may exercise its authority under CERCLA to undertake response actions at any time. In any event, the EPA reserves its right to seek reimbursement from Respondent for costs incurred by the United States, and Respondent reserves its right to assert any defenses it may have to the EPA's cost recovery claims. Notwithstanding compliance with the terms of this Consent Order, Respondent is not released from liability, if any, for the costs of any response actions taken or authorized by the EPA.

83. If the EPA determines that activities in compliance or noncompliance with this Consent Order have caused or may cause a release of hazardous waste or hazardous constituent(s), or a threat to human health and/or the environment, or that Respondent is not capable of undertaking any of the Work ordered, the EPA may order Respondent to stop further implementation of this Consent Order for such period of time as the EPA determines may be needed to abate any such release or threat and/or to undertake any action which the EPA determines is necessary to abate such release or threat.

84. This Consent Order is not intended to be nor shall it be construed to be a permit. Further, the parties acknowledge and agree that the EPA's approval of any final work plan does not constitute a warranty or representation that the work plans will achieve any required cleanup or performance standards. Compliance by Respondent with the terms of this Consent Order shall not relieve Respondent of its obligations to comply with RCRA or any other applicable local, state, or federal laws and regulations.

85. Notwithstanding any other provision of this Consent Order, and consistent with Paragraph 5, no action or decision by the EPA pursuant to this Consent Order, including without limitation, decisions of the Regional Administrator, the Director or Deputy Director of the RCRA Division, or any authorized representative of the EPA, shall constitute final agency action giving rise to any right of judicial review prior to the EPA's initiation of a judicial action to enforce this Consent Order, including an action for penalties or an action to compel Respondent's compliance with the terms and conditions of this Consent Order.

86. In any action brought by the EPA for a violation of this Consent Order, Respondent shall bear the burden of proving that the EPA's actions were arbitrary and capricious or not in accordance with law.

87. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive or other appropriate relief relating to the Facility, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been raised in the present matter.

XIX. OTHER CLAIMS

88. Nothing in this Consent Order shall constitute or be construed as a release from any claim, cause of action, demand, or defense in law or equity, against any person, firm, partnership, or corporation for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken or migrating from the Facility.

XX. OTHER APPLICABLE LAWS

89. All actions required to be taken pursuant to this Consent Order shall be undertaken in accordance with the requirements of all applicable local, state, and federal laws and regulations. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations.

XXI. INDEMNIFICATION OF THE UNITED STATES GOVERNMENT

90. Respondent agrees to indemnify and save and hold harmless the United States Government, its agencies, departments, agents, and employees, from any and all claims or causes of action arising solely from or on account of acts or omissions of Respondent or its officers, employees, agents, independent contractors, receivers, trustees, and assigns in carrying out activities required by this Consent Order. This indemnification shall not be construed in any way as affecting or limiting the rights or obligations of Respondent or the United States under their various contracts. Respondent shall not be responsible for indemnifying the EPA for claims or causes of action solely from or on account of acts or omissions of EPA.

XXII. COST ESTIMATES/FINANCIAL ASSURANCE/PERFORMANCE FAILURE

91. Estimated Cost of the Work

a. Respondent shall submit to the EPA and MDEQ detailed written estimates, in current dollars, of the cost of hiring a third party to perform the Work required under this Consent Order (hereafter "Estimated Cost of the Work"). The Estimated Cost of the Work shall be consistent with the requirements of 40 C.F.R. § 265.142 and § 265.144 and this section. For purposes of this Consent Order, references in such regulations to the terms "closure" and "post-closure" will mean the Work to be performed under this Consent Order, and the phrase "during the active life of the Facility" will mean from the effective date pursuant to Section XXVII (Effective Date) until the execution of an Acknowledgement of Termination and Satisfaction

pursuant to Section XXV (Termination and Satisfaction). The Work required by Paragraph 21.a. shall not be subject to the provisions of this Section XXII.

b. At the time of submission of the IM WP required by Paragraph 21.b., Respondent shall submit to the EPA and MDEQ for review and approval an initial Estimated Cost of the Work which covers the Work under the IM WP.

c. Until the termination of this Consent Order pursuant to Section XXV (Termination and Satisfaction), within sixty (60) calendar days prior to the anniversary date of the establishment of the financial assurance mechanism, or within thirty (30) calendar days of the close of Respondent's fiscal year if using a financial test or corporate guarantee, Respondent shall annually adjust the Estimated Cost of the Work to account for inflation and any changes to the IM WP, or any additional work required pursuant to supplemental work plans required to be submitted pursuant to Section VIII (Work to be Performed) or Section IX.C. (Additional Work). In addition, Respondent shall submit a revised Estimated Cost of the Work concurrently with the submission of any additional work plan required under Section VIII (Work to Be Performed) or Section IX.C. (Additional Work) or otherwise by this Consent Order.

d. The EPA will review the Estimated Cost of the Work and any revisions and will, after consultation with MDEQ, notify Respondent in writing of the EPA's approval, disapproval, or modification of the submission consistent with this section. Once approved, the Estimated Cost of the Work will be the amount required as financial assurance in Paragraph 92 below.

92. Financial Assurance

a. In order to ensure completion of the Work required under this Consent Order, Respondent shall secure financial assurance for the benefit of the EPA in the amount of the most recently approved Estimated Cost of the Work. Respondent may use one or more of the financial assurance instruments generally described in Paragraphs 92.a.i through 92.a.vi below, in a form substantially identical to the wording specified in 40 C.F.R. § 264.151. Respondent may use multiple mechanisms if they are limited to surety bonds guaranteeing payment, letters of credit, trust funds, and/or insurance policies. Any and all financial assurance documents provided pursuant to this Consent Order shall be satisfactory in form and substance as determined by the EPA.

- i. A trust fund established for the benefit of the EPA, administered by a trustee who has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.
- ii. A surety bond guaranteeing payment at the direction of the EPA into a standby trust fund that meets the requirements of the trust fund in Paragraph 92.a.i above. The surety company issuing the bond must be among those listed as acceptable sureties on federal bonds as set forth in Circular 570 of the U.S. Department of the Treasury.
- iii. An irrevocable letter of credit, payable at the direction of the EPA, into a standby trust that meets the requirements in Paragraph 92.a.i above. The letter

of credit should be by an entity that has the authority to issue letters of credit and whose letter-of-credit operations are regulated and examined by a federal or state agency.

- iv. A policy of insurance that provides the EPA with acceptable rights as a beneficiary thereof; and is issued by an insurance carrier that has the authority to issue insurance policies in the applicable jurisdiction(s), and whose insurance operations are regulated and examined by a federal or state agency. The policy must provide that the insurer shall make payments as the EPA shall direct in writing: (a) to reimburse Respondent for expenditures made by Respondent for work performed in accordance with this Consent Order, or (b) to pay any other person whom the EPA determines has performed or will perform the work in accordance with this Consent Order, up to an amount equal to the face amount of the policy. The policy must also provide that it may not be canceled, terminated, or non-renewed and the policy will remain in full force and effect in the event that: (a) Respondent is named as a debtor in voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code, or (b) the EPA notifies the insurer of Respondent's failure to perform, under Section XV (Delay in Performance/Stipulated Penalties) of this Consent Order.
- v. A guarantee, executed in favor of the EPA by one or more of the following: (1) a direct or indirect parent company; or (2) a company that has a "substantial business relationship" (as defined in 40 C.F.R. § 265.141(h)) with Respondent, to perform the work in accordance with this Consent Order or to establish a trust fund as permitted by Paragraph 92.a.i above; provided, however, that any company providing such a guarantee shall demonstrate to EPA's satisfaction that it satisfies the financial test requirements of 40 C.F.R. § 265.143(e) with respect to the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee.
- vi. A demonstration by Respondent that Respondent meets the financial test criteria of 40 C.F.R. § 265.143(e) with respect to the Estimated Cost of the Work and the amounts, if any, of other federal, state, or tribal environmental obligations financially assured through the use of a financial test or guarantee, provided that all other requirements of 40 C.F.R. § 265.143(e) are satisfied.

b. At the time of submission of the IM WP, Respondent shall submit draft financial assurance mechanisms and related documents to the EPA concurrently with the submission of the initial Estimated Cost of the Work, for the EPA's review and approval. Within fourteen (14) calendar days after the EPA's approval of both the initial Estimated Cost of the Work, and the form, substance, and value of Respondent's financial assurance, whichever date is later, Respondent shall submit all executed or otherwise finalized instruments or other documents to the EPA. Respondent shall submit such documents by certified mail to:

Robert Stewart
RCRA Enforcement and Compliance Branch
U.S. EPA, Region 4
61 Forsyth St., SW
Atlanta, Georgia 30303

c. If Respondent seeks to establish financial assurance by using a letter of credit, surety bond, or corporate guarantee, Respondent shall at the same time establish, and thereafter maintain, a standby trust fund, which meets the requirements of Paragraph 92.a.i above, into which funds from the other financial assurance instrument can be deposited, if the financial assurance provider is directed to do so by the EPA, pursuant to Paragraph 95.

d. If Respondent provides financial assurance by means of a guarantee or financial test pursuant to Paragraph 92.a.v or 92.a.vi above, Respondent shall also comply with the other relevant requirements of 40 C.F.R. § 265.143(e), 40 C.F.R. § 264.151(f), and 40 C.F.R. § 264.151(h)(1) relating to these options unless otherwise provided in this Consent Order, and with the requirements of this section, including but not limited to: (i) the initial submission to the EPA of required financial reports and statements from the Respondent or guarantor's chief financial officer and independent certified public accountant; (ii) the annual resubmission of such reports and statements within ninety (90) calendar days after the close of the Respondent or guarantor's fiscal year; and (iii) notification of the EPA within thirty (30) calendar days after the close of any fiscal year in which the Respondent or guarantor no longer satisfies the financial test requirements set forth at 40 C.F.R. § 265.143(e)(1). Respondent further agrees that the EPA may, based on a belief that Respondent or guarantor may no longer meet the financial test requirements of this section, require reports of financial condition at any time from such entity in addition to those specified in this section. For purposes of the financial assurance instruments specified in this section, references in 40 C.F.R. Parts 264 and 265, Subpart H to: (1) the terms "current closure cost estimate," "current post-closure cost estimate," and "current plugging and abandonment cost estimate" shall mean the Estimated Cost of the Work; (2) "the sum of current closure and post-closure cost estimates and the current plugging and abandonment cost estimates" shall mean the sum of all environmental obligations guaranteed by such entity or for which such entity is otherwise financially obligated in addition to the Estimated Cost of the Work to be performed in accordance with this Consent Order.

93. Respondent shall diligently monitor the adequacy of the financial assurance. If Respondent becomes aware of information indicating that any financial assurance mechanism provided pursuant to this section is inadequate or no longer satisfies the requirements of this section, then Respondent shall notify the EPA in writing of such information within fourteen (14) calendar days. If the EPA determines that a financial assurance instrument provided pursuant to this section is inadequate or no longer satisfies the requirements of this section, the EPA shall notify Respondent of such determination. Respondent shall, within thirty (30) calendar days of receipt of notice of the EPA's determination, or within thirty (30) calendar days of notifying the EPA of such information, secure and submit to the EPA for approval a proposal for a revised or alternative form of financial assurance that satisfies the requirements of this section. In seeking approval for a revised or alternative form of financial assurance, Respondent shall follow the procedures set forth in Paragraph 96 below. Respondent's inability or failure to secure and submit to the EPA financial assurance for completion of the Work shall in no way excuse

performance of any other requirements of this Consent Order, including, without limitation, the obligation of Respondent to complete the Work in strict accordance with the terms of this Consent Order.

94. If the EPA is notified by the issuer of a financial assurance instrument secured by Respondent that it intends to cancel such instrument, and Respondent fails to provide an alternative financial assurance instrument in accordance with this section at least thirty (30) calendar days prior to the cancellation date, the funds guaranteed under such mechanism must be paid prior to cancellation into the relevant standby trust fund or a newly created trust fund approved by the EPA to facilitate performance of the Work in accordance with this Consent Order.

95. Performance Failure

a. In the event that the EPA determines that Respondent: (i) has ceased implementation of any portion of the Work, (ii) is significantly or repeatedly deficient or late in its performance of the Work, or (iii) is implementing the Work in a manner that may cause an endangerment to human health or the environment, the EPA may issue a written notice (“Performance Failure Notice”) to both Respondent and the financial assurance provider of Respondent’s failure to perform. The notice issued by the EPA will specify the grounds upon which such a notice was issued and will provide Respondent with a period of fourteen (14) calendar days within which to remedy the circumstances giving rise to the issuance of such notice.

b. Failure by Respondent to remedy the circumstances giving rise to the EPA’s issuance of the relevant Performance Failure Notice to the EPA’s satisfaction before the expiration of the 14-day notice period specified in Paragraph 95.a. shall trigger the EPA’s right to have immediate access to and benefit of the financial assurance provided pursuant to this section. The EPA may at any time thereafter direct the financial assurance provider to immediately: (i) deposit into the standby trust fund, or a newly created trust fund approved by the EPA, the remaining funds guaranteed under the financial assurance instrument; or (ii) or arrange for performance of the Work in accordance with this Consent Order.

c. If the EPA is unable after reasonable efforts to secure the payment of funds or performance of the Work from the financial assurance provider pursuant to Paragraph 95.b, then, upon receiving written notice from the EPA, Respondent shall, within fourteen (14) calendar days thereafter, deposit into the standby trust fund, or a newly created trust fund approved by the EPA, in immediately available funds and without setoff, counterclaim, or condition of any kind, a cash amount equal to the estimated cost of the remaining Work to be performed in accordance with this Consent Order as of such date, as determined by the EPA.

d. Respondent may invoke the procedures set forth in Section XVI (Dispute Resolution) to dispute the EPA’s determination that any of the circumstances giving rise to the EPA’s issuance of a Performance Failure Notice specified in Paragraph 95.a; however, notwithstanding Respondent’s invocation of such dispute resolution procedures, and during the pendency of any such dispute, the EPA may in its sole discretion direct any trustee of a trust fund established pursuant to this section to make payments from such trust fund to facilitate performance of the Work in accordance with this Consent Order until the earlier of: (i) the date

that Respondent remedies, to the EPA's satisfaction, the circumstances giving rise to the EPA's issuance of the relevant Performance Failure Notice; or (ii) the date that a final decision is rendered in accordance with Section XVI (Dispute Resolution), that Respondent has not failed to perform the Work in accordance with this Consent Order.

96. Modifications to, or Termination of, Financial Assurance

a. Reduction of Amount of/Change of Form of Financial Assurance. Respondent may submit, on any anniversary of the effective date or at any other time, a request to reduce the amount, or change the form or terms, of financial assurance provided pursuant to this section. Any such petition shall be submitted to the EPA must include the estimated cost of the remaining Work, the basis upon which such cost was calculated, and a description of the proposed changes, if any, to the form or terms of the financial assurance. If the EPA notifies Respondent that it has approved the requested reduction or change, Respondent may reduce or otherwise change the financial assurance in compliance with and to the extent permitted by such written approval and shall submit all documents evidencing such reduction or change to the EPA within thirty (30) calendar days after receipt of the EPA's written decision. If the EPA disapproves the request, Respondent may seek dispute resolution pursuant to Section XVI (Dispute Resolution), provided however, that Respondent may reduce or otherwise change the financial assurance only in accordance with an agreement reached pursuant to Section XVI or the EPA's written decision resolving the dispute.

b. Release, Cancellation, or Discontinuation of Financial Assurance. Respondent may release, cancel or terminate any financial assurance provided pursuant to this section only: (i) if an Acknowledgment is executed pursuant to Paragraph 100; (ii) in accordance with the EPA's approval of such release, cancellation, or termination; or (iii) if there is a dispute, in accordance with the agreement or final administrative decision resolving such dispute.

XXIII. MODIFICATION

97. This Consent Order may only be modified by mutual agreement of the EPA and Respondent. Any agreed modifications shall be in writing, be signed by both parties, shall have as their effective date the date on which they are signed by the EPA, and shall be incorporated into this Consent Order.

98. Any requests for a compliance date modification or revision of an approved work plan requirement must be made in writing. Such requests must be timely and provide justification for any proposed compliance date modification or work plan revision. The EPA has no obligation to approve such requests, but if it does so, such approval must be in writing. Any approved compliance date or work plan modification shall be incorporated by reference into the Consent Order.

XXIV. SEVERABILITY

99. If any provision or authority of this Consent Order or the application of this Consent Order to any party or circumstances is held by any judicial or administrative authority to

be invalid, the application of such provisions to other parties or circumstances and the remainder of the Consent Order shall remain in force and shall not be affected thereby.

XXV. TERMINATION AND SATISFACTION

100. The provisions of this Consent Order shall be deemed satisfied upon Respondent's and the EPA's execution of an "Acknowledgment of Termination and Agreement to Record Preservation and Reservation of Rights" ("Acknowledgment"). The EPA will prepare the Acknowledgment for Respondent's signature, which Acknowledgment will specify that Respondent has demonstrated to the satisfaction of the EPA that the terms of this Consent Order, including any additional tasks determined by the EPA to be required pursuant to this Consent Order, have been satisfactorily completed. Respondent's execution of the Acknowledgment will affirm Respondent's continuing obligation (1) to preserve all records as required in Section XIII (Record Preservation) and (2) to recognize the EPA's reservation of rights as required in Section XVIII (Reservation of Rights), after all other requirements of the Consent Order are satisfied.

XXVI. SURVIVABILITY/PERMIT INTEGRATION

101. Except as otherwise expressly provided in this section, this Consent Order shall survive the issuance or denial of a RCRA permit or the finalization of a Consent Decree for the Facility, and this Consent Order shall continue in full force and effect after either the issuance or denial of such permit or the finalization of such Consent Decree, unless expressly terminated after the issuance of such permit or Consent Decree. Accordingly, Respondent shall continue to be liable for the performance of obligations under this Consent Order notwithstanding the issuance of such permit or finalization of such Consent Decree. If the Facility is issued a RCRA permit or Consent Decree and that permit or Consent Decree expressly incorporates all or a part of the requirements of this Consent Order, or expressly states that its requirements are intended to replace some or all of the requirements of this Consent Order, Respondent may request modification or termination of this Consent Order and shall, with EPA approval, be relieved of liability under this Consent Order for those specific obligations. In consenting to this provision, Respondent is in no way acknowledging that it is subject to a RCRA permit requirement and expressly reserves any defenses it may have to the issuance or conditions of any such permit.

XXVII. EFFECTIVE DATE

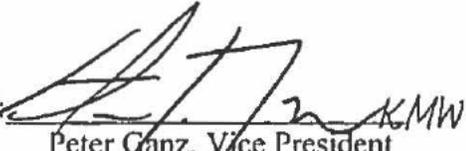
102. The effective date of this Consent Order shall be five (5) calendar days after Respondent has received written notice from the EPA, which notice may be provided electronically via electronic mail, return receipt requested, that the EPA has signed the Consent Order.

In the matter of Hercules Incorporated, Docket No. RCRA-04-2014-4201(b):

IT IS SO AGREED:

Hercules Incorporated

DATE: 7/3/14

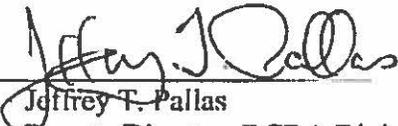
BY:  KMW
Peter Ganz, Vice President
Hercules Incorporated

In the matter of Hercules Incorporated, Docket No. RCRA-04-2014-4201(b):

IT IS SO ORDERED:

U.S. Environmental Protection Agency, Region 4

DATE: 7/03/2014

BY: 
Jeffrey T. Pallas
Deputy Director, RCRA Division
U. S. EPA, Region 4

CERTIFICATE OF SERVICE

I hereby certify that I have this day served a true and correct copy of the foregoing RCRA Section 3008(h) Administrative Order on Consent, In the matter of Hercules Incorporated, Docket No. RCRA-04-2014-4201(b), on the parties listed below in the manner indicated:

Colleen E. Michuda
Associate Regional Counsel
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street, SW
Atlanta, Georgia 30303

(Via EPA's internal mail)

Jeffrey T. Pallas
Deputy Director, RCRA Division
U.S. Environmental Protection Agency, Region4
61 Forsyth Street, SW
Atlanta, Georgia 30303

(Via EPA's internal mail)

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Ridgeland, Mississippi 39158-6010
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(Via electronic mail)

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KBourdeau@bdlaw.com

(Via electronic mail)

Kristina Woods, Esq.
Law Department
Ashland Inc.
5200 Blazer Parkway
Dublin, Ohio 43017
kwoods@ashland.com

(Via certified mail and electronic mail)

I also hereby certify that I have this day filed the original of the foregoing RCRA Section 3008(h) Administrative Order on Consent, Docket No. RCRA-04-2014-4201(b), with the Regional Hearing Clerk, U.S. Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia 30303.

Dated this 7 day of July, 2014.



Attachment 2

Interim Measures Scope of Work

1. Introduction

This Interim Measures Scope of Work (“IM SOW”) establishes the requirements for the design, construction and implementation, operation, maintenance, and performance monitoring of the specific Interim Measures set forth below. All actions conducted under this Consent Order will be implemented in compliance with all regulations and requirements of the Resource Conservation and Recovery Act (“RCRA”), the Toxic Substances Control Act, the Clean Air Act, the Clean Water Act, and other applicable federal, state and local regulations. Respondent shall furnish all the personnel, equipment, materials, and services for the implementation of these Interim Measures.

These Interim Measures are specific to the releases of contaminants from the Hercules Facility (“the Facility”) into groundwater, soil, and, potentially, into air in Areas #1 and #2. See Figure 2 for a diagram of the Facility.

In Area #1, a recent collapse of the sewer line and road along Providence Street east of the Facility has necessitated a prompt response for the safe replacement of the sewer line through an area of groundwater containing hazardous constituents. At the time of this Consent Order, Providence Street is closed to traffic, and the City of Hattiesburg has installed a 1600-foot sewer by-pass line to temporarily route wastewater around the collapsed sewer area. A diesel pump operates continuously to pump the wastewater through the by-pass line, and a collapsed manhole has been temporarily secured by the City of Hattiesburg.

Also in Area #1, free product (i.e., dense non-aqueous phase liquid (“DNAPL”)) and dissolved phase contaminants (including, but not limited to, benzene, carbon tetrachloride, and chloroform) have been detected in off-site groundwater on private property east of the Facility at levels above the EPA Regional Screening Levels (RSLs) and the Mississippi Target Remediation Goals (TRGs). These contaminants are believed to have originated from the Hercules Facility, primarily from the on-site wastewater treatment impoundment basin (IB). Hercules is currently conducting air and groundwater monitoring under the May 2011 RCRA 3013(a) Order (“3013 Order”) to investigate the potential for future impacts to indoor air quality if the groundwater contamination plume continues to migrate in the direction of the adjacent residence.

In Area #2, a dissolved phase groundwater contamination plume (including, but not limited to, benzene, ethylbenzene, and xylenes) has been identified and is believed to have originated from underground structures in this area. In addition, another structure/scale in this area warrants additional investigation and possible removal if determined to be a source of contamination. Contaminants have been detected at levels that exceed the EPA RSLs and the Mississippi TRGs. Off-site migration of these contaminants has not been detected at this time; however, the results of future investigations conducted under the 3013 Order will be used to confirm this finding and direct any future actions needed.

II. Interim Measures Implementation

Sewer Scope of Work

The EPA and Respondent acknowledge that Respondent has agreed and is contractually obligated to the City of Hattiesburg to perform the work outlined in Attachment 3 (“Sewer SOW”) of the Consent Order in accordance with the terms and conditions of an agreement between the City of Hattiesburg and Respondent. Pursuant to the Consent Order, those aspects of the Sewer SOW relating to characterization and management of contaminated media and addressing protection of workers and prevention of unacceptable exposure of the public to hazardous constituents encountered within the area of work while the work is performed pursuant to the Sewer SOW, shall be subject to oversight by the EPA and/or MDEQ. Respondent shall ensure that hazardous waste determinations are performed on all groundwater, soils, and other waste materials generated during the sewer work, and shall manage all wastes in accordance with applicable federal and state regulations. Prior to commencing this work, Respondent shall submit to the EPA and MDEQ a Contingency Plan providing for activities to be undertaken in the event that air monitoring indicates an unacceptable risk to workers or off-site receptors during the sewer work. Respondent shall provide copies of all sampling data, waste manifests, and disposal records to the EPA and MDEQ.

IM Work Plan:

Respondent shall prepare and submit an IM Work Plan (“IM WP”) that will address the design, construction, implementation, operation, maintenance, and performance monitoring of the Interim Measures discussed below and in Section VIII of the Consent Order. Specifically, the IM WP will specify the actions to be taken to address:

- Decommissioning of the IB in accordance with the Revised Impounding Basin Decommissioning Work Plan, dated August 5, 2013, as revised in response to MDEQ’s Comments, dated May 8, 2014, and approved by the EPA and MDEQ.
- Removal of the underground storage tank(s) (USTs) (and any contaminated environmental media associated with the UST removal) in Area #2, in general accordance with applicable Mississippi UST regulations.
- Assessment of the former scale(s)/structure(s) in Area #2 to determine if they are sources that need to be removed as an IM, and removal of the structure(s) (and any contaminated environmental media generated by the removal) if such determination is made.
- Removal of the mobile fraction of free product (i.e., Dense non-aqueous phase liquid (“DNAPL”)) from groundwater in Area #1, to the extent technically practicable.
- Evaluation of dissolved phase groundwater contamination in Area #1 to determine the level of hydraulic control, mitigation, and/or removal that is required to prevent or minimize, and/or reduce the extent of the migration of hazardous constituents towards residential areas (including the residence at 135 W. 8th Street), and implement the appropriate IM, if necessary and to

the extent technically practicable, to mitigate unacceptable risks to receptors at such residences.

- Evaluation of dissolved phase groundwater contamination in Area #2 to determine if it is off-site and, if so, determine the level of hydraulic control, mitigation, and/or removal that is required to prevent or minimize, and/or reduce the extent of the migration of hazardous constituents towards residential areas, and implement the appropriate IM, if necessary and to the extent technically practicable, to mitigate unacceptable risks to receptors at such residences.
- Continue to evaluate the vapor intrusion pathway at residences in Area #1 (including, at a minimum, four (4) quarters of crawl space and ambient air monitoring at the residence at 135 W. 8th Street under the 3013 Order), and then, if it is determined, based on a multiple lines of evidence approach, that an unacceptable risk to human health exists, institute mitigation and/or remediation of the vapor intrusion pathway as necessary to protect human health, as determined by the EPA in consultation with MDEQ.

In an effort to expedite the Interim Measures, the investigation, preparation, and/or implementation actions necessary for the design and/or implementation of the above items can be approved and undertaken in a phased approach by Respondent.

Respondent has developed, and the EPA has approved, a “Constituents of Potential Concern (“COPC”) Technical Report,” (ARCADIS, November 2012), which identifies the hazardous constituents that are of particular concern at the Facility. Respondent may, for work performed pursuant to this IM SOW, utilize this COPC list to guide its evaluations, sampling, and monitoring work. This COPC list may be revised after subsequent investigations. Any revisions to this COPC list must be approved by the EPA, in consultation with MDEQ.

The IM WP will include a schedule for design and implementation of the specific actions to be undertaken, as well as a Project Management Plan, a Quality Assurance Project Plan (“QAPP”), and a Health and Safety Plan (“HASP”). The schedule proposed in the IM WP shall incorporate a phased approach for implementing the interim actions for the purpose of providing for timely execution of these actions.

The IM WP shall include, at a minimum, the following sections:

- Interim Measures Objectives
- Investigation or Preparation Activities
- Conceptual Design Plans and Specifications
- Construction/Implementation Actions
- Interim Measure Construction Quality Assurance
- Operation, Maintenance, and Effectiveness Monitoring
- Reporting
- Schedule
- Community Engagement

IM Design:

Upon approval of the IM WP by the EPA, Respondent will begin design of the components for the Interim Measures, as specified in the approved IM WP. For each component of the Interim Measures, Respondent shall present a preliminary design in writing or orally to the EPA for approval to proceed with the detailed design.

Following the detailed design of each Interim Measure component, Interim Measures design letter report(s) will be submitted to the EPA for approval and authorization to begin IM construction in accordance with the design letter report(s), as amended by the EPA, and the approved schedule in the IM WP.

Design letter reports shall contain applicable information to communicate the design objectives and specifications, such as: presentation of any new investigation information or data; discussion of design strategy and ability to meet IM performance objectives; compliance with applicable guidance and regulations; discussion of important technical factors (e.g., presentation of detailed design components, constructability, permits needed, and appropriate contingency plans, etc.); schedule and sequence of construction/implementation activities; operation and maintenance requirements; performance monitoring plan; and pertinent calculations and key technical specifications.

IM Construction/Implementation:

Upon approval of the IM design letter report(s), Respondent will implement the IM components in accordance with the approved plans and specifications presented in the reports. All construction/implementation activities will also be performed in accordance with the approved QAPP, HASP, and other applicable guidance documents and shall comply with all state and local regulations and ordinances for public safety. Construction/implementation shall also include: a pre-construction notification and/or meeting with the EPA and MDEQ prior to commencement of activities; construction inspections throughout the implementation process to ensure that work is conducted according to approved plans and designs; and notification in writing to the EPA (for each phase of the Interim Measures implementation) when construction activities have been completed with a summary of the work conducted and discussion of any deviations to the approved plans.

III. IM Progress Reports

Progress reports will be submitted to the EPA and MDEQ on a monthly basis (due by the 20th of the following month) and shall contain, at a minimum: discussion of activities undertaken in the reporting period; summary of problems encountered and solutions undertaken; discussion of deviations, if any, from the approved IM WP or other approved submissions; changes of key personnel; summary of contact with the community, local representatives, or the media; summary of work to be performed in the next reporting period; and discussion of technical support or direction needed from the EPA or MDEQ. Monthly progress reports shall continue until construction of the Interim Measures has been conducted and Respondent is notified by the EPA that progress reports can be submitted on a quarterly basis (due by the 20th of the following

quarter). Where appropriate, a final report shall be submitted within thirty (30) days of completion of construction/implementation.

IV. IM Schedule

The implementation of the Work to be performed under the Consent Order will begin upon the effective date of the Consent Order. Efforts will be made by Respondent to expedite implementation of the Interim Measures by communicating frequently and openly with the EPA regarding progress made, problems encountered, and decisions or direction needed. A phased approach to the design and implementation of the IMs shall be proposed and presented in the IM WP, as appropriate, to provide for timely execution of the Interim Measures. In general, the following schedule should be incorporated into the IM WP:

IM WP submitted to the EPA ----- within forty-five (45) calendar days of the effective date of the Consent Order

IM design letter report(s) submitted to the EPA ----- within thirty (30) calendar days of approval of the IM WP, or within an alternate time period agreed upon by the EPA

IM Construction/Implementation ----- to begin within ten (10) calendar days of approval of IM design letter report(s)

V. Community Engagement

Respondent will actively participate in, plan, and implement all community engagement activities specified by the EPA and MDEQ during the implementation of this Consent Order. These activities may include preparing figures or maps for community meetings, participating in community meetings and updates, preparing material for outreach efforts, and other support activities requested by the EPA and/or MDEQ.

Attachment 3

EXHIBIT 1

The following work scope has been prepared for the replacement of the City of Hattiesburg (City) sanitary sewer line located beneath West 7th Street and Providence Street along the eastern property line of the former Hercules Incorporated (Hercules) Hattiesburg facility. The work to be completed is detailed in the drawings titled Construction Plans for Sewer Rehabilitation on Providence Street, dated June 19, 2014 and specifications document titled Sanitary Sewer Replacement Providence Street Area, dated June 2014, prepared by the City's Engineer (SD&W Consulting Engineers) (attached). The approach to the work scope and separation of responsibilities between Hercules and the City presented in this letter is recommended due to the potential presence of groundwater containing volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) within some areas of the sewer replacement project.

The City will have responsibility to complete or provide the following services and goods:

- Provide complete construction drawings and specifications stamped for construction by a registered Professional Engineer applicable to the Providence Street Sanitary Sewer Replacement Project.
- Install and operate for the duration of the project, a sewer bypassing system whereby sewage water would be diverted from the project area manholes and piping as needed. This includes measures for those with connections to the sanitary sewer between these manholes to avoid any potential loss of service to customers. The City will bear the costs of the sewer bypass system, with Hercules reimbursing the City only for costs of operating the bypass system for any time in excess of the time established for completing the sewer repairs as set forth in paragraph 7 of the Project Responsibility Allocation Agreement.
- Manage water generated during dewatering the sewer replacement excavation and redirected to the sanitary sewer system, as long as the water does not contain any separate phase material or dissolved phase constituents in excess of concentrations established in consultation with the MDEQ and/or EPA authorizing the discharge and does not cause any upset or bypass condition at the City's wastewater treatment plant.
- Properly close West 7th Street and Providence Street and provide all traffic controls for the duration of the project as deemed necessary.
- Provide appropriate project supervision, including on-site representatives as appropriate, to inspect, approve, and certify the project work as necessary and appropriate. Such supervision will include a Project Engineer authorized to evaluate and agree, as appropriate, on any Work Change Orders that arise during the project. The City or its designees shall be responsible for all final certifications and approvals associated with the Work, excepting any regulatory certifications or approvals necessary due to the potential presence of contamination in the project area.

Hercules will have responsibility to complete the following activities:

- Remove old sanitary sewer and replace with a new sanitary sewer from Station 1396.13 to Station 2761.83 (total distance of 1365.70 feet) per the drawings and specifications including Manholes A369, A370, A371, A372 and A373. This shall include all tie-ins both at manholes and

along the pipe length, and any other project components (i.e. pipe bedding, backfilling, compaction, groundwater dewatering, storm sewer cross drain replacement, etc..) as shown on the construction drawings, but excluding sewer bypassing and traffic controls.

- Dispose of any groundwater that is deemed hazardous or fails to meet any criteria established in consultation with MDEQ and/or EPA.
- Manage groundwater containing any separate phase material by treating through an oil/water separator prior to discharging the groundwater to the sanitary sewer; manage solid waste generated by the oil/water separator
- Dispose of any soils that are deemed hazardous; otherwise, soil shall be replaced back into the excavation if appropriate from a geotechnical standpoint as proposed by Hercules and approved by the City.
- Conduct air monitoring during the sewer replacement activities.
- Replace asphalt in West 7th Street and Providence Street following the completion of the work as defined in the technical specifications.
- Dispose of the entire length of the old sanitary sewer piping, manholes, etc. (including transportation and disposal).
- Manage all non-hazardous soil which cannot be re-used as piping backfill due to project design requirements for 36 inches of select material and 6 inches of crushed aggregate and/or geotechnical considerations as proposed by Hercules and approved by the City.
- Provide copies of all sampling data, waste manifests, and disposal records to the City upon the completion of the Project.
- Provide the City with reasonable access to the project area and personnel charged with implementing the project sufficient to allow the City full opportunity to inspect, evaluate, approve or certify, as necessary, the performance of the project in accordance with the project drawings and specifications (attached) and any approved Work Change Orders.

Attachment 4



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
31 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

APR 21 9:0

MEMORANDUM

SUBJECT: Region 4 Data Management and Electronic Data Deliverables (EDDs)

FROM: Franklin E. Hill
Superfund Division Director

TO: Superfund Division

Introduction

As information technology advancements continue, the ability to receive, store, and use electronic data from a variety of sources becomes a critical aspect of EPA's work. EPA has the need to receive and use environmental data in an electronic format. In an effort to streamline the electronic submittal of various environmental sampling data, EPA Region 4 has adopted a standardized electronic data deliverable (EDD) format. Using a Regional EDD format allows for efficient and cost-effective exchange of site data with contractors, and Federal and State agencies.

The EPA Region 4 standard format for EDDs include quality controls to minimize potential data errors so that the data can be appropriately analyzed and utilized for decision making. The data is electronically archived for ready access as needed. As different contractors, consultants, and agencies are involved in various stages of a Superfund project, there are significant cost savings in having the site-related data readily available. The uniform EDD approach does more than cut site management costs. It provides better and more reliable stewardship of Superfund data, and when integrated with other information such as GIS, it helps ensure transparent decision making.

Data Management and Electronic Data Deliverables

When conducting Superfund work in Region 4, the party submitting data will provide an electronic submittal of data in accordance with Region 4 policies, guidelines, and formats. The Region 4 EDD is a standardized format required by the Field Branches Quality System and Technical Procedures, Environmental Data Submission Guidance, SESD-106-R0 (or most recent version). The Field Branches Quality System and Technical Procedures supersede the "Environmental Investigations Standard Operating Procedures and Quality Assurance Manual" (EISOPQAM), November 2001, and the "Ecological Assessment Standard Operating Procedures and Quality Assurance Manual" (EASOPQAM), January 2002. The methods described in this document are to be used by all data providers when preparing and submitting environmental data electronically to Region 4, regardless of the originating program.

All required information, instructions and guidance are available via the EPA web site www.epa.gov/region4/waste/sf/edd/edd.html free of charge. This web site contains links to obtain the required software, as well as the most recent versions of the Environmental Data Submission Guidance, the Region 4 EDD Reference Guide, and the Region 4 EDP Reference Manual.

Should you have questions regarding electronic data submission or wish to obtain paper copies of the guidance documents, please contact Beth Walden, Remedial Project Manager, at (404) 562-8814, or you may email walden.beth@epa.gov. You may also contact the DART Coordinator at (404) 562-8558, or you may email R4dartcoordinator@epa.gov.